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AN INVESTIGATION INTO FACTORS AFFECTING PRIMARY SCHOOL CHILDREN'S AWARENESS AND ATTITUDES TOWARDS ENVIRONMENTAL ISSUES IN CHAUNGZONE TOWNSHIP*

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Abstract

The purposes of this study are (1) to investigate the level of primary school children's existing awareness towards environmental issues, (2) to investigate the level of primary school children's existing attitudes towards environmental issues, (3) to identify the factors affecting environmental awareness of primary school children, and (4) to identify the factors affecting environmental attitudes of primary school children. Descriptive method was used in this research. The reliability coefficient (Cronbach's Alpha) of questionnaire was 0.83. In qualitative study, interview and observation were used. A proportional stratified sampling was used to select 354 primary school children from 38 Basic Education Schools in Chaungzone Township. The parents of the children and teachers who taught at primary level also participated in this study. Among them, 20 teachers and 20 parents were purposively selected for qualitative study. Descriptive statistics, Item Percent Correct (IPC), Independent Samples *t* Test, One-Way ANOVA, post-hoc test by Tukey, and Multiple Regression were used for the analysis of quantitative data. In analyzing qualitative data, the cyclical process was used. According to the findings, it was found that most of the primary school children have satisfactory level of environmental awareness and above satisfactory level of environmental attitudes. Regarding the factors affecting children's environmental awareness, the first predictor was their concern towards environmental issues and the second one was their out-of-school experience. Concerning the factors affecting children's environmental attitudes, the first predictor was their interest towards environmental issues, the second one was their in- school experience and the third one was gender. Qualitative study suggested that children who got the opportunity to participate in out-of-school experience and connect the lesson with the natural environment conveyed more environmental awareness than those of others.

Keywords: Environmental Awareness, Environmental Attitudes

Introduction

Environmental education is the effective way to address the environmental problems and strengthen for conservation of nature. It plays a key role to attain both self-responsibility and self-awareness on current environmental issues and challenges and to be noticed that every citizen has the duties to address those matters and challenges.

Educating people is one of the measures to bring the needed awareness and sensitivity towards protecting the environment. In order to strengthen knowledge and understanding about the environment and be more aware on the world's current condition, school, parents and community need to collaborate to convey adequate awareness and inculcate the right environmental attitudes in young generation, especially children.

Myanmar is also one of the countries which are facing a wealth of new and challenging environmental problems every day. As the effects of climate change, Myanmar experiences rising temperatures, greater frequency of intense rainfall and severe cyclones along Myanmar's coastline. Land degradation, urban solid waste management and deforestation are also increasing problems in Myanmar. Then, in Chaungzone Township, the major economy is paddy and rubber plantation. But, some people use chemical fertilizer for the nutrition of the plant to control agricultural productivity and quality. The improper fertilization can lead to water, soil and air pollution. In

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order to handle environmental problems, it is very important to emerge environmentally literate children who know about environment and are aware of the environmental problems.

Keeping in mind these issues, it was intended to find out the environmental awarenessand environmental attitudes of primary school children in Chaungzone Township.

Objectives of the Research

General Objective

The main objective of this study is to investigate factors affecting primary school children's awareness and attitudes towards environmental issues.

Specific Objectives

The specific objectives of this study are as follows:

(1) To investigate the level of primary school children's existing awareness towards environmental issues
(2) To investigate the level of primary school children's existing attitudes towards environmental issues
(3) To identify the factors affecting environmental awareness of primary school children
(4) To identify the factors affecting environmental attitudes of primary school children

Research Questions

This study is targeted on the following questions:

(1) What is the level of primary school children's existing awareness towardsenvironmental issues?
(2) What is the level of primary school children's existing attitudes towards environmental issues?
(3) What are the factors affecting environmental awareness of primary school children?
(4) What are the factors affecting environmental attitudes of primary school children?

Scope of the Research

This study was conducted in Chaungzone Township, Mon State. Primary schoolchildren who were attending Grade IV, their parents and teachers who were teaching at primary level from those schools were participated in this study.

Definition of Key Terms

Environmental Awareness is defined as conscious of the problem and dangersfacing mankind and environment and pressing need for positive action to control the dangers and undesirable impact of man activities and demand upon the environment (Environmental Education Committee, Kenyatta University College, 1980, cited in Boiyo, 2014).

Environmental Attitudes involves set of values and feelings of concern for the environment and motivation for actively participating in environmental improvement and protection (UNESCO, 1978).

Operational Definitions

In this study, **Environmental Awareness** is operationally defined as the children's awareness of the problems concerning conservation of resources, pollution, and general issues and positive action to control these problems.

Environmental Attitudes is operationally defined as the desirable attitudes on children's values and feeling of concern that reflects conservation and protection of the environmental resources.

Theoretical Framework

The goals of environmental education which were agreed in the Tbilisi Declaration are

- to foster clear awareness of, and concern about, economic, social, political and ecological interdependence in urban and rural areas;

- to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;

- to create new patterns of behaviors of individuals, groups and society as a whole towards the environment

The categories of environmental education objectives which were established at the Tbilisi conference are (1) Awareness, (2) Knowledge, (3) Attitude, (4) Skills and (5) Participation (UNESCO, 1997, cited in Palmer & Neal, 1994).

According to Palmer & Neal (1994), environmental education needs to fall on threefold structures:

(1)   Education in the environment focuses on facilitating environmental education experiences in nature and inspiring children to develop relationships with the natural world. The primary school children need to be involved in learning process through the environment by working outside the classroom, developing skills of enquiry and exploration within the local area, developing problem-solving skills and critical and creative thinking skills.

(2)   Education about the environment is concerned with building environmental knowledge, understandings, and awareness of ecological processes. The primary school children should develop knowledge and understanding of the natural process which takes place in the environment, how life is dependent on the environment, the impact of human activities on the environment, environmental issues, the importance of effective action to protect the environment, the role of science and technology in the development of societies and their impact on the environment.

(3)   Education for the environment is mainly directed towards promoting positive conservation behaviours and environmental action. For being educated for the environment, the children should be interested in and learn to appreciate their environment through the care of living things and their habitats in and around the school, respect for their environment through relevant and interesting studies of it, seek solutions to environmental problems within the school and the local area, appreciate the resilience, fragility, and beauty of nature.

Environmental Awareness. Based on the UNESCO report in reorienting teacher education to address sustainable development guideline and tools by Steele (2012) and the Myanmar's National Environmental Performance Report 2007-2010, children need to have awareness on conservation of resources (energy, forest, water), pollution (air pollution, water pollution, soil pollution) and general issues concerning environmental problem.

Environmental Attitudes. In the early stages of life on earth, the hazards presented by the environment were inanimate — broadly speaking the inclemency of the elements — but as life

developed, or evolved, it became self-predatory so that the weaker and the smaller were consumed, or deprived of their food, by the stronger and the bigger (Dr. Khin Zaw, 2001).

In order to preserve all species of animals on the earth, the balance of ecological system needs to be considered. Based on the Models of Ecological Values by Wiseman and Bogner (2003), there are two factors of environmental attitudes; preservation and utilization attitudes. Preservation Attitudes is a bio-centric dimension that reflects conservation and protection of the environment's resources and these attitudes will involve intent to support, care with resources and enjoyment of nature. Utilization Attitudes is an anthropocentric dimension that reflects the utilization of natural resource and this attitude will involve altering nature and human dominance.

There are possible factors affecting children's awareness and attitudes towards environmental issues:

In-school Experience: This involves playing and visiting in the school park, inquiring the nature of plants and animals, investigating environmental issues, and participating in environmental education activities in the school environment.

Out-of-school Experiences: This includes recreation in nature, observing different types of plants and animals, and inquiring the types of water and soil in local environment.

Home: It includes parents' knowledge, their interest and concern towards environmental issues, and their attitudes towards environmental education.

Environmental Education Given by Teachers: Environmental awareness and attitudes of children can be increased because of the teachers' knowledge and attitudes on environmental issues and their environmental education activities.

Media: It is a means of public communication and environmental awareness and attitudes are expanded through media education. This includes printed media (magazines, journals, books, newspaper) and electronic media (radio, television, video, internet).

Methodology

Quantitative and qualitative methods were used in this study. For quantitative study, descriptive research design was used and data were collected through questionnaire. A set of questionnaire was developed after reviewing related literature. For content validity, the advice and guidance were taken from the 11 expert educators. The reliability coefficient of questionnaire was 0.83. The participants of this study were 354 primary school children. Proportional stratified sampling was used.

In this study, schools were classified into three groups. The first group involvingBasic Education Primary Schools and Basic Education Post Primary Schools was categorizedas Group 1 Schools. The second group including Basic Education Middle Schools and Basic Education Middle Schools (Branch) was assigned as Group 2 Schools. The third group including Basic Education High Schools and Basic Education High Schools (Branch) was regarded as Group 3 Schools. According to this classification, there were 29 Basic Education Primary Schools and 1 Basic Education Post Primary School in Group 1 Schools, 2 Basic Education Middle Schools and 1 Basic Education Middle School (Branch) in Group 2 Schools, and 4 Basic Education High schools and 1 Basic Education High School (Branch) inGroup 3 Schools.

Descriptive statistics, Item Percent Correct (IPC), Independent Samples *t* Test, One- Way ANOVA, post-hoc test by Tukey, and Multiple Regression were utilized for the analysisof quantitative data. In scoring the response to the items relating to environmental awareness and environmental attitudes, the value less than 50% is considered as below satisfactory level, the

value between 50% and 74% as satisfactory level, and the value grater than or equal75% as above satisfactory level. To explain the factors affecting primary school children's awareness and attitudes towards environmental issues, in-school experience, out-of-school experience, interest, and concern towards environmental issues included in the childrenquestionnaire were analyzed by using descriptive statistics.

For qualitative data, the researcher selected purposively ten schools based on the results of quantitative data analysis. Qualitative method was also used to get more definite information about factors affecting primary school children awareness towards environmentalissues.

Findings

Quantitative Findings

Research Question (1) Investigating the level of primary school children's existingawareness towards environmental issues

Table 1 Numbers and Percentages of Primary School Children Showing the Level of Environmental Awareness   (N=354)

Scoring Range	No. of Students	Remark
<50%	53 (15%)	Below Satisfactory Level
50%-74%	154 (43%)	Satisfactory Level
≥75%	147 (42%)	Above Satisfactory Level

Scoring range: <50% = Below Satisfactory   50%-74% = Satisfactory   ≥75% = Above Satisfactory

According to the table, 53 (15%) of total students were below satisfactory level, 154 (43%) of students were at satisfactory level, and 147 (42%) of total students were above satisfactory level.

Table 2 One-Way ANOVA Result Showing Primary School Children's Environmental Awareness Grouped by School Group   (N=354)

Variables		Sum of Squares	*df*	Mean Square	*F*	*p*
Environmental Awareness	Between Group	166.803	2	83.402	6.182	.002**
	Within Group	4735.027	351	13.490		
	Total	4901.831	353			

Note: *p<.05, **p<.01, ***p<0.001, ns= not significant

According to One-Way ANOVA result, it was found that there was a significant difference in environmental awareness of primary school children among school groups.

Table 3 Tukey HSD Result Showing Primary School Children's EnvironmentalAwareness Grouped by School Group   (N=354)

Variables	(I) School	(J)School	Mean Difference (I-J)	*p*
Environmental Awareness	Group 2	Group 1	-1.963*	.005**
		Group 3	-2.430*	.002**

*p<.05, **p<.01, ***p<0.001, ns= not significant

According to the table, Post hoc Tukey test indicates that there were significant differences in environmental awareness between children from Group 1 schools and Group 2 schools and between children from Group 2 schools and Group 3 schools.

Research Question (2) Investigating the level of primary school children's existing attitudes towards environmental issues

Table 4 Numbers and Percentages of Primary School Children Showing Desirable Attitudes towards Environmental Issues   (N=354)

Scoring Range	No. of Students	Remark
<50%	6 (2%)	Below Satisfactory Level
50%-74%	159 (45%)	Satisfactory Level
≥75%	189 (53%)	Above Satisfactory Level

Scoring range: <50% = Below Satisfactory   50%-74% = Satisfactory   ≥75% = Above Satisfactory

According to the table, it was found that 6 (2%) of total students were below satisfactory level, 159 (45%) of total students were at satisfactory level and 189 (53%) of total students were above satisfactory level.

Table 5 Independent Samples *t* Test Showing Primary School Children's Environmental Attitudes Grouped by Gender   (N=354)

Variable	Gender	*t*	*df*	*p*
Environmental Attitudes	Male	-2.411	352	.016*
	Female			

*p<.05, **p<.01, ***p<0.001, ns= not significant

According to the table, a significant difference in attitudes towards environmental issues was found by their gender.

Table 6 One-Way ANOVA Result Showing Primary School Children's Environmental Attitudes Grouped by School Group   (N=354)

Variables		Sum of Squares	*df*	Mean Square	F	*p*
Environmental Attitudes	Between Group	128.100	2	64.050	6.398	.002**
	Within Group	3513.685	351	10.010		
	Total	3641.785	353			

*p<.05, **p<.01, ***p<0.001, ns= not significant

According to the table, It was found that there was a significant difference in environmental attitudes among school groups.

Table 7 Tukey HSD Result Showing Primary School Children's Environmental Attitudes Grouped by School Group   (N=354)

Variables	(I) School	(J)School	Mean Difference (I-J)	*p*
Environmental Awareness	Group 2	Group 1	-1.892*	.001**
		Group 3	-1.830*	.010*

*p<.05, **p<.01, ***p<0.001, ns= not significant

According to the table, there were significant differences in environmental attitudes between the students from Group 2 School and Group 1 School, and between the students from Group 2 School and Group 3 School.

Table 8 Mean Values and Standard Deviations of Primary School Children's In-school Experience and Out- of-school Experience   (N=354)

No.	Variables	Mean	SD
1	In-school Experience	2.67	0.65
2	Out-of-school Experience	2.39	0.69

Scoring range: 1.00-1.80 =never   1.81-2.60 =seldom,   2.61-3.40=sometimes
                  3.41-4.20 =often   4.21-5.00=always

For in-school experience, the average mean value was 2.67. It can be noted that the children sometimes participated in in-school experience. The mean value for out-of-school experience was 2.39. It was found that they seldom participated in out-of-school experience.

Table 9 Mean Values and Standard Deviations of Primary School Children's Interest and Concern towards EnvironmentalIssues   (N=354)

No.	Variables	Mean	SD
1	Interest	3.36	0.84
2	Concern	3.54	0.79

Scoring range:
  Interest: 1.00-1.80 = not interested   1.81-2.60 =slightly interested
            2.61-3.40 = moderately interested   3.41-4.20 =very interested
            4.21-5.00 = extremely interested
  Concern: 1.00-1.80 =not concerned   1.81-2.60 = slightly concerned
            2.61-3.40 = moderately concerned   3.41-4.20 = very concerned
            4.21-5.00 = extremely concerned

According to the table, the average mean value was 3.36 and it can be noted that primary school children were moderately interested in environmental issues. For Environmental Concern, the average mean value was 3.54. It can be regarded that primary school children were very concerned towards environmental issues.

Research Question (3) Factors affecting environmental awareness of primary school children

Five variables were identified as predictors of primary school children's Environmental Awareness (EA): In-school Experience (IE), Out-of-school Experience (OE), Interest (I), Concern(C), and School Group (SP). Simultaneous multiple regression was conducted to investigate the best predictor of their Environmental Awareness. The combination of variables for predicting Environmental Awareness included In-school Experience (IE), Out-of-school Experience (OE), Interest (I), Concern(C), and School Group (SG), F (5,348) = 9.222

Table 10 Simultaneous Multiple Regression Analysis for Factor Predicting Primary School Children's Environmental Awareness

Variables	B	SEB	β	*p*
In-school Experience	.11	.07	.11	.051
Out-of-school Experience	.14	.07	.12*	.049
Interest	.03	.08	.03	.732
Concern	.22	.08	.20**	.006
School Group	.07	.04	.08	.123
Constant	1.11	.18		.000

*R=.34, R^2=11, F (5,348)= 9.222 *p<.05, **p<.01, ***p<0.001,*

The Beta coefficients were presented in the table. Out-of-school experience of the children and their concern towards environmental issues significantly predicted their environmental awareness when all five variables were included. The adjusted R squaredvalue was .11 (R=.34). This indicated that 11% of the variance in children's awareness towards environmental issues was explained by the model, and this is smaller than typical effect.

According to Beta weights, concern towards environmental issues variable (β = .20, p<.01) appears to be the best predictable of children's environmental awareness. Out-of- school experience variable (β = .12, p< .05) appears to be the second predictor of children's environmental awareness. Children's in-school experience, their interest towardsenvironmental issues and the school group appear to be important for their environmental awareness
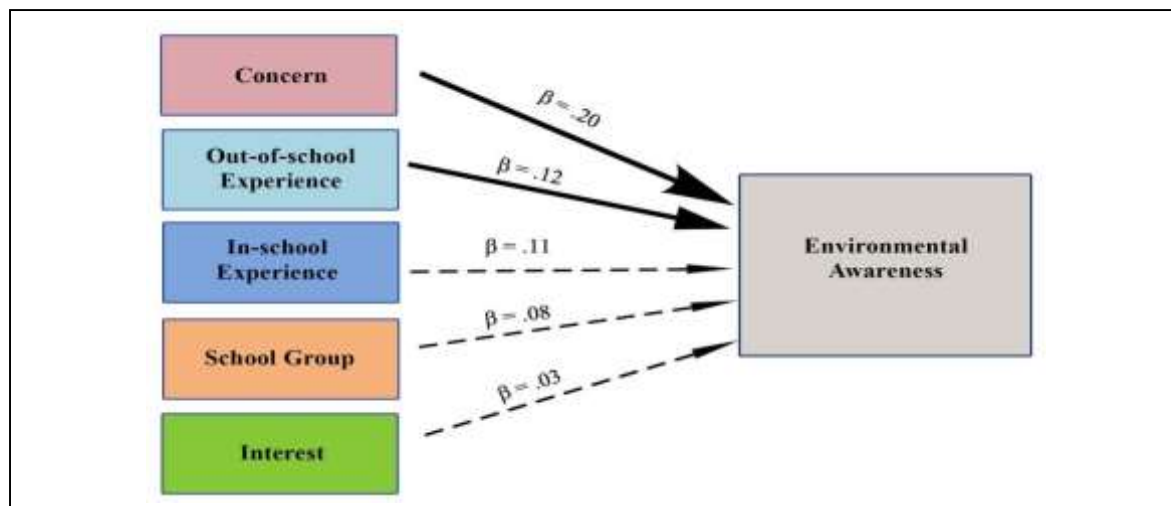
Figure 1 Potential Factors Affecting Primary School Children's Environmental Awareness

Notes:

- - - - - - - -► Predicting on children's environmental awareness (not significant)
──────────► Predicting on children's environmental awareness (statistically significant)

Research Question (4) Factors Affecting environmental attitudes of primary school children

To investigate the best predictors of Environmental Attitudes (EA) of primary school children, simultaneous multiple regression was conducted to identified six variables as predictors: In-school Experience (IE), Out-of-school Experience (OE), Interest (I), Concern(C), Gender (G) and School Group (SG). 8

Table 11 Simultaneous Multiple Regression Analysis for Factor Predicting Primary

School Children's Environmental Attitudes (354) Variables	B	SEB	β	*p*
In-school Experience	.11	.05	.12*	.033
Out-of-school Experience	.02	.05	.02	.683
Interest	.16	.06	.21**	.004
Concern	.12	.06	.11	.051
Gender	.17	.05	.16**	.001
School Group	.00	.03	.00	.935
Constant	1.38	0.16		

*R=.41, R^2=.15, F (6,347) = 11.439 *p<.05, **p<.01, ***p<0.001,*

The Beta coefficient were presented in the table. Interest, gender and in-school experience significantly predicted primary school children's environmental attitudes when all six variables were included. The adjusted R squared value was .15 (R = .41). This indicates that 15% of the variance in environmental awareness explained by the model. This is a medium effect according to Cohen (1988).

According to Beta weights, Interest variable (β= .21, p < .01) appears to be the best predictor of primary school children environmental attitudes and Gender variable (Beta = .16, p < .001) appears to be the second predictor of environmental attitudes. In-school experience (Beta = .12, p < .05) appears to be the third predictor of primary school children's environmental attitudes. It was shown in figure.
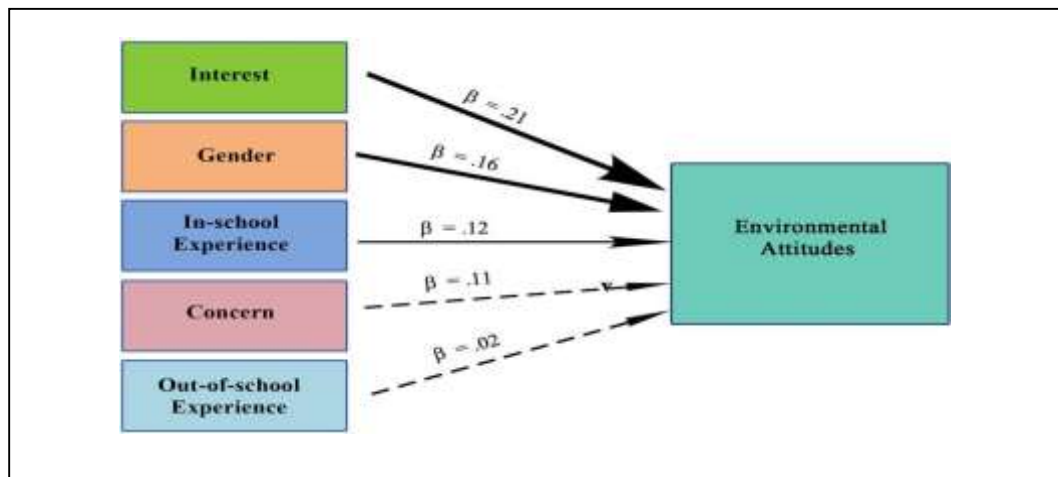
Figure 2 Potential Factors Affecting Primary School Children's Environmental Attitudes

Notes

- - - - - - - - - ▶   Predicting on children's environmental attitudes (not significant)

————————▶   Predicting on children's environmental attitudes (statistically significant)
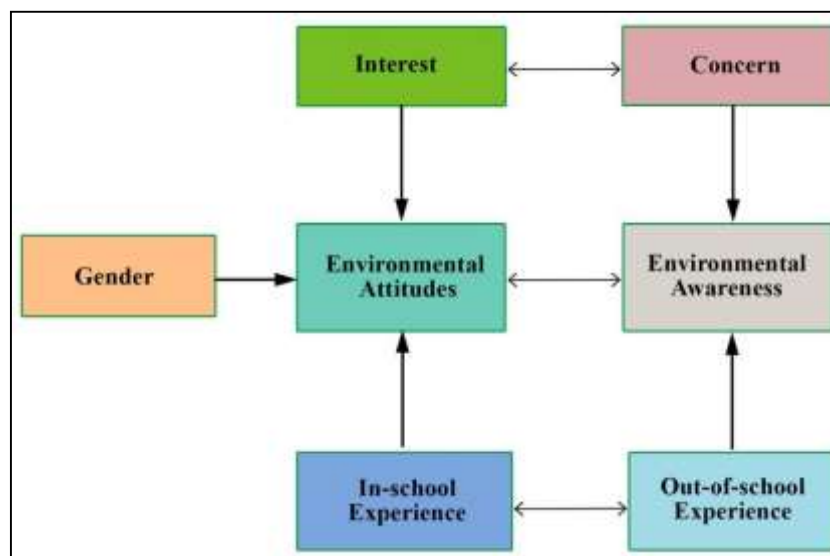
Figure 3 Potential Factors Affecting Primary School Children's Environmental Awareness and Attitudes

Qualitative Findings

The Result of Interview

Twenty teachers and twenty parents from ten schools participated in this interview. The schools were selected according to the environmental awareness level of the students. The schools were divided into two groups: Group A and Group B. Group A involved one Basic Education High School, one Basic Education Middle School and three Basic Education Primary Schools with high level of environmental awareness and Group B included one Basic Education High School, one Basic Education Middle School and three Basic Education Primary Schools with low level of environmental awareness. In each group, there were ten teachers; two teachers from each school were interviewed. In parents section, participants were also selected in the same way.

(i) Environmental Awareness and Environmental Attitudes

Regarding environmental awareness of teachers and parents, the interviewed result revealed that all teachers and parents from both groups were aware of the causes and consequences of deforestation because they could explain that deforestation occured due to cutting trees for commercial purpose without reforestation, agricultural use of land, and the extreme use of timber products. They were also aware that the lack of plants and trees could cause the change in climate which leads to the problems for the survival of all beings.

Regarding awareness on pollution, all teachers from both groups had awareness on the causes and consequences of air pollution. Although parents from group A realized the impact of air pollution and could name the diseases caused by it, parents from group B could only give the answer that it had negative effect on human health. Most teachers and parents from Group A and B could mention the cause of water pollution like throwing solid and industrial wastes into water bodies and they also had awareness on the consequences of water pollution because most of them mentioned that it has a serious effect on human health and aquatic life. Moreover, most teachers and parents from both groups were knowledgeable on how to manage solid wastes. Concerning the use of chemical fertilizers, pesticides and insecticides most teachers and parents from both groups gave a complete explanation on the harmful effect of the chemical fertilizers, pesticides and insecticides. Regarding endangered species, most teachers and parents had a desire to preserve, but a few of group A teacher gave the response on how to preserve these species.

Regarding environmental attitudes of teachers and parents, the interviewed result revealed that a few teachers from group A and some teachers from group B considered that natural resources could provide for the need of people forever. Over half of Group A teachers and parents though that environment exists for utilization by people and over half of Group B teachers and parents considered it was not concerned with people only. Most teachers and parents from Group A and Group B had the attitudes that people could not change the environmental setting in order to supply the needs of people.

(ii) In-school Experience and Out-of-school Experience

Group A Teachers: Based on the result of interview, 50% of teachers from Group A (n=5) said that, in practical, they did not perform any events concerning environmental education. In contrast, only one teacher said that she delivered her students current environmental issues and news. However, 40% of teachers from Group A (n=4) replied that they always try to share their knowledge to their students because they wanted to give more knowledge about ecology and persuade their students by explaining the law of nature in order to permeate the feeling of loving nature. Moreover, they also delivered the awareness on not to destroy the plants and trees.

With regard to in-school experience, 30% of the Group A teachers (n=3) said that they gave their students environmental education in connection with science subjects in school curriculum. Furthermore, 20% of teachers from Group A (n=2) responded that they hold panel discussion and talk show program for environmental education. Nevertheless, 50% of teachers from Group A (n=5) stated that they frequently did activities of plantation around the school.

As out-of-school experience, 50% of teachers from Group A (n=5) presented that they arranged for exploration trip concerning the knowledge on different types of plants; either what is the difference between Gymnosperms and Angiosperms or how to classify flowering and non-flowering plants. One of the teachers who performed exploitation trip continued that she also participated in regional plantation ceremonies.

The rest of 50% of the teachers from Group A (n=5) did not perform such kind of activities mentioned in above.

Group B Teachers: As in-school experiences, one of Group B teachers taught her students in connection with science subject in school curriculum. A few of Group B teachers (20%) organized for panel discussion and talk show about the environmental education. Just over half of surveyed (60%) organized to make such kind of activities such as plantation around the school.

Moreover, 60% of teachers from Group B (n=6) said that they rarely took their students to out of schools for the purpose of observing nature. Among them, one of the teachers from Group B said that she sometimes explained current environmental issues and 40 % of teachers from Group B (n=4) explained about ecology to their students. They also continued that they explained the students to love the nature and the importance of plants and tree.

Group A and Group B Parents: In response to that question, 50% of parents from Group A (n=5) and 40% of Group B parents (n=4) said that they asked their children to plant trees and to throw rubbish systematically. One of the parents from group A replied that painting was the best way to give environmental education because children were more interested in picture and colour and it could attract them. Another one of the Group A teacher also said that she sometimes took her children to garden and forest to love and feel the beauty of nature. One of the Group B parents said that nurturing the children to love the nature since their childhood could instill the preservation attitudes in them. In contrast, one of the Group B parents said that giving environmental education was not the task of parents and it was the duty of teachers.

The Result of Observation

The Result of Observation revealed that some schools had green environment, but cultivation of plants by students themselves was rarely occurred. Most of the schools had magazines, journal and books which were arranged in the school library. A few schools displayed connecting the lesson with the natural environment.

Discussion

According to Jackson (2005, cited in Boiyo, 2014), one of the best ways to preserve the environment is to create environmental awareness among society especially students. In the findings, although most of the primary school children were at satisfactory level concerning environmental awareness, 15% of students were below satisfactory level. The result of quantitative findings demonstrated that it needs to promote the collaboration with independent experts and third party institutions which mainly emphasize on environmental conservation to perform various kinds of activities such as giving lecture to primary school children and holding impromptu talk, and essay competition concerning environmental issues. Qualitative finding also revealed that recycling habits were rarely found in school and most of parents had little knowledge of

conservation of wildlife. Moreover, even though teachers and parents had known much information on causes and consequences of environmental issues, children from a few schools had got the opportunities to learn outside the classroom as a natural extension of the working environment and develop skills of enquiry and exploration within the local area for raising awareness among them. Since the children as the future leader play a very important role in the development of a country, it is very essential for them to know about the environment. They can apply this knowledge and can be better citizens in the future. According to Palmer and Neal (1994), the use of the environment as a resource for learning enables the development of a great deal of knowledge and understanding and skills of investigation and communication.

Investigating primary school children's attitudes towards environment plays an important role in enhancing their preservation attitudes towards environment. According to Palmer and Neal (1994), encouraging children to explore their personal response to the relation with the environment and environmental issues is linked to the development of attitudes and values. In the findings, a few children were below satisfactory level regarding desirable attitudes towards environments although most of them were at above satisfactory level and satisfactory level. The results of qualitative findings pointed out that some schools had given little opportunity to children to connect the lesson to the natural environment and the children did not also participate in creating green environment around the school. Moreover, the attitudes of the teachers and parents can influence their children because some of them believed that the natural resources had no limitation and it could fulfill the need of the people all the time.

Davis (1998) stated that education in environment aims to enhance positive feelings and attitudes towards nature and natural elements. As in-school experience, quantitative findings pointed out that although children sometimes participated in cultivating, watering flowers and plants in school, playing in the surrounding of the school compound, they seldom participated in Impromptu talk and debate concerning the environmental issues, creating toys and souvenir with the waste products, investigating various types of insects, and participating in essay competition concerning the environment. It may be concerned with the environmental education opportunity given by the school because even though teachers often practice on such activities as explaining the environmental-friendly behaviour, asking students to participate in planting flowers and trees in their environment, using relevant first-hand resources and real life experience as a basis for learning, they rarely held competition concerning essay writing, and impromptu talk on environmental conservation.

The benefit of undertaking out-of-school experiences is the best strategy to acquire information through hands-on experiences. From these experiences, they are enable to analyze on environmental problem and will also able to conduct on problem solving of current environmental issues and changes. One of the possible facts that accumulation of knowledge and information form out-of-school experiences raise their awareness capacity in addressing environmental problems.

In this study, the findings pointed out that there was no significant difference in environmental awareness between male students and female students. But, a significant difference was found in environmental attitudes between male students and female students. It is in line with what Hassam, Rahman and Sharifah (n.d.) and Sakar (2011) examined that female students had higher attitudes to environment as compared to male students. The results obtained in this study also indicated that female students have higher environmental attitudes than male students. According to socialization theory, females tend to assume 'caregiver' roles more than males, which in turn make them abler to understand their locality and the world. As a result, females can feel compassion for the ecological environment. Taking socialization theory into consideration, different socialization of males and females can be claimed as being the reason for the gender

difference in environmental attitudes and responsibility favoring females. Females are socialized to be more altruistic, cooperative, nurturing, and interdependent while males are socialized to be more independent and competitive (Zelezny, Chua, & Aldrich, 2000).

Research findings proved that environmental concern and out-of-school experiences are the factors affecting environmental awareness of primary school children. As out-of-school experience, the findings pointed out that although primary school children sometimes participated in planting flowers and trees in the home surrounding, observing animals in the home surrounding, and discovering to the place where crops are growing, they never participated in going a picnic to forest and mountain and seldom participated in playing and wandering along the river and forest, observing birds and animals in the nature, and visiting to the zoo. Then, they seldom participated in these experiences. According to informal interview, it was found that children were brought only to the place near the school compound as out-of-school experience in some schools and most schools did not perform such activities. Chan. koon-chai (1995) stated that students may obtain various environmental education through participation in a number of extracurricular activities, in special meeting or field visit to country parks and various outdoor education activities

Conclusion

Research findings could be combined as follows:

1. Regarding environmental awareness, 53 (15%) of primary school children had below satisfactory level, and 154 (43%) of children were in satisfactory level, and 147 (42%) of children were in the above satisfactory level. Hence, it can be regarded that most of the primary school children had satisfactory level of awareness towards environmental issues.

2. Regarding environmental attitudes, 6 (2%) of primary school children had below satisfactory level, and 159 (45%) of children were in satisfactory level, and 189 (53%) of children were in the above satisfactory level. It can be regarded that most of the primary school children had above satisfactory level of desirable environmental attitudes.

3. According to gender group, *t* test results indicated that no significant difference was found in environmental awareness between the group of male students and that of female students. But, there was a significant difference in environmental attitudes of primary school children between the group of male students and the group of female students.

4. Concerning in-school experience of the primary school children, primary school children sometimes participated in in-school experience. As out-of-school experience, primary school children seldom participated in out-of-school experience.

5. Concerning interest and concern towards environmental Issues, primary school children were moderately interested in environmental issues. Moreover, primary school children were very concerned to environmental issues.

6. According to the result of simultaneous multiple regression, it can be concluded that concern towards environmental issues becomes the best predictor for environmental awareness. Out-of-school experience becomes the second predictor for environmental awareness.

7. Concerning environmental attitudes, it can be concluded that interest in environmental issues becomes the best predictor for environmental attitudes. Gender becomes the second predictor for environmental attitudes. In-school experience becomes the third predictor for environmental attitudes.

8. According to the qualitative findings, most teachers and parents had awareness on the cause and consequences of deforestation, air pollution, and water pollution. They also had knowledge on how to manage solid waste. They could give a complete explanation on the

harmful effect of chemical fertilizers, pesticides and insecticides. Concerning endangered species, although they had a desire to preserve to these species, the challenge is that they had a little knowledge on this issue. Regarding environmental attitudes, most teachers and parents from Group A perceived that natural resources could not exist for a long time without conservation. But, the rest of them thought that it would always fulfill the needs of people. Most of teachers and parents also accepted that nature does not exist for the utilization of people only. To preserve the environments, most parents and teachers gave emphasis on the issues of deforestation, air pollution and water pollution. In giving environmental information to children, they usually talk about the importance of plants and trees and emphasize the role of education for environmental sustainability. Group A teachers and parents gave more opportunity concerning in-school experience and out-of-school experience to students.

Recommendations

The following recommendations are based on the analysis of research findings.

1. Children should be given the opportunities to engage in the activities of *education in the environment, education about the environment* and *education for the environment.*
2. Children should be given the opportunities to participate in environmental education through action taking like awareness raising, negotiation, persuasion campaigns and rehabilitation of degraded areas in order to promote their attitudes towards the environmental conservation.
3. School should collaborate with environmental educators to foster environmental literacy of primary school children by engaging them in activities.
4. A school garden should be set up in every school by encouraging children to cultivate plants individually or in group because children will get a feeling of ownership and try to conserve their own environment.
5. Every school should have adequate arrangements for planning and implementing a programme of environmental education.
6. Classroom should be decorated with some educational infographic tools like posters, photographs, charts and informative artworks to raise environmental awareness of the children.
7. Educators should increase the willingness of parents to let their children play in nature by developing targeted programming that fills specific community needs and by creating safe, supervised outdoor spaces for children.
8. School should use a range of resources in teaching environmental education including trips to museums, gardens, backyards, wetlands, national parks, camping, building trees houses, etc.
9. School should include environmental studies as part of the extra-curricular activities.
10. Parents should help their children connect to nature by providing access and encouraging play and exploration.
11. Female should participate in future environmental activism more and more because they tend to preserve the environment than males and they play a key role in household management as well as in educating their children and family.
12. All teachers should have the capacity to provide environmental education and these should study at local, national and global levels.
13. Teachers should be familiar with the goals and objectives of environmental education and the evaluation techniques for supporting the set environmental goals.

14. The teacher should use the approaches that are suitable and interesting for pupils such as using the resources from the local environment, simple investigative techniques, critical thinking and problem solving, and story-telling.

15. Department of Basic Education should lay down a policy which can perform as bridge within schools and third-party institutions who are focusing on environmental conservation and awareness.

16. Government should organize Environmental Education campaign programmes for children, youth, men and women.

17. NGOs (at national and community levels) should initiate and help by awareness campaigns to save environment.

18. Environmental Education (EE) should be integrated and implemented in every subject of the curriculum.

Need for Further Research

This study has been conducted on primary school children with special focus on their awareness and attitudes towards environmental issues. It is necessary to investigate their skills and participation for conservation of environment. As this study has mainly examined on primary school children's awareness and attitudes, other factors affecting middle school and high school children's awareness and attitudes towards environmental attitudes are here by recommended for further studies.

Acknowledgements

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RELATIONSHIP BETWEEN TEACHER-STUDENT INTERACTION AND STUDENT ENGAGEMENT

Moe Thuzar Kyaw[*]

Abstract

The current study focused specifically on students' perceptions of teacher-student interaction and their engagement. The purpose of this paper is to investigate the relationship between students' perceptions of teacher-student interaction and their engagement. Quantitative research method was used in this study. Thirty eight percent of fifth year students at Sagaing University of Education were selected as the participants of this study by using simple random sampling method. In this study, "Questionnaire for Students" was used to collect the required data. In this questionnaire, two instruments; instrument one which investigated the students' perceptions of teacher-student interaction developed by the researcher and instrument two which investigated the perceptions of students on their engagement developed by Lam and Jimerson (2008). According to the results of the study, students' perceptions on teachers' dominant interaction, cooperation interaction, and submissive interaction dimension were high level and opposition interaction dimension was moderate level. For the students' engagement, they perceived that affective engagement and cognitive engagement dimensions were high level and behavioural engagement dimension was moderate level. When examining the relationship between students' perceptions of teacher-student interaction and their engagement, teachers' dominant interaction ($r= .415$, $p < 0.01$) was positively and moderately correlated with students' engagement, teachers' cooperation interaction ($r= .499$, $p < 0.01$) was positively and moderately correlated with students' engagement, teachers' submissive interaction ($r= .477$, $p < 0.01$) was positively and moderately correlated with students' engagement. Furthermore, teachers' opposition interaction ($r= .233$, $p < 0.01$) was positively and low correlated with students' engagement. This study suggested to fill three basic needs of students; competence, relatedness and autonomy.

Keywords: Teacher-Student Interaction, Student Engagement.

Introduction

Receiving quality education is an important cornerstone in the lives of every individual. To fill these needs, a successful learning environment is a crucial role in student learning. This influence, or power, can significantly impact the learning environment, which, in turn, affects a student's achievement in school. The most powerful weapon teachers have, when trying to foster a favorable learning climate, is a positive relationship with their students (Boynton & Boynton, 2005 as cited in Varga, 2017).

Relationships are needed to create between student and teacher in an effective classroom. Connell & Wellborn (1991, as cited in Skinner & Belmont, 1993) stated that student engagement is optimized when the social context fulfills children's basic psychological needs. When students feel a sense of control and security in the classroom, they are more engaged because they approach learning with enthusiasm and vigor. Students become active participants in their own education (Skinner & Green, 2008; Maulana, Opdenakker, Stroet, & Bosker, 2013, as cited in Varga, 2017). Engagement increases when students feel their environment at school satisfies their need for autonomy, competence, and relatedness (Wang & Eccles, 2013, as cited in Pettis, 2017).

Research has indicated that the relationship between teachers and students is an important predictor of academic engagement and achievement. Students who perceive their teachers as more supportive have better achievement outcomes (Boynton & Boynton, 2005; Spilt, Koomen, & Thijs, 2011; Skinner & Green, 2008; Rimm-Kaufman & Sandilos, 2012; Gehlbach, Brinkworth, & Harris, 2012, as cited in Varga, 2017). Additionally, the learning environment plays a significant

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role in maintaining student interest and engagement. If students have positive relationships with their teachers, they will be more engaged and thus more motivated throughout each of their classes (Varga, 2017). Therefore, it is essential that teachers consider the nature of the work itself. When academic activities are interesting, challenging, fun, and relevant to the lives of students, students will want to put forth more effort and engage in these activities. When a teacher creates a welcoming environment and considers the needs of the students, learning outcomes will be ideal— students will effectively perform tasks they find personally important or interesting (Maulana *et al.*, 2013, as cited in Varga, 2017).

Aim of the Study

The main aim of this study is to explore the relationship between students' perceptions of teacher-student interaction and student engagement in Sagaing University of Education.

The specific aims of this study are:

(1) To find out students' perceptions of teacher- student interaction in Sagaing University of Education,

(2) To examine students' perceptions of their engagement in Sagaing University of Education, and

(3) To explore the relationship between teacher-student interaction and student engagement in Sagaing University of Education.

Research Questions

(1) What are students' perceptions of teacher-student interaction in Sagaing University of Education?

(2) What are students' perceptions of their engagement in Sagaing University of Education?

(3) Is there any relationship between teacher-student interaction and student engagement in Sagaing University of Education?

Definitions of Key Terms

Teacher-Student Interaction: Teacher-student interaction refers to interaction that is meaning-focused and carried out to facilitate the exchange of information and prevent communication breakdowns (Ellis, 1990, as cited in Hanum, 2016).

Student Engagement: Engagement is the quality of effort students themselves devote to educationally purposeful activities that contribute directly to desired outcomes (Hu & Kuh 2001, as cited in Trowler, 2010).

Operational Definition

Teacher-Student Interaction: In this study**, t**eacher- student interaction includes four dimensions. They are dominance interaction, cooperation interaction, submission interaction and opposition interaction.

Dominance Interaction: It is teachers' interaction whose display strict behavior and leadership behavior.

Cooperation Interaction: Teachers who displays helping, friendly, and understanding behavior use this interaction.

Submission Interaction: Teachers give freedom and behave uncertain behavior with their students in this interaction.

Opposition Interaction: Teachers treat their students with dissatisfaction and admonishing behavior in opposition interaction.

Student Engagement: Student engagement is measured by behavioral, cognitive and emotional dimensions in this study.

Behavioral Engagement: Behavioral engagement is the extent in which students are engaged in learning activities within the classroom.

Cognitive Engagement: Cognitive engagement is a student's attempt to learn.

Affective Engagement: Affective engagement is the student's psychological feelings about assigned learning activities.

Review of Related Literature

Historical Background of Teacher-Student Interaction

Constructivism is a theory of learning. As such, a constructivist approach to learning sees the learning environment as a "mini-society, a community of learners engaged in activity, discourse, interpretation, justification, and reflection" (Fosnot, 2005, as cited in Gablinske, 2014). While constructivist theory of education indicates that knowledge is constructed individually by the student that learning occurs in a social environment (classroom) with experiences that have been carefully constructed by the teacher. In biological theorists' terms, there is "an active interplay of the surround (environment) to evolution and to learning".

Bruner (1977, as cited in Gablinske, 2014) writes that the process of education requires that "schools must also contribute to the social and emotional development of the child if they are to fulfill their function of education". Bruner develops four themes he considers essential to the process of learning – one of them relates to stimulating the desire to learn, creating interest in the subject being taught, and what he terms "intellectual excitement". He suggests studying the methods used by 'successful' teachers as a way of determining effective practices. Constructivism provides a natural and best frame for this study because a major tenet of a constructivist researcher is to look at the processes of interaction among individuals in the context of where they live and work.

In 1840, Mann said that the teacher must be intuitive and lead the minds of his pupils to discover what they need to know and then supply them with what they require. Dewey (1938, as cited in Gablinske, 2014) said that as an educator, you need to be able to discern what attitudes are conducive to continued growth and what are detrimental, and use that relational knowledge to build worthwhile educational experiences for students. Vygotsky (1978, as cited in Gablinske, 2014) believed that higher mental functioning are socially formed and culturally transmitted. Cognitive development is mediated through language dialogues between one who knows (teacher) and one who is learning (student). Jackson (1968, as cited in Gablinske, 2014) studied life in classrooms and determined that "there is a social intimacy in schools that is unmatched elsewhere in our society".

The Role of Teachers

Sarason (1999, as cited in Gablinske, 2014) looks at teaching as a performing art, and discusses the "art of teaching" and the role that teacher interaction plays in creating a "productive learning" environment. Sarason contends that there are three overarching features for productive

learning; the first is recognizing and respecting the individuality of the learner. The second is for the teacher to know the subject matter sufficiently to be able to determine when the learner may have difficulty and be able to intercede to prevent the difficulty from happening. The third tenet is that the teacher is constantly looking for ways to engage and stimulate the learner so he/she wants to learn. By building relationships with students, teachers can fulfill what Sarason contends is the overarching purpose of schooling – motivate learners to experience personal and cognitive growth.

Students' Perceptions of their Teachers' Behaviour

Student perception plays an important role in incentive. In fact, research suggests that the most powerful predictor of a child's motivation is the child's perception of control. Perceived control is the belief that one can determine one's behavior, influence one's environment, and bring about desired outcomes. Because students already have a history of experiences with whether adults are attuned to their needs, teachers build on these experiences (Skinner & Greene, 2008, as cited in Varga, 2017). Therefore, a student's perception of the teacher's behavior impacts the relationship. Students who feel their teacher is not supportive towards them have less interest in learning and are less engaged in the classroom (Rimm-Kaufman & Sandilos, 2012, as cited in Varga, 2017).

Teacher-Student Interaction

Good teacher-student interactions can positively impact student behaviors in the classroom. The learning environment plays a significant role in developing a student's motivation to learn, and positive relationships can help maintain student interest and active engagement in learning (Maulana, Opdenakker, Stroet & Bosker, 2013, as cited in Varga, 2017). Research suggests that good teacher-student relationships are important for maintaining adolescents' interests and academic engagement in learning (Maulana *et al.,* 2013, as cited in Varga, 2017). This present study based on self-determination theory and the model for interpersonal teacher behavior.

- **Self-Determination Theory**

According to SDT, the fulfillment of the three basic psychological needs for competence, relatedness, and autonomy is essential to psychological health and growth, intrinsic motivation, well-being, optimal functioning, and self-actualization (Deci & Ryan, 2000; Ryan & Deci, 2002, as cited in Korthagen & Evelein, 2016). Evelein recognized that teachers want to feel competent in managing their classroom. He related this with basic psychological needs for competence. He also expressed that teachers want to experience contact and have positive connection with their students. This idea could be related with relatedness of SDT. Then, he related teachers' having room for their own ideas and choices with autonomy. To reiterate self-determination theory, students need to experience an emotional involvement from their teachers. Furthermore, students who have positive relationships with teachers are less likely to avoid school (Rimm-Kaufman & Sandilos, 2012, as cited in Varga, 2017). Experiencing a sense of belonging greatly contributes to developing positive relationships and positive behaviors.

- **The Model for Interpersonal Teacher Behaviour**

The Model of Interpersonal Behaviour consists of dominant, cooperative, submissive, and oppositional domains that define teacher interpersonal behavior in the classroom (Wubbels, Creton, Levy & Hooymayers, 1993, as cited in Pettis, 2017). Dominant teacher behaviors manage and control the classroom environment (Pettigrew, Miller-Day, Shin, Hecht, Krieger & Graham, 2013, as cited in Pettis, 2017,). Cooperative teacher behaviors promote positive teacher-student relationships (De Laet, Colpin, Vervoort, Doumen, Leeuwen, Goossen &Verschueren, 2016, as cited in Pettis, 2017) Teachers who are cooperative exhibit behaviors such as listening, empathy,

trust, and friendliness (Wubbels et al., 1993, as cited in Pettis, 2017). There is a relationship between teachers who exhibit friendliness and closeness and students' autonomous motivation which has been linked to achievement (Maulana & Opdenakker, 2014, as cited in Pettis, 2017).

Submissive teacher behaviors allow students to work independent while maintaining a low profile within the classroom (Wubbels *et al*., 1993, as cited in Pettis, 2017). Lakshman and Schubert (2015, as cited in Pettis, 2017) found that submissive teachers had students who were more comfortable in the classroom. Oppositional teacher behaviors criticize their students and show less enthusiasm and dissatisfaction within the classroom (Wubbels *et al*., 1993, as cited in Pettis, 2017). The results suggested that teachers, who display oppositional behaviors, have students who do not enjoy learning in their classroom (Sánchez-Rosas *et al.,* 2016, as cited in Pettis, 2017). A similar study conducted by Smart (2014, as cited in Pettis, 2017) noted that students describe oppositional behavior as teachers who are harsh, dissatisfied, and impatient, which made learning difficult to enjoy. The behavior of the teacher has an impact on motivation in the classroom (Smart, 2014, as cited in Pettis, 2017).

The Developmental Context of Student Engagement

Guided by Bronfenbrenner's bio ecological theory of human development and a person-environment fit framework, what follows is a discussion of student engagement within the specific developmental periods that are tied to the specific developmental tasks, opportunities, and challenges of early childhood, middle childhood, and adolescence. Janosz, Archambault, Morizot, and Pagani (2008, as cited in Christenson, Reschly & Wylie, 2012) found that student engagement tends to be stable for many over the course of adolescence and that many display moderate to high levels of behavioral, cognitive, and emotional engagement, albeit lower than in the middle schooling years. For adolescents, behavioral engagement is consistently defined as time on task, study behaviors, school and class attendance, and participation in class discussions. Most of the research on adolescent behavioral engagement has focused on student truancy and dropout, which Blumenfeld *et al*. (2005, as cited in Christenson *et al.,* 2012) argued reflects the disengaged student. Many disengaged students are dissatisfied with school, are disruptive in the classroom, have parents that are more controlling, and have more family conflict (Corville-Smith, Ryan, Adams, & Dalicandro, 1998, as cited in Christenson *et al.,* 2012). Developmentally, during adolescence, individuals experience rapid physical maturation as well as rapid development of cognitive skills. Cognitive engagement is defined as attention to task, task mastery, and preference for challenging tasks. During adolescence, youth have developed the self-regulatory skills necessary for the self-perceptions of competence and intrinsic motivation, and abstract thinking.

Emotions such as fear, anxiety, boredom, or enthusiasm about a school-related task have been considered in investigations of emotional engagement in academic tasks. In a study using experiential sampling methods, Shernoff (2010, as cited in Christenson *et al.,* 2012) investigated whether the quality of experience in after-school programs mediated the relationship between program participation and academic achievement. He found that feelings of challenge and importance while participating in after-school programs were positively related to academic achievement (Shernoff 2010, as cited in Christenson *et al.,* 2012).

Relationship between Teacher-Student Interaction and Student Engagement

Teacher-student interactions may be the most important element in student engagement (Groves, Sellars, Smith & Barber, 2015, as cited in Pettis, 2017). This is due to positive experiences students have in the classroom involving their teachers. Teachers who challenge their students are more likely to engage students in course related material (Groves *et al.,* 2015, as cited in Pettis, 2017). When teachers place a higher value on their work, students are encouraged to respond. Students who received support from their teachers were more engaged than disengaged (Van den

Berghe *et al.*, 2015, as cited in Pettis, 2017). Mesquita, Coutinho, De Martin-Silva, Parente, Faria & Afonso (2015, as cited in Pettis, 2017) noted that teachers' interactions with students leave a permanent impression on the student. A positive emotional connection is made through tone, verbal, and nonverbal communication (Mesquita *et al*., 2015, as cited in Pettis, 2017).

Methodology

Overall Design of the Study

The purpose of this study is to find out the relationship between teacher-student interaction and student engagement in Sagaing University of Education. The research method adopted in this study was descriptive research method. Data were mainly collected by using two instruments in order to explore the information of students in Sagaing University of Education. In order to examine the teacher-student interaction, students were asked by using instrument of Teacher-Student Interaction developed by Researcher. Similarly, Student Engagement Questionnaires developed by Lam and Jimerson (2008) was used to measure the student engagement. After collecting data, descriptive statistics such as means and standard deviation were calculated for the students' perceptions of teacher-student interaction and students' engagement by using Statistical Package for the social Sciences Software (SPSS) program. In addition, Pearson product moment correlation was utilized to find out the relationship between teacher-student interaction and student engagement. Moreover, two open-ended questions were taken into account in this study.

Population and Sample

In Sagaing University of Education, there were 628 fifth year students in 2019-2020 AY. The fifth year students were mainly considered as the sample of the research because they were more mature and experienced students than other students and more familiar with their teachers. For pilot study, 88 students were chosen as a sample. For the main study, the researcher randomly selected the 240 students among fifth year students.

Research Instruments

Research instruments are tools for collection data to achieve the research objectives. In order to gather required data, "*Questionnaire for Students*" was developed by researcher to investigate the demographic information of students and their perceptions of "Teacher-Students Interaction". This instrument was based on review of the literature: self-determination theory and a circular model for interpersonal diagnosis of personality. In self-determination theory, three basic psychological needs are distinguished namely the need for competence, relatedness and autonomy (Deci & Ryan, 2000, 2002, as cited in Korthagen & Evelein, 2016). Leary (1958, as cited in Pettis, 2017) originally developed a circular model for the interpersonal diagnosis of personality. This model was used to measure normal and abnormal behavior. Wubbel et al (1993, as cited in Pettis, 2017) adapted the model and created the current version of the model of interpersonal teacher behavior. In this model, the four domains are dominance, cooperation, submission and opposition (Wubbel et al, 1993, as cited in Pettis, 2017).

According to self-determination theory and teacher interpersonal behavior model, competence is similar to dominance, relatedness is similar to cooperation, and autonomy is similar to submission. In this study, teacher-student interaction were examined by using the dimensions of dominance, cooperation, submission and opposition. Each dimension has two sub-scales and each sub-scale has four items. Dominance includes leadership behavior and strict behavior. Submission behavior includes uncertain behavior and student responsibility and freedom behavior. Cooperation includes helpful/friendly behavior and understanding behavior. Opposition includes

dissatisfied behavior and admonishing behavior. This instrument consists of 32 items into 4 dimensions: "Dominant" (8 items), "Cooperation" (8 items), "Submissive" (8 items) and "Opposition" (8 items). Each item was measured using a Likert scale that ranged from "never" (1 point) to "always" (5 points).

Moreover, students were assessed their perceptions on their student engagement by using Student Engagement Questionnaires developed by Lam and Jimerson (2008). This instrument consisted of 32 items into 3 dimensions: "Affective engagement" (9 items), "Behavioral engagement" (11 items) and "Cognitive engagement" (12 items). Each item was measured using a Likert scale that ranged from "strongly disagree" (1 point) to "strongly agree" (5 points). Students were asked to express their opinions about teacher-student interaction and their engagement by using open-ended questions.

Data Collection Procedures

After taking permission from the responsible persons, questionnaires were distributed to students from Sagaing University of Education on 11 February and collected them after one week. Two hundred and forty students (100%) returned to the questionnaires. Based on the results of the responses, this study was conducted in order to examine the relationship between students' perceptions of teacher-students interaction and student engagement.

Data Analysis

Descriptive statistics such as mean and standard deviation were calculated for teacher-students interaction and student engagement by using SPSS. The decision rules for the levels of teacher-students interaction and student engagement data were: the mean scores for 1.00-2.33 were defined as low level, the mean scores for 2.34-3.67 were defined as moderate level and the mean scores for 3.68-5.00 were defined as high level. In addition, Pearson product moment correlation was utilized to examine the relationship between teacher-students interaction (independent variable) and student engagement (dependent variable). Responses from open ended questions were categorized and analyzed to complement findings on differences in teacher-students interaction and student engagement.

Research Findings

Table 1 Mean Values and Standard Deviations of Teacher-Student Interaction Perceived by Students on each Dimension

No.	Dimension	*N*	*M*	*SD*	*Remark*
1	Dominance	240	3.68	0.486	High Level
2	Cooperation	240	3.94	0.554	High Level
3	Submission	240	3.86	0.504	High Level
4	Opposition	240	3.32	0.418	Moderate Level

1-2.33= Low Level,   2.34-3.67=Moderate Level,   3.68-5= High Level

According to the Table 1, these results showed that the teachers' "dominance, cooperation and submission" interaction were high levels and opposition interaction was moderate level.

In order to see obviously for the level of mean values for each dimension, Figure 1 was illustrated.
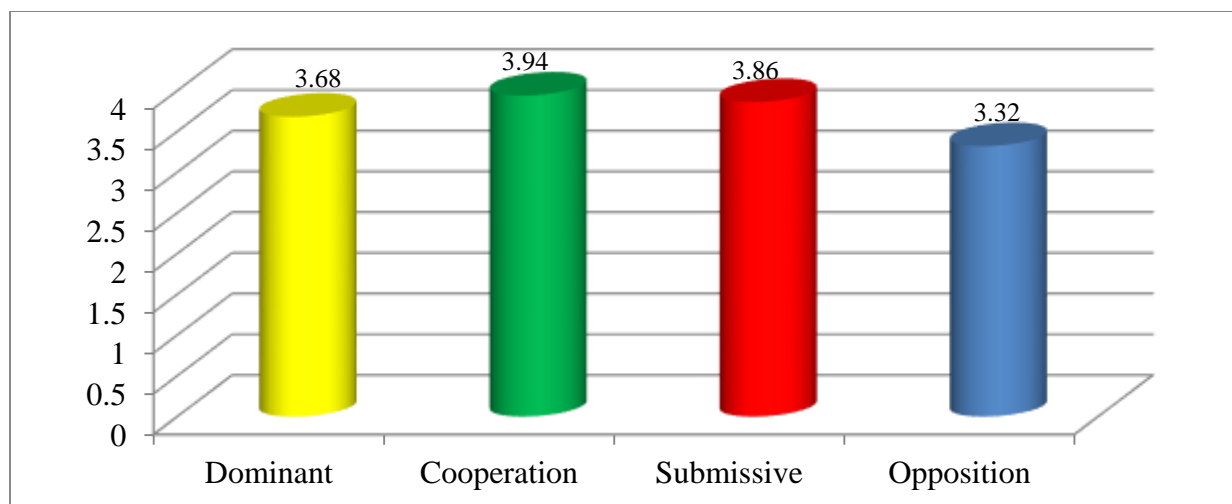
Figure 1 Dimensions of Teacher-Student Interaction Perceived by Students

According to the Figure 1, the mean values for "dominance" dimension was 3.68, the mean value for "cooperation" dimension was 3.94, the mean value for "submission" dimension was 3.86, and the mean value for "opposition" dimension was 3.32. It can be seen that cooperation dimension is the highest and opposition dimension is the lowest.

Table 2 Mean Values and Standard Deviations of Students' Engagement Perceived by Themselves on each Dimension

No.	Dimension	*N*	*M*	*SD*	*Remark*
1	Affective Engagement	240	3.79	0.518	High Level
2	Behavioral Engagement	240	3.64	0.478	Moderate Level
3	Cognitive Engagement	240	3.72	0.486	High Level
4	Overall Engagement	240	3.72	0.428	High Level

1-2.33= Low Level,   2.34-3.67=Moderate Level,   3.68-5= High Level

Table 2 illustrated the mean values of students' perceptions on each dimension of student engagement. The result showed that students' affective engagement and cognitive engagement are high level and students' behavioral engagement is moderate level. But overall engagement showed high level.

In order to see obviously for the level of mean values for each dimension, Figure 2 was illustrated.
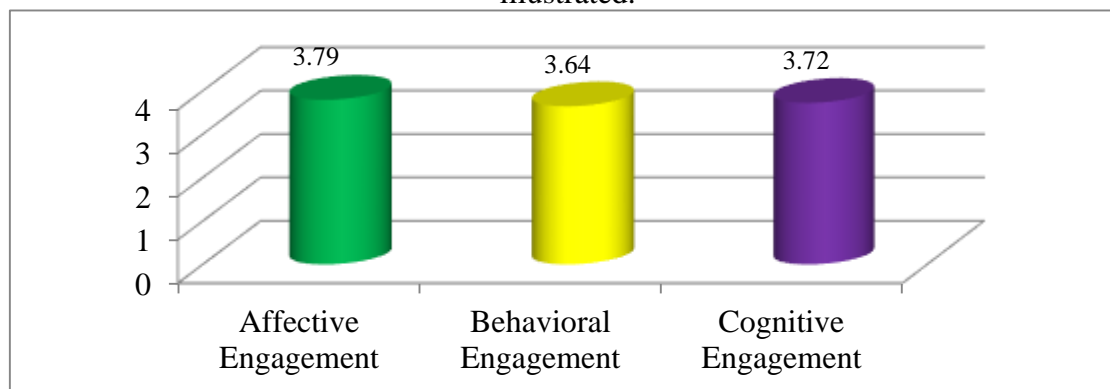
Figure 2 Dimensions of Students' Perceptions of their Engagement

According to the figure 2, the mean values for "affective engagement" dimension was 3.79, the mean value for "behavioral engagement" dimension was 3.64, and the mean value for "cognitive engagement" dimension was 3.72. The result showed that dimension of students' perception of their affective engagement is the highest and dimension of behavioural engagement is the lowest.

Relationship between Students' Perceptions of Teachers' Interaction and Student Engagement

The Pearson's product moment correlation was used to find out the relationship between students' perception of teacher-student interaction and their engagement. Table 3 showed the relationship between students' perception of teacher-student interaction and their engagement.

Table 3 Relationship between Students' Perceptions of Teacher-Student Interaction and Student Engagement

	1	2	3	4	5
1. Dominance Interaction	1				
2. Cooperation Interaction	.543** .000	1			
3. Submission Interaction	.497** .000	.725** .000	1		
4. Opposition Interaction	.182** .005	.380** .000	.506** .000	1	
5. Student Engagement	.415** .000	.499** .000	.477** .000	.233** .000	1

**Correlation is significant at the 0.01 level (2-tailed).

According to Table 3, there was positively and moderately relationship with teacher's "dominance interaction" (r= .415, p<0.01) with "student engagement". Moreover, there was positively and moderately relationship between teachers' "cooperation interaction" and "students' engagement" (r=.499, p<0.01). In addition, teachers' "submission interaction" was positively and moderately relationship with "student engagement" (r=.477, p< 0.01). But, teachers' "opposition interaction" was positively and low relationship with "student engagement" (r=.233, p< 0.01).

Open-Ended Responses

Students were asked for three open-ended questions. The first question asked students to describe how your teacher interacts with you. According to the open-ended question one's responses, most teachers practice cooperation interaction, some practice submission interaction and few practice dominance interaction. But, some practice opposition interaction.

The second question is whether students engage or not in their learning in class. According to open-ended responses, most students always engage in their learning. Some students also engage sometimes. But, a little do not engage. Another is asked students to present their teachers' encouragement to engage in their learning. According to responses, most students engage because of their teachers' reward, punishment, activities, new way, games and competitions. This is their teachers' dominance interaction. Some indicated that they engage because their teachers use discussion, extension knowledge, receiving mistake, getting suggestions, and benefits of cooperation. This interaction is teachers' cooperation interaction. Some expressed that they can present their ideas freely. Some said that their teachers do not encourage them. These two reasons are due to their teachers' submission interaction. There was no reason for teachers' opposition interaction.

Discussion and Conclusion

Analyses of quantitative data collected from the study attempted to answer the three questions.

Research question one evaluated the students' perceptions of teacher-student interaction. When examining the students' perceptions of teacher-student interaction, it was found that the mean values for dominant teacher interaction was 3.68, the mean value for cooperation teacher interaction was 3.94, the mean value for submissive teacher interaction was 3.86, and the mean value for opposition teacher interaction was 3.32. Therefore, dominance interaction, cooperation interaction and submission interaction were high level and opposition interaction was moderate level. In other words, the teachers from Sagaing University of Education practiced four interactions including dominance, cooperation, submission and opposition. Fifth year students perceived that their teachers practice dominance, cooperation, and submission interaction in the high level and also practice opposition interaction in the moderate level.

According to the open-ended responses, teachers from Sagaing University of Education practice four interactions. Most students perceived that their teachers mostly practice cooperation interaction. However, few practice dominance interaction. This fact is not consistent with quantitative finding because teachers' dominance interaction is high level. This may be due to 12% students' no responses. Therefore, it can be interpreted that teachers from Sagaing University of Education practice four interactions and mostly practice cooperation interaction according to the students' perceptions. In other words, their teachers can exhibit helpful, friendly relation with their students.

Research question two examined the students' perceptions of their engagement at Sagaing University of Education. When investigating the students' perceptions of their engagement, it was found that the mean values for affective engagement was 3.79, the mean value for behavioral engagement was 3.64, and the mean value for cognitive engagement was 3.72. Therefore, students' affective engagement and cognitive engagement were high levels and students' behavioral engagement was moderate level. Moreover, students' overall engagement showed high level. Based on open-ended responses, most students engage in their learning process. Another, fifth year students of Sagaing University of Education engaged in learning activities within their classroom, attempted to learn and had positive attitudes towards their assigned tasks. Generally, fifth years students of Sagaing University of Education had good feeling about their assigned learning activities.

Research question three investigated the relationship between teacher-student interaction and student engagement at Sagaing University of Education. Based on the research finding, teachers' dominance interaction ($r= .415, p < 0.01$) was positively and moderately correlated with students' engagement. Students can engage because of their teachers use dominance interaction based on open-ended responses. This was not consistent with prior research because prior research had no correlation between teacher dominance interaction and student engagement (Pettis, 2017). According to the result, the students can engage when their teacher dominate their classroom. This result consistent with Pettigrew's ideas (Pettigrew et al., 2013, as cited in Pettis, 2017) that students were sensitive to controlling teacher behavior and were motivated to participate in class. Other study found that teachers' leadership sector and student cognitive outcome are positive correlation (Goh, 1994. Henderson, 1995, as cited in Den Brok, Wubbels & Brekelmans, 2004). Therefore, it can be interpreted that when teacher dominate their classroom, they can control their class's noise level, movement, group work and other aspects of classroom environment. Although students can get pressure to engage in their class, they succeed at the end.

Based on the research finding, teachers' cooperation interaction ($r= .499$, $p < 0.01$) was positively and moderately correlated with students' engagement. In addition, student engagement was due to teachers' strong cooperation based on open- ended responses. Similarly, prior research showed that there was positive relationship between teacher cooperation interaction and student's engagement (Pettis, 2017). This result also consistent with Maulana and Opdenakker's finding those teachers who exhibit friendliness and closeness and students' autonomous motivation which has been linked to achievement (Maulana & Opdenakker, 2014, as cited in Pettis, 2017). Other studies found that helpful, Friendly and understanding behavior positively relate with pleasure confidence, effort, and relevance of students (Brekelmans et al., 2002, Van Amelsvoort, 1999, as cited in Den Brok *et al.*, 2004). Therefore, the greater the teacher cooperation interaction is, the better student engagement is. When teacher cooperation interaction is strong, their students are more likely to engage in course related activities. Thus, the students can get good grade from their efforts.

Based on the responses of students, teachers' submission interaction ($r = .477$, $p< 0.01$) was positively and moderately correlated with students' engagement. Some can engage due to their teachers' submission interaction according to open-ended responses. But, prior research showed that there was no association between teacher submission interaction and student engagement (Pettis, 2017). However, Zhu, 2013 (as cited in Pettis, 2017) indicated that students preferred legislative, judicial and liberal thinking styles. Another study showed that submissive teachers had students who did not mind their misbehavior and upset normal classroom functions (Lakshman & Schubert, 2015, as cited in Pettis, 2017). Therefore, when teacher can create more comfortable classroom environment, their student can work independently.

Based on the research finding, teachers' opposition interaction ($r= .233$, $p < 0.01$) was positively and low correlated with students' engagement. Prior research indicated that teacher opposition behavior does not correlate with student engagement (Pettis, 2017). The result consistent with Sanchez-Ross' suggestion that the teacher who display oppositional behaviors have students who do not enjoy in their learning in the classroom (Sanchez-Rosas et al., as cited in Pettis, 2017). Another study showed that students who had conflicts with their teachers were less engage in the class (De Laet *et al.,* 2015, as cited in Pettis, 2017). Therefore, when the teachers behave opposition interaction, the students had less engaged in their class.

In conclusion, this research found that the teachers from Sagaing University of Education behave dominance interaction, cooperation interaction and submission interaction. Therefore, they exhibit friendliness, closeness, sympathy, interest, listening and trust and they can manage their class smoothly. They can also give their students freedom to present their ideas. In contract, the teachers admonish their students' behavior and dissatisfied them because they show opposition interaction according to the students' responses. Moreover, students can engage in their class according to research finding. They are mature and have a lot of experiences and skills to engage in classroom's activities.

In addition, there are positively and moderately relationships between teachers' dominance interaction, cooperation interaction, submission interaction and students' engagement based on the results. Therefore, students have better engagement in their class when their teachers interact with friendly, closely, warmly and systematically management and give freedom.

On the other hand, the research showed that there is positively and low relationship between teachers' opposition interaction and students' engagement. In particular, there are three reasons for this unexpected relationship. First, the students like feeling of challenge and importance and want to participate in after-school program (Shernoff, 2010, as cited in Christenson *et al.,* 2012). Second, Knollmann & Wild found that they want to get autonomy which is key developmental task of adolescents (Christenson *et al.,* 2012). Third, many disengaged students are dissatisfied with school, are disruptive in the classroom, have parents that are more controlling, and have more

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family conflict (Corville-Smith, Ryan, Adams, & Dalicandro, 1998, as cited in Christenson *et al.,* 2012). When these students meet more influence or more controlling teachers, the quality of teacher-student interaction have not good result. For this reason, they have negative perceptions on their teachers. Similarly, teachers cope with daily stress including more workload, large class size and disengaged students. Thus, these teachers respond to such students with less support and more coercion.

To sum up, this study showed that some students have disaffection because teachers use opposition interaction and this interaction relate with student engagement based on students' responses. That is why, three important qualities of teacher-student interaction; relatedness, competence and autonomy are needed according to self- determination theory.

Suggestions

This study gives the following suggestions.

(1) Students should be provided with academic tasks that are challenging, authentic, integrating across subjects area. Thus, they can have more experiences to relatedness.

(2) They should be promoted their intrinsic motivation and encouraged to discover their own interest and goals so that their competence can increase.

(3) They are needed to explain the importance of activities and rules and to solicit their own ideas. Their ideas should be respected in order to increase their relatedness.

(4) Disaffected students are needed to treat with more caring, warmth, involvement, structure and autonomy support.

(5) Students should be given opportunities that can meet and discuss their difficulties with their teachers closely and friendly.

Thus, students' basic needs could be filled by using these ways. It can be expected that quality teacher-student interaction will be promoted by using these suggestions. The twenty-first century poses a paradox for higher education. This study could supply university teachers to better understand how they interact with their students. This study will assist teachers to understand students' attitudes toward teacher-student interaction, to encourage students' participation in learning, to solve students' difficulties, to espouse proper and efficient teaching strategies to achieve a better performance in teaching.

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RELATIONSHIP BETWEEN PRINCIPALS' LEADERSHIP STYLES AND TEACHERS' JOB SATISFACTION

Saw Sandar Win Htut[*]

Abstract

This paper concerns a research study about the relationship between principals' leadership styles and teachers' job satisfaction at selected Basic Education High Schools in Sagaing Township. In this study, two instruments: *Principals' Leadership Behaviour Survey* developed by Ibrahim (2014) to measure principals' leadership styles and *Teachers' Job Satisfaction Survey* adapted from Minnesota job satisfaction survey developed by Weiss (1967) to measure teachers' job satisfaction were used. In this study, quantitative research method was used. The sample was chosen 147 teachers from five selected Basic Education High Schools by using purposive sampling method. After collecting the data, descriptive statistics such as, Mean Values and Standard Deviations and Pearson product-moment correlation coefficient were calculated by using SPSS. The findings of the study indicated that teachers from selected high schools perceived that their principals mostly practiced "Democratic" leadership style ($\bar{X} = 3.76$) but moderately used "Autocratic" ($\bar{X} = 3.54$) and "Laissez-Faire" leadership style ($\bar{X} = 2.95$) to manage their schools. The finding of teachers' "job satisfaction" showed that "overall job satisfaction" of teachers from all selected schools falls under the moderate level ($\bar{X} = 3.48$). When studying the correlation between principals' leadership styles and teachers' job satisfaction at selected schools, it was found that principals' "Autocratic" leadership style and "Democratic" leadership style were positively and moderately correlated with teachers' job satisfaction ($r = .607$, $p<0.01$, $r= .633$, $p<0.01$). In addition, there was a low and negative relationship between "Laissez-Faire" leadership style and teachers' "job satisfaction" ($r= -.210$, $p<0.05$) at selected high schools. And two open-ended questions were also discussed. Based on the research findings, this study helps to provide guidance and direction to principals who wish to exercise their leadership on a more appropriate and relevant way particularly in a context of change.

Keywords: Autocratic leadership style, Democratic leadership style, Laissez-fair leadership style, Teachers' job satisfaction

Introduction

Educational institutions are significant places where the next generation is sophisticated and school leaders tolerate a heavy weight of responsibility for their institution. Leaders in educational institutions are the same as leaders in other organizations, and inevitably face the challenge of maintaining the goals of institutions (Northouse, 2010). Principal needs the qualities to lead all teachers, members and staffs. The principal is directly responsible to direct teachers toward the goal of an organization. His attitude with teachers creates a positive relationship with each other. The positive environment creates when principal will use the suitable leadership styles for the staffs (Mehrotra, 2005). Leadership is such a process in which subordinates are influenced by the leaders to achieve institutional goals (Omolayo, 2000; Bamigboye, 2000; Akanwa, 1997; and Bhatti, Maitlo, Shaikh, Hashmi, & Shaikh, 2012, cited in Munir and Iqbal, 2018).

School leadership is a process of encouraging and helping teachers and learners to work enthusiastically toward realization of school objectives or educational objectives (Machumu & Kaitila, 2014). Principal leadership styles are critical because teachers and principals work together closely, and teachers are directly affected in terms of their job satisfaction (Ismail, 2012). In addition to a school leader's leadership style, teachers' job satisfaction is another critical factor affecting school effectiveness. The leadership of a principal is essential element for job satisfaction of teacher. Some researchers discovered that different leadership styles will engender different

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working environment and directly affect the job satisfaction of the employees (Bogler, 2001, 2002; Timothy & Ronald, 2004, cited in Wanjiru, 2013).

Hussain Ch, Ahmad, Malik and Batool (2017) indicated that mostly principals decide the operational objectives and standards of the school by themselves. They suggested that the school principals should enhance the participation of faculty in decision making. According to Ibrahim (2014), autocratic principals negatively influence teachers' job satisfaction because they adopt harsh leadership styles which are widely detested by the teachers and students alike. And then, Ibrahim concluded that the influence of democratic leadership style on teachers' job satisfaction is a positive moderate relationship between democratic leadership style and teachers' job satisfaction. Moreover laissez-faire leadership style is very strong negative relationship with teachers' job satisfaction. However, another study in Somalia found that the most indicator of teacher satisfaction was laissez-faire leadership style; the teachers like the leader who let them take their decision concerning their own work; the one who gives more space of freedom (Ali & Dahie, 2015).

The principal, who leads with democratic leadership style, provides freedom to teachers for work independently. Democratic principal always listens to the opinions of the teacher and follow them. Those teachers are more satisfied with the principals' democratic leadership style. Autocratic principals do not provide opportunities to teachers for work freely. Those teachers are likely unhappy with the principals' autocratic leadership style. Moreover, principals who use the laissez faire leadership style tend to fail to follow up on those they have delegated tasks. They leave everything to the mercy of their subordinates, some of whom may lack the necessary skills and competence to execute the work. Others may simply not like to do the work unless they are supervised (Hussain Ch et al., 2017).

In this study, the relationship between principals' leadership styles and teachers' job satisfaction will be explored by studying the teachers' perception. Using information regarding leadership styles, principals may be better understanding their leadership styles used in the workplace and how it impacts their teachers' job satisfaction. Therefore, leadership styles of principals, teachers' job satisfaction and the relationship between principals' leadership styles and teachers' job satisfactions will be investigated in this study.

Purpose of the Study

The main purpose of this study is to investigate the relationship between principals' leadership styles and teachers' job satisfaction at Selected Basic Education High Schools in Sagaing Township.

The specific purposes of this study are:

- to examine the principals' leadership styles perceived by teachers,
- to explore the teachers' job satisfaction perceived by teachers themselves, and
- to find out the relationship between principals' leadership styles and teachers' job satisfaction.

Research Questions

The following research questions guide the direction of the study.

1. What are the leadership styles of principals perceived by teachers at selected Basic Education High Schools in Sagaing Township?

2. What are the levels of teachers' job satisfaction perceived by teachers themselves at selected Basic Education High Schools in Sagaing Township?

3. Are there any relationship between teachers' perception of principals' leadership styles and their job satisfaction at selected Basic Education High Schools in Sagaing Township?

Definitions of Key Terms

This study was guided by the following definitions.

- **Leadership Styles** refer to patterns of behavior by a leader in influencing members of the group. It is the way the leader behaves towards the group members (Ibrahim, 2014).

- **Autocratic Leadership Style** is known as authoritative style or directive style of leadership in which the autocratic leader retains most of the authority for him-self or her-self (Paper Tyari, 2019).

- **Democratic Leadership Style** is known as participative style of leadership. In this style, subordinates are also involved in decision making (Paper Tyari, 2019).

- **Laissez-Faire Leadership Style** is an approach in which there is essentially no leadership because there is limited interaction between the leader and the followers (Bass, 1990 as cited in Schwartz, 2017).

- **Job Satisfaction** is defined as the pleasure the employees feel as a result of evaluating their work and their work life (Anderson, Sharad, Gregory, Neil, & Duncan, 2014).

Operational Definitions

In this study, three principals' leadership styles are measured according to Ibrahim, (2014). They are Autocratic Leadership Style, Democratic Leadership Style and Laissez-faire Leadership Style.

- **Autocratic Leadership** refers to giving full empowerment to the leader with minimal participation from the followers.

- **Democratic leadership** refers to a situation where there is equal work among leaders and followers.

- **Laissez-Faire leadership** refers to a leadership style in which leaders are hands-off and allow group members to make the decisions.

In this study, teacher job satisfaction is divided into eight dimensions with respect to Weiss (1967). These are advancement, recognition, responsibility, work itself, supervision, working condition, interpersonal relationship, and salary (or) pay.

- **Advancement** refers to the promotion opportunities that exist within profession.

- **Recognition** is aspect of acknowledgement for good work done by teachers.

- **Responsibility** refers to duties including teaching work and extra work without teaching.

- **Work Itself** is the kind of work which is interesting, providing opportunity, meaningful, and security.

- **Supervision** refers to the management of the principal who monitors performance of the teachers.

- **Work Conditions** are defined as a teacher's work place, work instruments, rules, procedures, and workload involving the paperwork affecting the teachers' job satisfaction.

- **Interpersonal Relations** refer to nature of social and profession interrelation with principal, teachers and colleagues.

- **Salary or Pay** refers to income of teachers for teaching.

Conceptual Framework of the Study

Kurt Lewin and associates at the University of Iowa explored three leadership behavior or styles: autocratic, democratic, and laissez-faire leadership style (Sapru, 2011). Ibrahim, (2014) also described these three principals' leadership styles. In this study, these three principals' leadership styles will be used.

Leadership Questionnaire was developed by Ibrahim (2014) based on trait, behavioural, situational leadership theories to measure principals' leadership styles. It was comprised the following three styles of leadership: (1) Autocratic leadership style, (2) Democratic leadership style, (3) Laissez-faire leadership style.

The notion of job satisfaction can be viewed through Herzberg's two factor theory of job satisfaction. He postulated that satisfaction was comprised of two types of factors –those that he termed "motivators" and those that he called "hygiene factors" (Gruneberg, 1979, cited in Gordon, 1998).

Therefore, Herzberg's theory is related to this study in that teachers' job satisfaction will be determined by various factors which include principal's leadership style. Different leadership styles used by the principal will elicit different levels of job satisfaction among teachers.

Teachers' Job Satisfaction Survey was adapted from Minnesota job satisfaction survey developed by Weiss (1967) based on Herzberg's two factors theory to measure teachers' job satisfaction. It was constituted of 8 dimensions: (1) Advancement, (2) Recognition, (3) Responsibility, (4) Work itself, (5) Supervision, (6) Working condition, (7) Interpersonal relation, and (8) Pay.
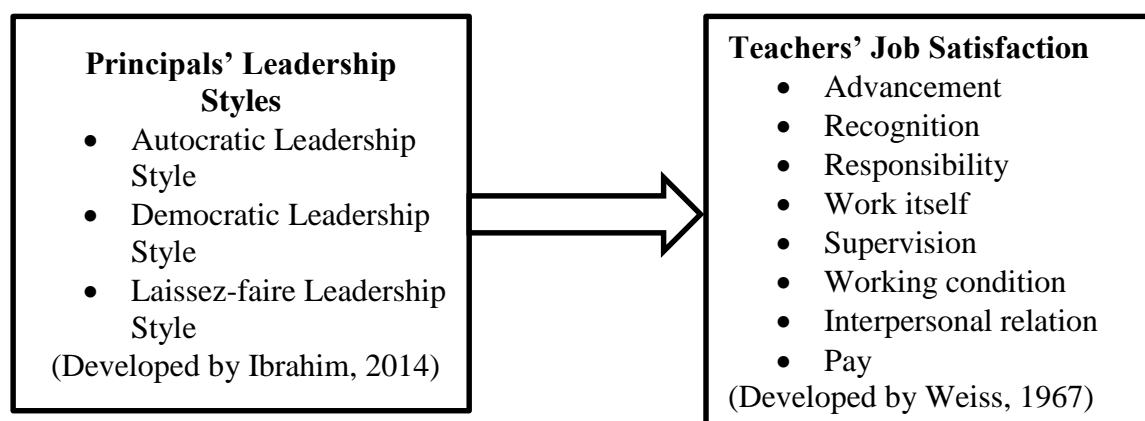
Figure 1 Conceptual Framework of the Study

Review of Related Literature

Clark (2000, cited in Hussain Ch, et al., 2017) suggested that leadership style is the pattern through the leader guides and encourages to members of the organization to accomplish the goals. Leadership style is the manner and approach of providing direction, motivating people, and implementing plans (Newstrom & Davis, 1993, cited in Schwartz, 2017). In this research, three kinds of leadership styles are used. The autocratic leadership style, democratic leadership style, and laissez-faire leadership style which three main subjects of this research are discussed in the following.

Autocratic Style of Leadership

Autocratic leadership refers to a system that gives full empowerment to the leader with minimal participation from the followers. Yukl (1989) found that autocratic leaders tend to have the following five characteristics: they do not consult members of the organization in the decision-making process, the leaders set all policies, the leader predetermines the methods of work, the

leader determines the duties of followers, and the leader specifies technical and performance evaluation standards.

Since this style of leadership usually only involves one person deciding, it permits quick decision-making. Although the autocratic style is relatively unpopular, in certain circumstances it can be an effective strategy, especially when the leader is short on time and when followers are not productive (Ismail, 2012).

Democratic Style of Leadership

Democratic leadership refers to a situation where there is equal work among leaders and followers. According to Goldman (1998, cited in Ismail, 2012), democratic organizations typically have the following six characteristics: policies are determined by a group of organizations, technical and job performance measures are discussed so they are understood by all, leaders provide advice to members in regards to implementing tasks, members are free to choose with whom they work, the group determines the distribution of tasks, and leaders try to be objective in giving praise and criticism.

Laissez-Faire Style of Leadership

Laissez-Faire leadership is when leaders are hands-off and allow group members to make the decisions. With this style, freedoms are fully determined by group goals, techniques, and working methods. Leaders rarely intervene. Laissez-faire style is described by Zervas and Lassiter (2007, cited in Ismail, 2012) as the most effective style, especially where followers are mature and highly motivated.

Teachers' Job Satisfaction

Job satisfaction is an important facet of people's lives and their productivity in the workplace. Job satisfaction can lead to a sense of responsibility and involvement toward achieving comprehensive carrier goals and contributing to the productivity of an organization (Harter, James, Schmidt, Hayes and Theodore, 2002). Teachers' job satisfaction can be defined as the fulfillment, the attractiveness and happiness teachers find in their job that leads them to be highly committed to it (Ejimofor, 2007).

Teachers' job satisfaction survey adapted from Minnesota Job Satisfaction Survey assesses eight dimensions of job satisfaction.

Advancement refers to as "promotion opportunities that exist within a profession" (Spector, 2007, cited in Younes, 2012). According to Kraner & Nonal (1999, cited in Kaltenbaugh, 2008) promotion refers to the furthering of or the advancement of one's job. An employee's opportunities for promotion are also likely to exert an influence on job satisfaction (Landy, 1989; Larwood, 1984; Moorhead & Griffen, 1992; Vecchio, 1988, cited in Bull, 2005).

Recognition is defined as employee attention, appreciation, and prestige. Blame and criticism are the negative aspects of these characteristics. Recognition is frequently reported to contribute to job satisfaction. Teachers whose successes are recognized are most effective on the job as they are praised for their accomplishments (Hackman & Oldham, 1980; Herzberg, 1958; Maslow, 1954; Sergiovanni, 1967, cited in Gordon, 1998). The principal should praise and recognize his/her teachers for their accomplishments.

Responsibility is defined as the accountability of one's work as well as teachers' active role in the students' learning and school policy. Teachers who are challenged with greater responsibilities in the job and have more autonomy in their work benefit from higher job satisfaction. Therefore, a teacher who is trusted with school responsibility such as a supervision role with little oversight will likely feel motivated with higher job satisfaction (Herzberg et al.,

1959; Kim & Loadman, 1994; Maslow, 1954; Sergiovanni, 1967, cited in Knox, 2011). Teachers must hold themselves responsible for the work. Teachers must hold themselves responsible for the school's work. The principal should give them ownership of their work and should give minimize control but retain accountability.

Work Itself is defined by Spector as "the related job tasks and to which degree of enthusiasm the employee enjoys performing these tasks" (Spector, 2007, cited in Younes, 2012). Work itself performed by employees has a significant impact on their level of job satisfaction. Basom and Frase, 2004; Staudt, 1997; cited in Kaltenbaugh, 2008) found that job satisfaction was greater among workers in jobs that had allowed them to exert their own judgment to get work done and demonstrate their ability to delegate tasks. Employees prefer work that is mentally challenging in that it provides them with opportunities to use their skills and abilities and offers a variety of tasks, freedom and feedback on how well they are doing (Robbins, 1993, cited in Lumley, Coetzee, Tladinyane, & Ferreira, 2011).

Supervision which is the dimension of job satisfaction is defined as the amount of regulation and control provided by the administration and the interpersonal relationships the employee has with the supervisor (Locke, 1976, cited in Knox, 2011). Supervision in technical skill is the ability to use the knowledge, method, techniques and equipment necessary for the performance of specific tasks acquired from experience and education. If workers view their superiors as fair and competent and sincere, the level of job satisfaction will be high. Furthermore, those workers who perceive their employers as unfair, incompetent and selfish will, therefore, experience a lower level of job satisfaction (Baron& Greenberg, 2003, cited in Maniram, 2007). Supervision is a powerful source of dissatisfaction in subordinates (Hackman, 1963, cited in Gordon, 1998). And the relationship of the employees with his peers, superiors and subordinates should be appropriate and acceptable (MSG Expert, 2016). Therefore, the principal needs to have technical skill in leading and have a positive relationship with the teachers.

Working Conditions are defined as an employee's work place, work instruments, the work itself, organization policy, and organizational rules. Arnold and Feldman (1996, cited in Wanjiru, 2013), promoted factors such as temperature, lighting, ventilation, hygiene, noise, working hours, and resources as part of working conditions. The absence of such working conditions, amongst other things, can impact poorly on the worker's mental and physical well-being (Baron and Greenberg, 2003, cited in Wanjiru, 2013). Robbins (2001) advocates that working conditions will influence job satisfaction, as employees are concerned with a comfortable physical work environment. In turn this will render a more positive level of job satisfaction.

Interpersonal Relation is the manner, in which teachers perceive the conditions of their workplace, including their relationships and interactions with principal and co-workers (Ismail, 2012). Teachers who have worked for long periods of time with the same principal tend to be able to work closely with that principal. These teachers come to feel comfortable with their principal and his or her leadership style, and this long-term interaction can improve the level of satisfaction between the teachers and the principal (Richards, 2003, cited in Ismail, 2012). Teacher and principal job satisfaction is derived from positive and/or negative relationships between principals and teachers and among administrators themselves (Ismail, 2012).

Pay refers to the employees' salary and remuneration (Spector, 1994, cited in Younes, 2012). It also refers to the amount of financial compensation that an individual receives as well as the extent to which such compensation is perceived to be equitable. According to Luthans (1998, cited in Bull, 2005), salaries not only assist people to attain their basic needs, but are also instrumental and satisfying the higher level needs of people. Pay is defined as a method of compensation for doing routine, scheduled, or interval tasks as prescribed by a job (Kaltenbaugh, 2008).

Methodology

Overall Design of the Study

This study was designed to investigate the relationship between principals' leadership styles and teachers' job satisfaction at Selected Basic Education High Schools in Sagaing Township. Descriptive survey method was adopted by using Likert scale. Data were mainly collected from all teachers of selected high schools by using "Questionnaire for teachers" in order to gain teachers' views on their principals' leadership styles and teachers' job satisfaction. The Questionnaire for teachers was composed of three parts. The first part of the questionnaire examined the demographic information of teachers and second part of the questionnaire explored the perception of teachers on their principals' leadership styles by using *Principals' Leadership Behaviour Survey* developed by Ibrahim (2014). The third part of the questionnaire aimed to find out teachers' perspective on their job satisfaction by utilizing Teachers' Job Satisfaction Survey adapted from Minnesota Job Satisfaction Survey developed by Weiss (1967).

After collecting the data, descriptive statistics, and Pearson product-moment correlation coefficient were tested by using SPSS.

Population and Sample

The target population of this study was principals and teachers from Selected Basic Education High Schools in Sagaing Township. There are 13 Basic Education High Schools (not included the branch and affiliated schools) in Sagaing Township. Out of 13 Basic Education High Schools, 2 Basic Education High Schools were selected for pilot study. For the main study, participants were selected by using purposive sampling method because teachers know well about their principals if their principals have at least two complete years in these schools. And then, teachers need to have at least two complete years in these schools so that they can know well about principals of these schools. A distribution of participants was monitored and adjusted by using two criteria. According to the first criterion, 5 Basic Education High Schools were selected for main study. As the second criterion, teachers sample consist of all teachers (147 teachers) at different levels (primary, junior and senior teachers) in selected high schools.

Procedure

Before field testing the instrument with a sample of teachers, two instruments were revised by a panel of experts. Out of selected high schools in Sagaing Township, two selected high schools were chosen for the pilot testing. Questionnaire was sent to schools on February 7, 2020 and collected them after lasting two days. The preliminary instrument was tested by 76 teachers representing two selected high schools. In the main study, questionnaires were distributed to teachers at five selected high schools in Sagaing Township on February 13 and 14, 2020 and collected them after three days. The responses of three open-ended questions were transcribed and synthesized

Research Findings

The purpose of the study is to explore the relationship between principals' leadership styles and teachers' job satisfaction at selected Basic Education High Schools in Sagaing Township. Table 1 shows mean values and standard deviations for principals' leadership styles perceived by teachers in selected high schools.

Table 1 Mean Values and Standard Deviations for Principals' Leadership Styles Perceived by Teachers at Selected Basic Education High Schools

Schools / Leadership Styles		A $n_1=25$	B $n_2=23$	C $n_3=22$	D $n_4=21$	E $n_5=56$	All Schools (N=147)
Autocratic Style	$\overline{X}$	3.16	3.51	3.70	3.67	3.66	3.56
	SD	.531	.216	.197	.404	.265	.380
Democratic Style	$\overline{X}$	3.38	3.72	4.02	3.97	3.74	3.75
	SD	.770	.325	.252	.546	.407	.517
Laissez-Faire Style	$\overline{X}$	3.00	3.01	3.02	2.85	2.90	2.95
	SD	.243	.265	.275	.266	.266	.267

1.00-2.33= less practice   2.34-3.67= moderately practice   3.68- 5.00= mostly practice

Table 1 shows the mean values and standard deviations of the teachers' perceptions of their principal's leadership styles. According to the respondents' perceptions, the mean values of "autocratic leadership" style of all selected schools are between 3.16 and 3.70. Principals from school A, B, D and E moderately practiced "autocratic style" of leadership. But principals from school C mostly practiced this leadership style. Again, the mean values of "democratic leadership" style of all selected schools are between 3.38 and 4.02. Principal from school A moderately practiced "democratic leadership" style.

On the other hand, principals from school B, C, D and E mostly practiced "democratic leadership" style. Similarly, the mean values of "laissez-faire leadership" style of all selected schools are between 2.85 and 3.02. Principals from these schools moderately practiced "laissez-faire leadership". When studying the perception of teachers on principals' leadership styles in selected high school, "autocratic leadership" style and "laissez-faire leadership" style were moderately practiced by principals and "democratic leadership" style was mostly practiced.

Table 2 Mean Values of Teachers' Job Satisfaction Perceived by Teachers Themselves at Selected Basic Education High Schools in Sagaing Township

School / Job Satisfaction	A $n_1=25$	B $n_2=23$	C $n_3=22$	D $n_4=21$	E $n_5=56$	All Schools (N=147)
Advancement	3.55	3.40	3.66	3.65	3.41	3.50
Recognition	3.06	3.31	3.55	3.75	3.34	3.38
Responsibility	3.73	3.66	3.75	3.81	3.59	3.68
Work itself	3.71	3.77	3.74	4.11	3.67	3.77
Supervision	3.32	3.69	3.97	3.75	3.80	3.72
Working condition	3.32	3.46	3.88	3.82	3.55	3.59
Interpersonal Relation	3.31	3.58	3.95	3.79	3.78	3.69
Pay	2.46	2.58	2.30	2.69	2.53	2.51
Teachers' job satisfaction	3.31	3.43	3.60	3.67	3.45	3.48

1.00-2.33=low satisfaction   2.34-3.67=moderate satisfaction   3.68- 5.00= high satisfaction

Table 2 shows the mean values and standard deviations of teachers' job satisfaction at selected Basic Education High Schools in Sagaing Township. According to Table 2, level of

"overall job satisfaction" perceived by teachers from each school was moderate satisfaction level. In summary, the level of "overall job satisfaction" of teachers from all selected schools was moderate satisfaction level with the mean score 3.48.

To investigate the relationship between teachers' perceptions of principals' "autocratic leadership" styles and teachers' "job satisfaction", the Pearson-product moment correlation coefficient was utilized (See: Table 3).

Table 3 Relationship between Principals' Autocratic Leadership Style and Teachers' Job Satisfaction

Variables	Principals' Autocratic Leadership	Teachers' Job Satisfaction
Principals' Autocratic Leadership	1	.607** .000
Teachers' Job Satisfaction	.607** .000	1

****Correlation is significant at the 0.01 level (2-tailed).

According to Table 3, it was found that principals' "autocratic leadership" style was moderately correlated with "job satisfaction" of teachers (r= .607, p<0.01). According to Gay (2003) this correlation implied that principals' autocratic leadership style had a significant and moderate effect on teachers' job satisfaction in selected high schools.

To investigate the relationship between teachers' perception of principals' "democratic leadership" style and teachers' "job satisfaction", the Pearson-product moment correlation coefficient was utilized (See: Table 4).

According to Table 4, it was found that principals' "democratic leadership" style was moderately correlated with "job satisfaction" of teachers (r= .633, p<0.01). This correlation implied that principals' democratic leadership style had a significant and moderate effect on teachers' job satisfaction in selected high schools.

Table 4 Relationship between Principals' Democratic Leadership Style and Teachers' Job Satisfaction

Variables	Principals' Democratic Leadership	Teachers' Job Satisfaction
Principals' Democratic Leadership	1	.633** .000
Teachers' Job Satisfaction	.633** .000	1

****Correlation is significant at the 0.01 level (2-tailed).

To investigate the relationship between teachers' perception of principals' Laissez-faire leadership styles and teachers' job satisfaction, the Pearson-product moment correlation coefficient was utilized (See: Table 5).

According to the Table 5, "laissez-faire leadership" style of principals was negatively and significantly related to "job satisfaction" of teachers (r = - .210, p<0.05). This implied that a negative correlation was existed between "laissez-faire leadership" style and teachers' "job satisfaction" level in selected high schools.

Table 5 Relationship between Principals' Laissez-Faire Leadership Style and   Teachers' Job Satisfaction

Variables	Principals' Laissez-faire Leadership	Teachers' job Satisfaction
Principals' Laissez-faire Leadership	1	-.210* .000
Teachers' Job Satisfaction	-.210* .000	1

*Correlation is significant at the 0.05 level (2-tailed).

Open-Ended Responses

In teachers' questionnaire, there were two open-ended questions at the end of the questionnaire. The first question asked teachers to express the principals' leadership styles. For the first question, out of 147 teachers, 30 (20.41%) teachers from selected high schools did not answer to that question. Eighteen (15.38%) teachers from selected high schools answered that their principal's leadership style can motivate their job satisfaction but 3 (2.56%) teachers do not like their principal's leadership style. Moreover, 15 (12.82%) teachers proposed that the principals, who praise the teachers for accomplishing their assigned tasks, can motivate their job satisfaction. Moreover, 25 (21.36%) teachers stated that the principals who lead fairly, objectively, and systematically the schools could motivate the teachers' high job satisfaction. Similarly, 15 (12.82%) teachers answered that the principals who have good communication skills, discuss important school matters with teachers, and provide precise and clear direction and information for teachers can motivate their job satisfaction on their schools. Furthermore, 11(9.4) teachers proposed that they like the principals, who are effective and efficient in management of schools and assign teachers the relevant subjects and duties fairly and demonstrate how to do the assigned the duties. Lastly, 30 (25.64) teachers from selected high schools answered that the principals who carry out the school matters in line with the guidance by Ministry of Education can motivate their job satisfaction.

The second question asked teachers to describe whether or not they were satisfied with their job and give reason for/ why they were satisfied or dissatisfied. For this question, 112 (76.19%) teachers from selected high schools responded to this question. Fifty six (51.77%) teachers answered that they satisfied their work because the leader led and managed fairly, objectively and actively to them in the school. Furthermore, 21 (18.75%) teachers replied that they necessitated the leader who is perfect in his/her administrative role and provides good and definite directions for school's success. Then, 25 (22.32%) teachers from selected high schools responded that they like the leader managing in accordance with the disciplines of the school and consulting and deciding with all teachers in every affaire of school. The last one group containing 8 (7.14%) teachers returned that they do not receive happiness because the leader does not assign the duties with respect to the teacher's ability, does not have mutual understanding with all teachers.

Conclusion and Discussion

In order to examine the relationship between principals' leadership styles and teachers' job satisfaction, three research questions were developed to guide this study.

Research question one asked teachers to express their perceptions of their principals' leadership styles at selected Basic Education High Schools in Sagaing Township. According to the responses of teachers, they asserted that their principals moderately practiced two leadership styles: Autocratic style and Laissez-faire style and mostly used Democratic style of leadership to manage their schools.

It can be concluded that the principals of selected high schools instill satisfaction of association in others. Moreover, they always seek different perspectives when solving problem, stimulate the teachers to be innovative and creative. Because of using the democratic leadership style by the principals of selected high schools, the most teachers from those schools satisfy and happy to their work. Thus, the principals from all selected high schools should utilize democratic leadership style to be successful to their schools.

In addition, research question two investigated the teachers' perception about their job satisfaction in selected high schools. As a result, it was found that the teachers from selected Basic Education High Schools were highly satisfied with four dimension of job satisfaction, namely, "Responsibility", "Work itself", "Supervision", and "Interpersonal relation", but they were moderately satisfied with four dimension of job satisfaction including "Advancement", "Recognition", "Working condition", and "Pay". However, the level of job satisfaction in all selected high schools falls under the moderate satisfaction level with the mean score 3.48.

Lastly, research question three asked teachers to investigate the relationship between their principals' leadership styles and their job satisfaction. According to the teachers' responses, it was found that principals' Autocratic leadership styles and Democratic leadership style were positively and moderately correlated with job satisfaction of teachers (*r=.607, p<0.01, r=.633, p<0.01*). And then, Laissez-faire style of leadership was negatively and slightly corrected with satisfaction (*r=-.210, p<0.05*). Therefore, it can be said that principals' leadership styles can influence the condition of the teachers' job satisfaction in selected Basic Education High Schools in Sagaing Township.

In short, the teachers from all selected high schools prefer the management of their principals and they have effective interpersonal relationship among them and with their principal. Moreover, they also like their profession and assumed that it provides them opportunities to learn and to use their skills and abilities. But they do not satisfy about their pay.

In conclusion, the principals should use to different kinds of leadership styles for teachers' job satisfaction in accordance with time and circumstances. Base on the research findings, this study helps to provide guidance and direction to principals who wish to exercise their leadership on a more appropriate and relevant way particularly in a context of change.

Recommendations for Further Studies

This study explored the relationship between principals' leadership styles and teachers' job satisfaction at selected Basic Education High Schools in Sagaing Township. Thus, further studies are needed to be expended similarly this research to acquire the schools' objectives of Basic Education Schools in other townships. And then a large population should be used so that it can ensure for a better organization of the data. Moreover, this research should be studied at Education Colleges, Degree Colleges, and Universities under the Ministry of Education in accordance with today circumstances. For further research, it can be also studied the effect of leadership styles of principals on teachers' job satisfaction and job performance. Furthermore, it can be also studied that the principals' leadership styles or behaviour impact on the teachers' job commitment.

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RELATIONSHIP BETWEEN SCHOOL STRUCTURE AND TEACHER EMPOWERMENT

Khin Moe[*]

Abstract

This study specially focused on relationship between teachers' perceptions of their school structure and their empowerment. A total of 147 teachers from five basic education high schools participated in this study. Two research instruments, "School Structures Questionnaire" adapted from Hoy & Sweetland (2001) and "School Participant Empowerment Scale (SPES)" developed by Short & Rinehart (1992) were used to collect quantitative data. Descriptive statistics such as means and standard deviations, and Pearson product-movement correlation coefficient were calculated through SPSS software. The findings of the study indicated that there were high levels of enabling school structures and moderate levels of hindering school structures in Basic Education High Schools according to teachers' perceptions. Similarly, the levels of teacher empowerment were at high levels in those schools based on teachers' perceptions. When studying the correlation between school structure's dimensions and teacher empowerment, it was found that enabling school structure was positively and moderately correlated to teacher empowerment (r=.486, p<0.01). However, it was also found that there was no relationship between hindering school structure and teacher empowerment.

Keywords: School structure, Teacher empowerment

Introduction

Education is defined as a fundamental verbal process of prepared for life. In the recent years, school organizations are more favor to decentralize ones. This study investigates the relationship between school structures and teacher empowerment. There is need to have school structures that enhance teacher competence and student achievement. Hoy & Sweetland (2001) summarize that "school structures vary along a continuum from enabling at one extreme to hindering at the other". Enabling and hindering school structures, as teachers experience, have different features, develop through different processes, and have different consequences for the teaching-learning context. Enabling schools encourage trusting relations between teachers and the principal. In many educational settings, teacher empowerment plays as an important role for promoting teachers' competencies and collaboration. Teacher empowerment is the process whereby teachers develop the competence to take charge of their own growth and resolve their own problems (Short, 1994). Incorporating expert teachers into school structures and empowering teachers will require some alteration of the current school practices. Recent research on school structures and an informal monitoring of school operation may lead to greater teacher empowerment.

Significance of the Study

Effective organizations of the twenty-first century, especially schools, will need to have enabling structures if they are to be competitive and successful (Hoy & Sweetland, 2001). When school structures are enabling, teachers trust each other, have a sense of efficacy and professionalism, and are not bound by rigid rules and feelings of helplessness. Hoy and Sweetland developed a model of enabling structure as "a hierarchy of authority and a system of rules and regulations that help rather than hinder teaching learning mission of the school". Evidence is convincing that schools can be designed with supporting structures that enable teachers to positively influence the academic expectations in their schools (Hoy, 2008, as cited in Messick,

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2012). In an enabling hierarchy, the principal is more likely to invite teachers to take part in shared decision-making.

According to Short (1994, as cited in Watts, 2009), an incorporation of empowerment gives teachers a sense of ownership and opportunities to improve the quality of instruction. He established a connection between schools and teacher empowerment as an "efficient means toward a self-management system confident of developing the roles of principals and teachers" (Hoy & Sweetland, 2001). Davidson and Dell (2003) and Hirsch, Emerick, Church and Fuller (2006) concur that school improvement is enhanced by the use of teacher empowerment. Teacher empowerment has been measured in a variety of educational paths and can point toward success with the proper support, staff development, and a collaborative spirit (Hoy & Sweetland, 2000; Short & Greer, 1997, as cited in Watts, 2009). If the school leaders incorporate avenues for teachers to empower themselves, they will be improved the quality of teaching. For the above reasons, this study is very important and useful in education.

Aim of the Study

The general aim of the study is to investigate the relationship between perceptions of teachers on their school structure and their empowerment at Basic Education High Schools in Sagaing Township.

The Specific aims are:

- to explore the perceptions of teachers on their school structure at Basic Education High Schools in Sagaing Township,
- to examine the levels of empowerment perceived by teachers at Basic Education High Schools in Sagaing Township, and
- to find out the relationship between perceptions of teachers on their school structure and their empowerment at Basic Education High Schools in Sagaing Township.

Research Questions

The following research questions guide the direction of the study:

1. What are the perceptions of teachers on their school structure at Basic Education High Schools in Sagaing Township?
2. What are the levels of empowerment perceived by teachers themselves at Basic Education High Schools in Sagaing Township?
3. Is there any relationship between perception of teachers on their school structure and their empowerment at Basic Education High Schools in Sagaing Township?

Definitions of Key Terms

- **School Structure:** School structure is defined as the specific institutional processes at the school level that affect the daily performance of youth (Conchas, 2006, as cited in Gonzalez, 2013).
- **Teachers Empowerment:** Teachers empowerment is giving power to the teachers. Empowerment can be either self-initiated or initiated by others and it is the process of enabling teachers to set their own work-related goals, make decisions and solve problems within their spheres of responsibility and authority (Vaidya, 2010).

Scope of the Study

The scope of this study was limited to the Basic Education High Schools in Sagaing Township. Sample schools were the schools in which principals had been at least two years in the current schools.

Theoretical Framework of the Study

According to Hoy and Sweetland (2001), school structures vary along a continuum from enabling at one extreme o hindering at the other. In this study, school structure will be measured by two types: enabling school structure and hindering school structure.

- **Enabling School Structure** is a hierarchy that helps rather than hinders and a system of rules and regulation that guides problem solving rather than punishes failure (Hoy & Sweetland, 2001).

- **Hindering School Structure** is a hierarchy that impedes and a system of rules and regulations that is coercive (Alder & Borys, 1996).

On the other hand, teacher empowerment will be measured with "School Participant Empowerment Scale (SPES)" develop by Short & Rinehart (1992). This instrument has six dimensions. They are:

- **Decision-Making** refers to the critical decisions directly affecting the operations of school (Short, 1992).

- **Teacher Impact** refers to teachers' perceptions having an effect and influence on school life (Short, 1992).

- **Teacher Status** refers to the teachers' sense of esteem ascribed by students, parents, community members, peers, and superiors to the position of teacher (Short, 1992).

- **Autonomy** refers to teachers' beliefs that they can control certain aspects of their work life (Short, 1992; Short & Johnson, 1994).

- **Professional Growth** refers to the school providing them with opportunities to grow and develop teaching skills (Short, 1992).

- **Self-Efficacy** refers to teachers' perception that they have the skills and ability to help students learn, are competent in building effective programs for students, and can effect changes in student learning (Short, 1992; Short & Johnson, 1994).

School Structure
• Enabling school structure
• Hindering school structure
  (Hoy & Sweetland, 2001)
	⟶	**Teacher Empowerment**
		• Decision making
		• Teacher impact
		• Teacher status
		• Autonomy
		• Professional growth
		• Self-efficacy
		  (Short, 1992)
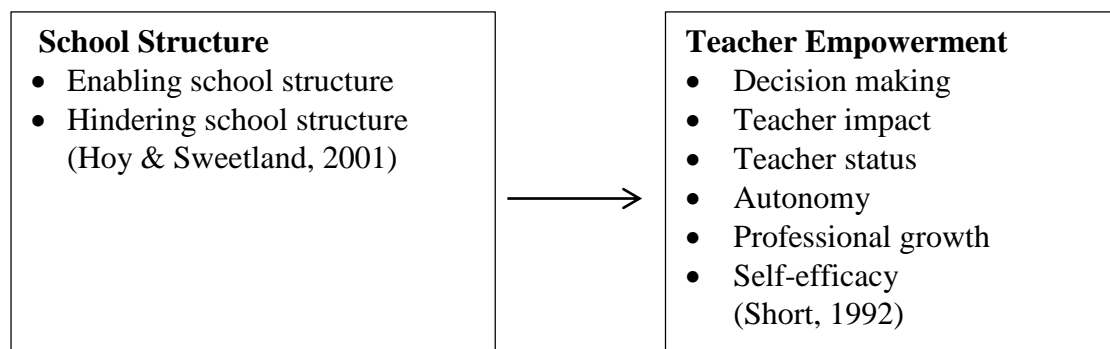
Figure 1 Theoretical Framework of this Study

Review of Related Literature

School Structure

School structure is how schools arrange the resources of time, space, and personnel for maximum effort on student learning. School structure includes organizational structures that allow learning to occur under a variety of circumstances condition including: flexible schedules, year-round calendars, modified timetables (Galland, 2008). School structure summarize that it vary along a continuum from enabling at one extreme to hindering at the other (Hoy & Sweetland, 2001). The structure of the organization can be defined simply as the sum total of the ways in which it divides its labor into distinct tasks and then achieves coordination among them (Mintzberg, 1979).

Most schools fall somewhere between these two extremes: completely organic (professional) and completely mechanistic (bureaucratic) (Lunenburg & Ornstein, 2012). The ideal professional-type school is characterized by high complexity, adaptiveness, and job satisfaction. That is, school administrators respect the professional knowledge of teachers, respond readily to the changing needs of the school and society and consider the intrinsic satisfaction of teachers to be an important school outcome. Bureaucratic-types schools tend to have a hierarchical structure of control, authority, and communication with little shared decision making (high centralization). There is little emphasis on professional expertise in both subject-matter knowledge and instructional methodology, low adaptation and human resources are of little important. However, each ideal type of school has advantages and disadvantages. Moreover, there are limits on how much a school administrator can emphasize one variable over another (Lunenburg & Ornstein, 2012).

The prototype of an enabling school structure is a hierarchy that helps rather than hinders and a system of rules and regulations that guides problem solving rather than punishes failure. In enabling school structures, principals and teachers work cooperatively across recognized authority boundaries while retaining their distinctive roles. The prototype for a hindering school structure is a hierarchy that impedes and a system of rules and regulations that is coercive. The underlying administrative assumption is that teacher behaviour must be closely managed and strictly are used to gain conformity (Hoy & Sweetland, 2001). However, the structure is used to ensure that reluctant, incompetent, and irresponsible teachers do what administrators prescribe (Alder & Borys, 1996).

Table 1 Two Types of School Structure: Enabling and Hindering

	Enabling Structure	**Hindering Structure**
Formalization	Promotes flexible rules and procedures Views problems as learning opportunities Values differences Encourages initiative Foster trust	Enforces rigid rules and procedures Views problems as constraints Demands consensus Punishes mistakes Fosters suspicion
Centralization	Facilitates problem solving Promotes cooperation Encourages openness Protects teachers Encourages innovation Seeks collaboration	Demands compliance Embraces control Fosters mistrust Punishes teachers Discourages change Rules autocratically
Processes	Participative decision making Problem solving	Unilateral decision making Enforcement
Context	Teaching trust Truthfulness and authenticity Cohesiveness Teacher sense of power	Teacher distrust Truth spinning and deception Conflict Teacher sense of powerlessness

Source: Adapted from Wayne K. Hoy & Scott R. Sweetland, (2001). *Designing better schools: The meaning and measure of enabling school structures*

Bureaucracy Theory

Max Weber identified three types of authority, differentiated by the justifications recognized by leader for exercising dominance and the types of authority are charismatic, traditional, and legal (Silver, 1983). Charismatic authority is a social dominance in which the leader's personal magnetism and exceptional attractiveness draws masses of followers. Next, traditional authority is a form of dominance inherent in a position that is passed to individuals from one generation to the next. Legal authority is a form of dominance created by legislation and upheld by the full legal machinery of the society. Weber's theory of bureaucracy is surely among the most thoroughly studies of all behavioral science frameworks both in educational research and organizational inquiry in general. Max Weber's (1947) classic analysis of bureaucracy is a food beginning point for discussion of the organizational structure in schools. Bureaucracies can have both positive and negative connotations. A beginning point for most organizations comes from the research of Max Weber. According to Weber (1947), almost all modern organizations, including schools, have such characteristics: division of labor and specialization, impersonal orientation, hierarchy of authority, rules and regulations and career orientation.

Teacher Empowerment

During the reform movement, the implementation has produced support for teachers to be more empowered. Short (1992) defined teacher empowerment as the process whereby teachers develop the competence to take charge of their own growth and resolve their own problems. Empowerment is vided as a process: the mechanism by which people, organizations, and community gain mastery over their lives. Empowerment is a process of transition from a state of powerlessness to a state of relative control over one's life, destiny, and environment. Empowerment is an important but insufficient condition to obtain real changes in teachers' way of

working and instructional practice. Teacher empowerment identified six dimensions. They are (1) decision making, (2) teacher impact, (3) teacher status, (4) autonomy, (5) professional growth, and (6) self-efficacy (Short, 1992). The empowered teachers would be more willing to give control over the learning process so that learning outcomes a collaborative effort. By reviewing literature, several researchers pointed out that an enabling school structure motivate teacher coexisting, problem solving through collaborating. Moreover, teacher empowerment moves towards developing teacher competencies for own growth.

Social Cognitive Theory

This research is theoretically grounded in teacher self-efficacy theory which is a significant part of Bandura's Social Cognitive Theory. The Social Cognitive Theory defines human behaviour as a triadic, dynamic, and reciprocal interaction of personal factors, behaviour, and the environment. The theory recognized that some sources of influence are stronger than others and that they do not all occur simultaneously (Bandura, 1977, as cited in Burn, 2010). Bandura contends that people are both products and producers of their environment. A persons' behaviour will determine the aspects of their environment to which they are exposed, and behaviour in, in turn, modified by that environment.

Motivational Theory

Maslow (1970, as cited in Cypert, 2009) popularized a theory of human motivation which explained motivation as a Hierarchy of Needs: physiological needs, safety needs, belonging needs, self-esteem needs and self-actualization needs, whereby individuals are always striving to reach their full growth potential or self-actualization. In addition, Herzberg (1959, cited in Blackburn, 2007) developed the motivation hygiene theory, which states there are both intrinsic and extrinsic factors that influence satisfaction or dissatisfaction of employees. The intrinsic, or motivator, factors include achievement, recognition for achievement, the work itself, responsibility and growth or advancement. The extrinsic, or hygiene, factors include company policy and administration, supervision, interpersonal relationships, working conditions, salary, benefits and job security.

Dimensions of Teacher Empowerment

Short (1992) derived six dimensions of teacher empowerment taken from a study of schools across the country between 1989 and 1992. She identified them as (1) involvement in decision-making, (2) teacher impact, (3) teacher status, (4) autonomy, (5) opportunities for professional development, and (6) teacher self-efficacy. Each of the six dimensions has established a mechanism by which teacher empowerment can be achieved.

(1) Decision-Making

Decision-making refers to the critical decision directly affecting the operations of schools (Short, 1992). This participation generally involves responsibilities for decisions relating to budgets, teacher selection, scheduling, curriculum, and other programs of instructional or curricular importance. Providing teachers with a significant role in school decisions is a key element empowerment (Short & Greer, 1997, as cited in Watts, 2009). In order for teachers to be empowered, they must believe that their involvement is genuine and their opinion critically impacts the outcome of the decision (Short, 1992).

(2) Teacher Impact

Teacher impact refers to teachers' perception having an effect and influence on school life (Short, 1992). Teachers' self-esteem grows when they feel they are doing something worthwhile,

doing it in a competent manner, and are recognized for their accomplishments. Teachers want to feel appreciated and respected by not only their students and colleagues, but by their working superiors as well (Short, 1992; Short & Johnson, 1994).

(3) Teacher Status

Short (1992) referred to teacher status as the teacher's sense of esteem ascribed by students, parents, community members, peers, and superiors to the position of the teacher. Recognition of this esteem can be formed in comments and attitudes from various constituents of the school environment, responses to the teacher's instruction, and the respect afforded the teaching profession (Short, 1992; Short & Johnson, 1994) having mutual respect and admiration from peers and colleagues allow an acknowledgement of authority and expertise.

(4) Autonomy

Autonomy, as a dimension of empowerment, refers to teachers' beliefs that they can control certain aspects of their work life (Short, 1992; Short & Johnson, 1994). This may include control over textbooks, scheduling, curriculum, and instructional planning. Autonomy is the sense of freedom to make certain decisions.

(5) Professional Growth

Short (1992) described professional growth as a dimension of empowerment referent to the school providing them with opportunities to grow and develop teaching skills. There is a generalized view that teachers receive staff development and training when the need arises. Professional growth goes beyond the generalized view in terms of authentic empowerment. Professional growth refers to the opportunities and support that raise the level of authority derived from the command of the subject matter and essential teaching skills.

(6) Self-Efficacy

Self-efficacy refers to teachers' perception that they have the skills and ability to help students learn, are competent in building effective programs for students, and can effect changes in student learning (Short, 1992; Short & Johanson, 1994). Blasé (1982, as cited in Short,1992) states that the primary rewards in teaching result from the teacher's positive self-evaluations of performance with students in instructional, moral, and counseling terms. Self-efficacy develops as an individual acquires self-knowledge and the belief that they are personally competent and has mastered skills necessary to be effect desired outcomes.

Methodology

Research Method

In this study, quantitative research method was used.

Population and Sample

Totally, there are 13 Basic Education High Schools in that the principals had been at least two years of service at the current school. Among them, two Basic Education High Schools in Sagaing Township were selected for pilot study. Seventy-seven teachers participated in this pilot study. And then, 5 Basic Education High Schools were chosen as the sample schools. Out of 147 teacher respondents, 19 (12.93%) teachers were male but 128 (87.07%) were female teachers.

Research Instruments

Two questionnaires for the teachers were used in this study: Questionnaire 1, to investigate school structure was based on "Enabling School Structures Questionnaire" adapted from Hoy & Sweetland (2001) and Questionnaire 2, to investigate teacher empowerment was based on "School Participant Empowerment Scale (SPES)" developed by Short & Rinehart (1992). The questionnaire for school structure contained 36 items. Each item was rated by using five-point Likert scale: (strongly disagree (1), disagree (2), undecided (3), agree (4) and strongly agree (5). The questionnaire for teacher empowerment contained 32 items. Each item was rated by using five-point Likert scale: (strongly disagree (1), disagree (2), undecided (3), agree (4) and strongly agree (5).

Data Collection Procedures

For the content validity, the advice and guidance were taken from a panel of experts who have specialized knowledge and expertise in the fields of study. After getting the validity of the questionnaire, pilot testing was conducted in two Basic Education High Schools in Sagaing Township. The preliminary instruments were field tested by 77 teachers representing two Basic Education High Schools.

Based on the findings of pilot test, internal consistency reliability of the questionnaires was determined by Cronbach's Alpha. The Cronbach's alpha reliability for school structure was 0.790 and Cronbach's alpha reliability for teacher empowerment was 0.853. After receiving the permission of the responsible persons, questionnaires were distributed to 5 Basic Education High Schools on 13 February, 2020 and collected them after one week.

Data Analysis

Descriptive statistics such as means and standard deviations were calculated by using SPSS (Statistical Package for the Social Science) version 22 for teachers' perceptions of school structures and teacher empowerment. Moreover, Pearson-product moment correlation coefficient was also used to find out the correlation between teachers' perceptions of their school structure and teacher empowerment in basic education high schools. According to Landell (1997, as cited in Saari, & Rashid, 2013), the mean values of 1.00 to 2.33 is defined as low level , 2.34 to 3.67 is defined as moderate level and 3.68 to 5.00 is defined as high level.

Research Findings

Teachers' Perceptions of their School Structure at Basic Education High School in Sagaing Township

Table 1 shows the mean values and standard deviations of school structure perceived by teachers from Basic Education High Schools in Sagaing Township.

Table 1 Mean Values and Standard Deviations of School Structure Perceived by Teachers at Basic Education High Schools in Sagaing Township

Schools		Dimensions of School Structure	
		Enabling	Hindering
A	Mean	**3.83**	2.87
	SD	0.32	0.34
B	Mean	**3.77**	3.21
	SD	0.26	0.39
C	Mean	3.39	3.05
	SD	0.62	0.34
D	Mean	**3.75**	3.14
	SD	0.28	0.50
E	Mean	**3.82**	3.00
	SD	0.28	0.42
All Schools	**Mean**	**3.71**	3.07
	SD	0.39	0.43

Note: 1.00 to 2.33 = Low level   2.34 to 3.67 = Moderate level   3.68 to 5.00 = High level

According to perceptions of teachers from School A, B, D and E shown in Table 1, "Enabling School Structure" was found at high level and "Hindering School Structure" was found at moderate level in their schools. In other words, the dominant school structure of those schools was "Enabling School Structure". On the other hand, teachers from School C perceived that their school had moderate levels of both "Enabling School Structure" and "Hindering" School Structure". When studying the school structure of all basic education high schools, "Enabling School Structure" was found at high level and "Hindering" School Structure" was found at moderate level. In conclusion, the dominant school structure of all basic education high schools was "Enabling School Structure".

Perceptions of Teachers' on their Empowerment at Basic Education High Schools in Sagaing Township

Table 2 shows the mean values and standard deviations of teachers' perceptions of their empowerment at Basic Education High Schools in Sagaing Township. According to Table 2, all dimensions of teacher empowerment were high in school E. The mean value of "Teacher Empowerment" in school E was high. School A, B, and D were high in the dimensions of "Teacher Impact", "Teacher Status", "Autonomy", "Professional Growth", and "Self-efficacy" and were moderate in dimension of "Decision-making". But, the mean values for "Teacher Empowerment" were high in school A, B, and D. For school C, the dimensions of "Teacher Impact", "Teacher Status", "Autonomy", and "Self-efficacy" were high and the dimensions of "Decision-making" and "Professional Growth" were moderate. The mean value for "Teacher empowerment" was high in school C.

Table 2 Mean Values and Standard Deviations of Teachers' Perceptions of their Empowerment at Basic Education High Schools in Sagaing Township

School		DM	TI	TS	AU	PG	SE	TE	Remark
A	Mean	3.60	3.86	3.93	3.98	3.89	3.98	3.87	High
	SD	0.53	0.38	0.36	0.40	0.46	0.38	0.39	
B	Mean	3.42	3.75	3.71	4.01	3.85	3.99	3.79	High
	SD	0.39	0.32	0.38	0.29	0.32	0.14	0.24	
C	Mean	3.18	3.81	3.68	4.08	3.67	4.10	3.75	High
	SD	0.51	0.42	0.34	0.26	0.52	0.32	0.29	
D	Mean	3.45	3.81	3.83	3.78	3.78	3.91	3.76	High
	SD	0.47	0.33	0.35	0.44	0.39	0.32	0.31	
E	Mean	3.70	3.86	3.97	3.89	3.84	4.02	3.88	High
	SD	0.45	0.25	0.29	0.39	0.47	0.29	0.24	
All Schools	**Mean**	**3.46**	**3.81**	**3.82**	**3.91**	**3.79**	**3.98**	**3.79**	**High**
	SD	**0.49**	**0.34**	**0.36**	**0.39**	**0.43**	**0.31**	**0.31**	

1.00 to 2.33 = Low   2.34 to 3.67 = Moderate   3.68 to 5.00 = High

Note: DM = Decision-making,   TI = Teacher Impact,   TS= Teacher Status,
          AU = Autonomy,   PG= Professional Growth,   SE= Self-efficacy,
          TE = Teacher Empowerment

When studying at Basic Education High Schools, the overall mean values for all dimensions were high. Therefore, the perceptions of teachers on "Teacher Empowerment" were high.

Correlation between School Structure Dimensions and Teacher Empowerment in Basic Education High Schools

To know the relationship between teachers' perceptions of their school structure (independent variable) and teacher empowerment (dependent variable), Pearson product-moment correlation coefficient was utilized.

According to table 3, enabling school structure was positively correlated to dimensions of teacher empowerment (r=.486, p<0.01). On the other hand, the finding showed that the correlation between hindering school structure and one of the dimension of empowerment, "Autonomy" was statistically and positively significant (r=0.218, p=0.008). However, there was no correlation between hindering school structure and five dimensions of teacher empowerment: "Decision Making (r=0.028 p=0.736), "Teacher Impact" (r=0.141, p=0.089), "Teacher Status" (r=0.026, p=0.752), "Professional Growth" (r=0.090, p=0.280) and "Self-efficacy" (r=0.130, p=0.116). Moreover, the Pearson correlation coefficient or r was 0.075 and the significant level (sig) or p was 0.0364. Therefore, hindering school structure and teacher empowerment was not correlated because the "sig" was greater than 0.01 (See Table 3).

Table 3   Correlation between School Structure's Dimensions and Teacher Empowerment Perceived by themselves in Basic Education High Schools

Variables	1	2	3	4	5	6	7	8	9
1.Enabling	1								
2.Hindering	.064	1							
3. DM	.546**	.028	1						
4. TI	.308**	.141	.538**	1					
5. TS	.605**	.026	.601**	.757**	1				
6. AU	.211*	.218**	.264**	.502**	.407**	1			
7. PG	.654**	.090	.540**	.649**	.772**	.392**	1		
8. SE	.274**	.130	.369**	.690**	.603**	.572**	.649**	1	
9. TE	**.486****	**.075**	.658**	.541**	.561**	.232**	.615**	.393**	1

*p<0.05; ** p<0.01

Note: DM= Decision-making,   TI = Teacher Impact,   TS= Teacher Status,
           AU = Autonomy,   PG = Professional Growth,
           SE = Self-efficacy   TE = Teacher Empowerment

Open-ended Responses

Teachers were asked two open-ended questions in questionnaire for teachers. The first question was "Does your school structure enable or hinder for you? Why?" Out of selected teachers, 124 teachers (84.35%) responded to this question and 23 teachers (15.65%) did not respond this. In the 124 teachers (84.35%) responded to this question, 102 teachers (82.26%) answered that "their school structure enable for them". Their reasons were: classrooms were enough for all the students, the principals supported whatever they needed, classrooms and toilets were enough, and their schools had libraries, teaching aids were enough, they had autonomy in teaching-learning process, and they committed school discipline. However, 22 teachers (17.74%) answered "their school structures hinder". Their reasons were: teaching aids were not enough, students-teachers ratio was not balance, and classrooms were inadequate.

And, the second question was "Which tasks do you perform in school? Discuss your opinion". Out of selected teachers, 118 teachers (80.27%) responded to this question and 29 teachers (19.73%) did not respond this. In the 118 teachers (80.27%) responded to this question. Their tasks were teaching, board of examination, management, school discipline, cleaning, school improvement process, librarian, physical training, and school health service.

Conclusion, Discussion and Recommendations

Summary of the Study

Key findings from this study were summarized below and will be discussed and included in the next section. When studying the teachers' perceptions on their "School Structure", there were moderate levels in two dimensions of school structure such as enabling and hindering structures in basic education high schools. When studying teachers' perceptions on "Teacher Empowerment" at Basic Education High Schools, the overall mean values for all dimensions were high. Therefore, the perceptions of teachers on "Teacher Empowerment" were high. This results showed that enabling school structure was positively and moderately correlated with teacher empowerment (r=.486, *p*<0.01). However, it was also found that there was no correlation between hindering school structures and teacher empowerment.

Similarly, different points of view of teachers on school structure and teacher empowerment were obtained by using two open-ended questions. Based on the responses of

teachers from two open-ended questions, it was assumed that most of the schools in this study were enabled for them. The principals supported whatever they needed, classrooms and toilets were enough, and their schools had libraries, teaching aids were enough. The school principal empowered teachers to share knowledge to each other, allowed to experiment with different teaching approaches, school discipline and school health service.

Conclusion and Discussion

Structure in schools is inevitable. Enabling school structure measures to what degree school structure enable teachers to work (Hoy & Sweetland, 2001). Enabling formalization assists teachers with solutions to problems in their work. Enabling procedures invite interactive dialogue, view problems as opportunities, foster trust, value differences. Hindering formalization refers to rules and procedures used to punish subordinates when they do not comply. In the school setting, hindering centralization sometimes breeds resistance and hostility towards administrators because teachers feel coerced into following rules that may or may not suit their needs or the needs of their students. Short (1992) defined teacher empowerment as "a process whereby school participants develop the competencies to take charge of their own growth and resolve their own problems". In this analysis, six dimensions of teacher empowerment are of interest: decision-making, teacher impact, teacher status, autonomy, professional growth and self-efficacy.

Research question one explored the teachers' perceptions level of their school structure at the Basic Education High Schools in Sagaing Township. School structures included two dimensions: "enabling", and "hindering". "Enabling School Structure" was found at high level and "Hindering" School Structure" was found at moderate level in their schools. In other words, the dominant school structure of those schools was "Enabling School Structure". On the other hand, teachers from School C perceived that their school had moderate levels of both "Enabling School Structure" and "Hindering" School Structure". When studying the school structure of all basic education high schools, "Enabling School Structure" was found at high level and "Hindering" School Structure" was found at moderate level. In conclusion, the dominant school structure of all basic education high schools was "Enabling School Structure".

Research question two was to investigate the level of teachers' perceptions on teacher empowerment at the Basic Education High Schools in Sagaing Township. According the perceptions of teachers, all dimensions of teacher empowerment were high in school E. The mean value of "Teacher Empowerment" in school E was high. School A, B, and D were high in the dimensions of "Teacher Impact", "Teacher Status", "Autonomy", "Professional Growth", and "Self-efficacy" and were moderate in dimension of "Decision-making". But, the mean values for "Teacher Empowerment" were high in school A, B, and D. For school C, the dimensions of "Teacher Impact", "Teacher Status", "Autonomy", and "Self-efficacy" were high and the dimensions of "Decision-making" and "Professional Growth" were moderate. The mean value for "Teacher empowerment" was high in school C. When studying at Basic Education High Schools, the overall mean values for all dimensions were high. Therefore, the perceptions of teachers on "Teacher Empowerment" were high.

Research question three was to explore the relationship between school structure dimensions and teacher empowerment. This results showed that the enabling school structure was positively and moderately correlated with all dimensions of teacher empowerment and overall value of teacher empowerment. In other words, it can be assumed that the higher the perceptions of teachers on the dimensions of school structure, "Enabling School Structure", the higher the level of teacher empowerment. Consequently, teachers had commitment to their professional development and participated in decision making. On the other hand, it was also found that there was no correlation between hindering school structure and teacher empowerment. However, hindering school

structure was statistically and positively correlated with one of the dimensions of teacher empowerment, "Autonomy". All in all, the result of the study supported Hoy and Sweetland's (2001) assumptions that both hierarchy and rules can be mechanisms to support teachers rather than vehicles to enhance principal power.

Recommendations for Further Research

This section presents recommendation for further study. This study explored the relationship between school structure and teacher empowerment at the Basic Education High Schools in Sagaing Township. Based on the research findings, the recommendations are: further studies were needed to be expended school structure and teacher empowerment. This research was limited at Basic Education High Schools in Sagaing Township. Therefore, similar research should be concluded at primary schools, middle schools and high schools in other divisions or regions. Principals should take into consideration the suggestion of teachers and be aware of their feelings and provide the necessary support to feel confident in making decisions. Moreover, principals should create critical decision making with teachers to enhance their school structure. Therefore, the period for the intervention and the content to be learnt should be extended. Besides, a large population should be used, as it can ensure for a better generalization of the data. Expanding the sample population could provide a greater insight into the perceptions of these two variables. Finally, training teachers to become more active participants in the school at large is the precursor to useful teacher empowerment.

Acknowledgements

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AN ANALYTICAL STUDY ON PEDAGOGICAL KNOWLEDGE AND PRACTICES OF TEACHER EDUCATORS IN EDUCATION COLLEGES

Khaing Khin Kyaw[1], Htay Khin[2] and Cho Cho Sett[3]

Abstract

This paper intended to study pedagogical knowledge and practices of teacher educators in education colleges, There are two phases in this study, namely, quantitative study (questionnaire survey) and qualitative study (interviews and observation). Descriptive research method was used in this study. Two sets of questionnaires developed by the researcher: questionnaire for teacher educators' pedagogical knowledge and questionnaire for teacher educators' practices concerning their pedagogical knowledge were used. The reliability coefficient (Cronbach α) was 0.98 for the questionnaire for teacher educators' practices. In qualitative study, interview and observation were conducted. Out of twenty-five Education Colleges, three hundred and twenty teacher educators from eight Education Colleges were selected as subjects by the use of equal-sized stratified sampling method. Among them, twenty four teacher educators were selected as participants in qualitative study. Item Percent Correct (IPC), Descriptive statistics, Independent Samples *t*-Test, One-way ANOVA, Tukey HSD test, and multiple regression were used for the data analysis. The level of pedagogical knowledge and practices of teacher educators were found to be at satisfactory and above satisfactory except from three teacher educators who were at below satisfactory in pedagogical knowledge. There were statistically significant differences in pedagogical knowledge of teacher educators grouped by qualifications and teaching subject. Similarly, significant differences were found in teacher educators' practices in groups divided by gender, age, position, and service. The first predictor affecting pedagogical knowledge was teaching subject and the second one is qualifications. The gap between knowledge and practice in some dimensions of pedagogical knowledge was suggested by qualitative findings.

Keywords: Pedagogy, Pedagogical Knowledge, Teacher Educators

Introduction

In the present era, 21st century, education must focus on nurturing the whole child_ morally, intellectually, physically, socially and aesthetically. Students need to acquire new knowledge, skills and dispositions to ensure their survival and success as individuals, as members of the community, and as valuable citizens of the nation. It can be achieved only when teachers have the right values, skills, and knowledge to be effective practitioners. Since the quality of teachers determines the quality of education, teacher education plays a vital role in producing qualified teachers.

To promote teacher quality, the role of teacher educators who produce teachers in initial teacher training is vital. Teacher educators are crucial players for maintaining – and improving – the high quality of the teaching workforce. They can have a significant impact upon the quality of teaching and learning in our schools. Since it is a universally accepted fact that the quality of teaching force determines the quality of education in a nation, pedagogical knowledge and practices of teacher educators needs to be considered as a determinant in promoting the quality of teachers.

Moreover, according to the Global Monitoring Report on Quality of UNESCO (2005, as cited in European Commission, October 2013), in this global context, the classroom pedagogy used by teachers is consistently seen as the crucial variable for improving learning outcomes and is

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critical in any reform to improve quality. Loughran (2014) argued that pedagogy of teacher education was based on two complementary aspects of knowledge and practice: teaching about teaching and learning about teaching. Therefore, the pedagogical knowledge of teacher educators and how to apply this knowledge is one of the major areas of concern for the immediate future and crucial element to be successful education. To produce quality teachers, an analytical study of teacher educators' pedagogical knowledge and practices is needed for investigation in teacher education field.

Aims of the Study

The main aim of this study is to study pedagogical knowledge and practices of teacher educators in Education Colleges. The specific aims of this study are:

(1) to study the pedagogical knowledge levels of teacher educators in Education Colleges,

(2) to investigate the variations of teacher educators' pedagogical knowledge according to personal factors,

(3) to study the levels of practices of teacher educators concerning their pedagogical knowledge,

(4) to investigate the variations of teacher educators' practices concerning their pedagogical knowledge according to personal factors, and

(5) to identify the predictors of teacher educators' personal factors on their pedagogical knowledge.

Research Questions

This research deals with the following questions regarding pedagogical knowledge and practices of teacher educators in Education Colleges.

(1) What are the levels of pedagogical knowledge of teacher educators in Education Colleges?

(2) Is there any variation of teacher educators' pedagogical knowledge according to personal factors?

(3) What are the levels of practices of teacher educators concerning their pedagogical knowledge?

(4) Is there any variation of teacher educators' practices concerning their pedagogical knowledge according to personal factors?

(5) What are the predictors of teacher educators' personal factors on their pedagogical knowledge?

Theoretical Framework

This research work was guided by following theoretical framework. In this study, pedagogical knowledge and practices of teacher educators was investigated with seven dimensions based on the common domains and areas of teacher competency standards from Brunei Darussalam and standards for effective teacher educators from Australia. These seven dimensions are: (1) Knowledge of students and how they learn; (2) Knowledge of subject content; (3) Knowledge of how to plan the lesson; (4) Teaching subject content using various instructional strategies; (5) Creating a supportive and safe learning environment for students; (6) Assessing student learning; and (7) Communicating and collaborating with other teachers, parents, and community.

(1) Knowledge of students and how they learn: Teacher educators should know individual differences, multiple intelligences of the learners. They should have knowledge of connecting new material with existing knowledge of the students; listening for student's current ideas and thinking; guiding students toward more complete understanding about the lesson; creating the opportunities

for participating in group discussion or activities; making a dialogue with the students to identify and articulate not only what they expect to learn but also what they learn from the topic. Moreover, teacher educators should know Maslow's hierarchy needs of motivation to get students productively involved with the work of the class.

(2) Knowledge of subject content: Teacher educators should know the central concepts, objectives and structure of the subjects he or she teaches and create learning experiences. They should understand content organization and observe clear information about the specific outcomes that students are expected to acquire. They should not only study objectives teaching the respective subject but also read various reference books that support to the understanding of subject matter. They should realize how to organize the subject content to provide desirable learning outcomes for the students.

(3) Knowledge of how to plan the lesson: Teacher educators should have a clear idea of what students are able to do, understand at the end of instruction. They should know how to write objectives at all six levels of Bloom's Taxonomy. They should formulate learning objectives in line with objectives of the curriculum and use action verbs to describe learning outcomes of the learner. They should prepare a detailed lesson plan including instructional procedure to achieve learning objectives. Moreover, descriptions of teaching aids, instructional strategies, assessment techniques and time duration of every step should be involved in the lesson plan.

(4) Teaching subject content using various instructional strategies: Teacher educators should have knowledge of how to select proper instructional strategy and model application of these strategies in the classroom. They should organize full-class instruction which involves gaining attention, informing the learner of the objective, recalling prerequisite learning, presenting the material, and maximizing drill and practice. They should provide assignments and projects and facilitate students in the process of inquiry to construct their own knowledge. They should arrange group discussions and classroom activities and use the strategies that emphasize concept learning, inquiry, and problem solving to teach concepts, patterns, and abstractions. Moreover, teacher educators should integrate technology in classroom instruction as well as the use of various teaching aids.

(5) Creating a supportive and safe learning environment for students: Teacher educators should arrange physical condition of the classroom as a clean and tidy class with sufficient sunlight, fresh air, enough space for students to move around. They should display charts and artworks in the classroom to create attractive physical learning environment. They should make efforts to plan the seating arrangement such as U shape, circle, face-to-face in group discussion time. They should establish the agreed rules and procedures to ensure student safety within the classroom. They should build positive relationships with students and encourage them to interact with each other with mutual respect. They should provide access to available resources and technologies for students to support learning in the diverse physical locations and contexts.

(6) Assessing student learning: Teacher educators should have a sound knowledge of assessment strategies and they should demonstrate how to use them effectively. They need to recognize informal assessment as well as formal assessment. They should design assessment tools such as formal testing, classroom observation, using oral questions, portfolios, projects, and performance assessment and provide informative feedback so that students' focus of learning is appropriate. Moreover, they should communicate meaningful information with students, parents, and others about a student's work.

(7) Communicating and collaborating with other teachers, parents, and community: Teacher educators should communicate with parents and community to present as much performance information as the school can provide. They should make efforts to organize a conference with the

public or to participate in community. In addition, they should strive for these functions: initiating collaborative relationships to expand professional learning opportunities and engage in research; sharing their knowledge and experiences to colleagues and updating their practices; engaging in various professional activities such as networks for specific subject matter areas, and attending refresher course, and scholarship programs, etc.

Definition of Key Terms

Important terms are carefully defined so that the reader may understand the concepts underlying the development of the investigation.

(1) Pedagogy refers to the art, science or profession of teaching and it includes the theory and practice of education, and therefore, the study and practice of how best to teach (TCSF, Myanmar, 2017).

(2) Pedagogical Knowledge refers to the teacher's deep understanding of the processes and practices of teaching and learning and it includes understanding how students learn, general classroom management skills, lesson planning, and student assessment; and knowledge about techniques or methods used in the classroom, the nature of the target audience, and strategies for evaluating student understanding (Koehler & Mishra, 2009).

(3) Teacher Educator refers to a person who works in tertiary institutions and is largely involved in the teaching of prospective teachers enrolled in a pre-service teacher preparation program (Loughran, 2014).

Operational Definitions

In this study, **teacher educators** are teaching staffs who instruct education, academic, and co-curricular subjects in education colleges to prepare student teachers to be effective and competent**.**

Pedagogical Knowledge, in this study**,** is composed of seven dimensions such as knowledge of how to plan the lesson; how students learn; subject content; creating safe and supportive learning environment for students; delivery of instruction; assessing student learning; and communicating and collaborating with colleagues, parents, and the community.

Methodology

Population and Sample: Out of 25 education colleges, 4 education colleges from Upper Myanmar (group A) and another 4 education colleges from Lower Myanmar (group B) were randomly selected in order to obtain the representative sample. From each education college, forty teacher educators were randomly selected as subjects, using equal-sized stratified sampling method (Gay& Airasian, 2003). Therefore, equal number of teacher educators (160) from each group was examined in this study and the number of teacher educators participated in this study was 320. In qualitative study, interview and observation were conducted. Out of 320, 24 teacher educators were selected as participants in qualitative study.

Instruments: Two main instruments which were developed by the researcher were used in this study. The first instrument was to study teacher educators' pedagogical knowledge in education colleges and it was mainly composed of three types of questions: thirty-seven true/false items to investigate their pedagogical knowledge concerning how students learn, subject content, creating learning environment, using teaching strategies, and communicating and working together with other teachers, parent and the community; seven multiple-choice items to study knowledge about how to assess their learners; and six matching items to examine how to write learning objectives in planning the lesson. The second one was structured with five-point Likert type items (1=never,

2=seldom, 3=sometimes, 4=often, 5=always). The total items were 52 items which included seven main dimensions of pedagogical practices. Two open-ended questions were investigated and eight interview questions were also included in qualitative study.

Findings

Research Question (1): What are the levels of pedagogical knowledge of teacher educators in Education Colleges?

According to table 1, it could be regarded that most of the teacher educators had satisfactory level of knowledge about their pedagogy except from three teacher educators who were at below satisfactory level.

Table 1 Number and Percentages of Teacher Educators Showing the level of Pedagogical Knowledge   (N=320)

Scoring Range	No. of Teachers (%)	Remark
<50%	3 (0.9%)	Below satisfactory level
50%-74%	87 (27.2%)	Satisfactory level
≥75%	230 (71.9%)	Above satisfactory level

Scoring Range: <50% = Below satisfactory   50%-74% = Satisfactory   ≥75% = Above satisfactory

Research Question (2): Is there any variation of teacher educators' pedagogical knowledge according to personal factors such as gender, age, position, service, teaching subject, and qualifications?

In analyzing the variations of teacher educators' pedagogical knowledge according to personal factors such as gender, age, position, service, teaching subject, and qualifications, it could be found that there were significant differences in teacher educators' pedagogical knowledge according to their teaching subject and qualifications.

Table 2 One-way ANOVA Result Showing Teacher Educators' Pedagogical Knowledge Grouped by Teaching Subject

Variable		Sum of Squares	*df*	Mean Square	*F*	*p*
Teacher Educators' Pedagogical Knowledge	Between Groups	454.802	2	227.401	10.642	.000***
	Within Groups	6773.790	317	21.368		
	Total	7228.597	319			

Note: ***$p<.001$

Table 3 Tukey HSD Result Showing Multiple Comparisons for Teacher Educators' Pedagogical Knowledge Grouped by Teaching Subject

Variable	(I) Teaching Subject	(J) Teaching Subject	Mean Difference (I-J)	*p*
Teacher Educators' Pedagogical Knowledge	Educational Subjects	Academic Subjects	2.99 (*)	.001***
		Co-curriculum Subjects	3.06 (*)	.000***

Note: ***$p<.001$

According to table 2 and 3, it could be found that the group of teacher educators who taught educational subjects had better pedagogical knowledge than the other groups such as the groups of those who taught academic and co-curriculum subjects. Furthermore, according to table 4 and 5, it could be seen that the group of MEd degree holders had better knowledge than BEd degree holders and non-professional degree holders.

Table 4 One-way ANOVA Result Showing Teacher Educators' Pedagogical Knowledge Grouped by Qualifications

Variable		Sum of Squares	*df*	Mean Square	*F*	*p*
Teacher Educators' Pedagogical Knowledge	Between Groups	757.53	2	378.76	18.56	.000***
	Within Groups	6471.07	317	20.41		
	Total	7228.59	319			

Note: ***p<.001

Table 5 Tukey HSD Result Showing Multiple Comparisons for Teacher Educators' Pedagogical Knowledge Grouped by Qualifications

Variable	(I) Qualifications	(J) Qualifications	Mean Difference (I-J)	*p*
Teacher Educators' Pedagogical Knowledge	MEd	BA/BSc+MA/MSc+PhD (Academic)	4.83 (*)	.000***
		BEd	3.51 (*)	.000***

Note: ***p<.001

Research Question (3): What are the levels of practices of teacher educators concerning their pedagogical knowledge?

In practicing pedagogical knowledge, it was found that teacher educators' overall practices were at above satisfactory level in all dimensions except from the dimension of communicating and collaborating with other teachers, parent and the community as shown in Table 6.

Table 6 Mean Values Showing Overall Teacher Educators' Practices Concerning Pedagogical Knowledge (N=320)

No.	Dimensions	Mean	Remark
1	Knowledge of how to plan the lesson	4.34	Above Satisfactory
2	Knowledge of students and how they learn	4.33	Above Satisfactory
3	Knowledge of subject content	4.22	Above Satisfactory
4	Teaching subject content using various teaching strategies	3.79	Above Satisfactory
5	Assessing student learning	4.05	Above Satisfactory
6	Creating a safe and supportive learning environment	4.18	Above Satisfactory
7	Communicating and collaborating with other teachers, parent and the community	3.52	Satisfactory
	Overall Teacher Educators' Practices	**4.06**	**Above Satisfactory**

Scoring Direction: 1.00-1.49= never 1.50-2.49= seldom 2.50-3.49= sometimes 3.50-4.49= often 4.50-5.00= always

Remark: 1.00-2.33= Below Satisfactory 2.34-3.67= Satisfactory　　　3.68-5.00=Above Satisfactory

Research Question (4): Is there any variation of teacher educators' practices concerning their pedagogical knowledge according to personal factors such as gender, age, position, service, teaching subject, and qualifications?

In analyzing whether there were any variation of teacher educators' practices concerning their pedagogical knowledge according to personal factors such as gender, age, position, service, teaching subject, and qualifications, it could be found that there were statistically significant differences between teacher educators' pedagogical practices according to gender, age, position, service. In table 7, there were statistically significant differences between male and female in teacher educators' practices concerning pedagogical knowledge.

Table 7 Independent Samples *t* Test Result Showing Teacher Educators' Practices Grouped by Gender

Variable	Gender	Mean	*t*	*df*	*p*
Total Teacher Educators' Practices	**Male**	**3.80**	-2.579	32.314	**.015***
	Female	**4.08**			

Note: **p<.05*

As shown in Table 8, one-way ANOVA result indicated that there were significant differences in total teacher educators' practices grouped by their age (*df*=3, *F*=3.743, *P*≤.001). Post hoc Tukey HSD analyses were also conducted in Table 9.

Table 8 One-way ANOVA Result Showing Teacher Educators' Practices Grouped by Age

Variable		Sum of Squares	*df*	Mean Square	*F*	*p*
Total Teacher Educators' Practices	Between Groups	2.278	3	.759	3.743	.011*
	Within Groups	64.126	316	.203		
	Total	66.404	319			

Note: **p<.05*

Table 9 Tukey HSD Result Showing Multiple Comparisons for Teacher Educators' Practices Grouped by Age

Variable	(I) Age	(J) Age	Mean Difference (I-J)	*p*
Total Teacher Educators' Practices	35-44yrs	25-34yrs	-.19	.041*
		45-54yrs	-.18	.041*
		≥55yrs	-.23	.021*

Note: **p<.05*

From Table 10, one-way ANOVA result described that there were significant differences in total teacher educators' practices grouped by their position (*df*=2, *F*=3.634, *P*<.05). In Table 11, Post hoc Tukey HSD analyses were also conducted.

Table 10 One-way ANOVA Result Showing Teacher Educators' Practices Grouped by Position

Variable		Sum of Squares	df	Mean Square	F	p
Total Teacher Educators' Practices	Between Groups	1.488	2	.744	3.634	.028*
	Within Groups	64.916	317	.205		
	Total	66.404	319			

Note: *p<.05

As shown in Table 11, Post Hoc Tukey HSD result displayed that there were significant differences in total teacher educators' practices between the groups of lecturer and assistant lecturer.

Table 11 Tukey HSD Result Showing Multiple Comparisons for Teacher Educators' Practices Grouped by Position

Variable	(I) Position	(J) Position	Mean Difference (I-J)	p
Total Teacher Educators' Practices	Lecturer	Assistant Lecturer	.17	.021*

Note: *p<.05

In Table 12, the result displayed that there were significant differences in total teacher educators' practices grouped by their service (*df*=3, *F*=3.143, *P*<.05).

Table 12 One-way ANOVA Result Showing Teacher Educators' Practices Grouped by Service

Variable		Sum of Squares	df	Mean Square	F	p
Total Teacher Educators' Practices	Between Groups	1.924	3	.641	3.143	.026*
	Within Groups	64.480	316	.204		
	Total	66.404	319			

Note: *p<.05

As shown in Table 13, the result displayed that there were significant differences in total teacher educators' practices between the groups of 31 years and above and 11-20years service.

Table 13 Tukey HSD Result Showing Multiple Comparisons for Teacher Educators' Practices Grouped by Service

Variable	(I) Position	(J) Position	Mean Difference (I-J)	p
Total Teacher Educators' Practices	31 years and above	11-20years	.18	.041*

Note: *p<.05

Research Question (5): What are the predictors of personal factors on teacher educators' pedagogical knowledge?

The results of finding the potential factors from demographic data of teacher educators affecting their pedagogical knowledge appeared that teacher educators' pedagogical knowledge were significantly predicted by teaching subject and qualifications as shown in table 14. According to the β weights, teaching subject (β=.232, *p*<.05) appears to be the best predictor of teacher

educators' pedagogical knowledge. Qualifications (β=.226, p<.001) appears to be the second predictor of teacher educators' pedagogical knowledge. The adjusted R squared value was .21 and this indicated 21% of the variance in pedagogical knowledge. According to Cohen (1988, as cited in Morgan, Leech, Gloeckner, & Barrett, 2004), this is a typical effect.

Table 14 Simultaneous Multiple Regression Analysis for Teacher Educators' Personal Factors Predicting Pedagogical Knowledge

Variables	B	Std. Error	Beta	*p*
Gender	-.05	.89	-.03	.950
Age	-.43	.54	-.09	.427
Qualifications	1.75	.48	.226***	.000
Position	.55	.50	.08	.275
Service	-.21	.49	-.05	.662
Teaching Subject	-9.7	.42	.232*	.021

R= .43, R^2 = .21; *F* (6, 313) = 7.16, *p*<0.05, ***p* <.001

Qualitative Research Findings

In conducting qualitative studies, interview and observation were conducted to support quantitative findings. Twenty four teacher educators from four education colleges were participated in interview sessions. The number of interview question was eight questions which developed with seven components of teacher educators' pedagogical knowledge and practices.

The Results of Interview

In planning the lesson, out of twenty-four teacher educators (participants), eight teacher educators from group I and only five from Group II prepared carefully the lesson. The other teacher educators need to be improved in lesson preparation. As regards how students learn, nine teacher educators from group I and seven educators from group II among the twenty-four participants knew the nature of their students well and created suitable learning opportunities with adult learner. It was investigated that the other teacher educators paid attention on the behavior of students and trained in accordance with the physical characteristics of a good teacher.

In using various teaching strategies, it was found that although they were familiar with a variety of teaching methods, four teacher educators from group I and only two educators from group II taught through both direct and indirect instructional strategies. In the responses of other teacher educators, they used only direct instruction approach and they complained time limitation, too much content and many non-academic activities.

In creating a supportive and safe learning environment, it was found that four teacher educators from group I and only one teacher educator created both physical and social or emotional learning environment. The other six educators from group I and nine educators from group II was found that they emphasized to create only physical learning environment. The rest four educators from each group said that they motivated students to learn in order to support environment for learning and they had insufficient knowledge about creating social and emotional learning environment for their students. As regards assessing student learning, despite their knowledge of assessment techniques, eight teacher educators from group I and seven teacher educators from group II were investigated the use of various assessment techniques and the other educators conducted assessment with closed verbal questions in the class, tutorial, and giving assignment.

According to the quantitative and qualitative findings, it could be concluded that teacher educators' pedagogical knowledge vary depending on their personal factors such as teaching

subject and qualifications and their practices depended on their demographic data. In addition, the researcher was aware of the gap between pedagogical knowledge and practices of teacher educators.

The Results of Observation

Researcher conducted non-participant observation in order to investigate teacher educators' practices concerning lesson preparation, creating a supportive and safe learning environment, teaching and assessing student learning, communicating and collaborating with other teachers, parent and the community. As regards lesson preparation, teacher educators from Group I were found that they wrote lesson plan and diary weekly and submitted to their respective heads of department in order to be supervised their lesson preparation. In addition, records of lesson study were also found.

In creating a supportive and safe learning environment, despite positive relationship between teacher and students, and among the students, it could be observed that most teacher educators from ECs paid more attention to training student teachers to abide by the school rules. Researcher kept aware of the fact that only a few students discussed about learning materials with the teacher and most of the students were very obedient.

As regards teaching and assessing student learning, it could be found that only a few teacher educators used student-centered approach in their teaching practices although most of the teacher educators espoused theories of student-centered learning. For the component of assessment, it could be found that teacher educators seldom practiced classroom assessment techniques (CATs) in the class. In using summative forms of assessment, teacher educators took records of tutorial, submitted assignment, and exam at the end of semester in order to certify the grade of students. However, it could be said that teacher educators who taught co-curriculum subjects such as domestic science, music and dancing, and physical education used approaches like demonstration, observation, and performance assessment.

In addition, researcher grasped the information that teacher educators never practiced informing parents with school activities. Currently, they seldom practiced participating in collaboration which cooperates with the community. However, collaborating with colleagues was relatively found in education colleges.

Conclusion

Conclusion and Discussion

Based on the results from this study, a number of discussions that are worth of being mainly focused will be presented. Findings from analyzing the levels of pedagogical knowledge of teacher educators indicated that only 0.9% of those was at below satisfactory level. It could be interpreted that most teacher educators in selected education colleges had satisfactory level of pedagogical knowledge. Analyzing personal factors of teacher educators who were at below satisfactory level found to be two academic subject teachers and one from co-curriculum subject teacher and they had not graduated BEd and their teaching service was under 5 years. From the qualitative findings of this study revealed that teacher educators who had never any teacher training program were found to be lack of knowledge about pedagogy of teacher education. This result supports the findings of Goodwin, & et al. (2014).

Investigating the seven dimensions of teacher educators' practices indicated that the participant teachers had above satisfactory level in six dimensions except from the dimension of communicating and collaborating with other teachers, parent and the community. In this dimension, although it was found that they sometimes practiced "informing parents and the

community with school activities," "participating in collaboration which cooperates with the community", and "participating in school-university research program" in quantitative study, qualitative findings investigated that they never practiced "participating in school-university research program", and "informing parents and the community with school activities". The researcher is aware of the fact that student teachers attending in education colleges are at adult stage and most of their native towns are far from ECs and their teachers guard as their parents. Therefore, it could be interpreted that teacher educators' poor practices were found in communicating and collaborating with parents.

In the dimension of teaching subject content using various teaching strategies, it was also found that most of the teacher educators taught subject content using only direct instructional approach instead of using various teaching strategies. This finding reflected the findings of Wan Aung, et al. (2013) which described teacher educators' mostly used teaching methods. However, this is contradictory with the present finding in that teacher educators who taught methodology and English (academic subject) were found to be practiced a variety of teaching methods in their classroom.

Westrup (2014) found out that the majority of challenges and current development needs of teacher educators were associated with communication problems between university departments and partnership schools. Similarly, Wan Aung, et al. (2013) also found this fact in their study. The qualitative result of this study was consistent with the above findings in that direct contact with schools was rarely found in teacher educators from education colleges in the aspect of supervision and mentoring of their student teachers during 40-day teaching practicum.

Borich (2007) claimed that curriculum guides clearly specify what content must be covered in what period of time and the level of learning outcomes for an instructional unit or lesson according to curriculum guides will be selected before instruction. The qualitative finding of this study found that teacher educators who had attended teacher training program responded that they planned the lesson in accordance with curriculum guideline, they set learning objectives for the lesson being taught, and they prepared the necessary instructional materials and assessment techniques in line with allocated time. It was found that teacher educators who had never attended teacher training said that they prepared the lesson with the preview of learning materials, reading academic literature, and thinking about how to teach with examples.

Malcolm Knowles (1970, as cited in Sierra Training Associates, Inc., 2007) proposed that adults learn from experience and therefore creating learning environment should be based on listening for learner's experience to support productive adult learning. In present finding of the study, it was also found that most of the teacher educators responded creating physical learning environment and modifying the behaviors of their students. Only a few of them paid attention to both physical and social or emotional learning environment. It could be interpreted that since Education Colleges (ECs) began from the nature of training school, setting strict rules and encouraging student teachers to abide by the rules were commonly found in teacher educators' responses.

As regards assessing student learning, in the qualitative study, it could be found that teacher educators assessed the whole class with the use of closed questions instead of using various classroom assessment techniques (CATs). Innovative assessment practice such as portfolio was found to be unfamiliar with them and assessing with items that demand more open-ended responses in the classroom rarely practiced. The finding is consistent with findings of past study by Wan Aung, et al. (2013).

In analyzing variations of teacher educators' pedagogical knowledge and practices according to personal factors, this study indicated that the most experienced teacher educators had better pedagogical knowledge and practices than the less experienced ones. Accordingly, the group of teacher educators who were fifty-five years and above old and the group of lecturers had better

pedagogical knowledge and practices than any other groups. The present finding also support Loughran's (2006) study which discussed that there were significant differences between newer graduates and more experienced teacher educators in terms of theoretical knowledge and application although effect sizes were small (as cited in Goodwin, & et al., 2014).

Loughran (2006) pointed out that more experienced teacher educators have been practicing for longer and they may likely to teach their newer teacher educators through mentoring, whether intentionally or not. Exceptionally, it was found that the group of teacher educators who were 25-34 years old had the highest mean scores among the age groups in investigating the variations of pedagogical knowledge of teacher educators. It could be interpreted that the age of most of the MEd graduates and PhD candidates who studied education specialization were in the range of 25 to 34 years.

According to Cochran-Smith (2004, as cited in Loughran, 2014), it is not sufficient for a teacher educator to pass on the accumulated tips and tricks of classroom teaching. Forgasz's (2013, as cited in Loughran, 2014) research also highlighted that since learning to teach must be complex, thoughtful, focused, and meaningful professional development for teacher educators is clearly required (as cited in Loughran, 2014). The result of the present study support the Cochran-Smith (2004) and Forgasz (2013)'s findings in that the differences of pedagogical knowledge and practices of teacher educators could be analyzed in terms of their commitment on professional development (Loughran, 2014). From the interview session with teacher educators who taught educational subject, academic subject, and co-curriculum subject, the selected participants responded that the more professional development activities they engaged in, the better their pedagogical knowledge and practices.

Furthermore, in the findings of this study, teaching subject and qualifications of teacher educators were found to be the predictors of demographic data on their pedagogical knowledge. From the qualitative study, it was discovered that teacher educators who held MEd and BEd degrees showed better pedagogical knowledge than those who held any other degrees. Exceptionally, among the BEd degree holders, a few teacher educators responded that they forgot some dimensions of pedagogical knowledge and some new concepts and ideas were unfamiliar with them because they had graduated BEd from a long time ago and their teaching subject was not educational subjects. It could be suggested that the opportunities of continuous professional development (CPD) of teacher educators will be created and designed through the school-based approach. Accordingly, Soma (2014) also pointed out that the basic principle of CPD is that opportunities are provided not far from school, continuously, and are designed to address teachers' learning needs.

In the current status, education colleges are going to upgrade into the four-year degree college in the upcoming future. To achieve this, recruiting human resources such as new teacher educators and uplifting the competencies which a teacher educator need to know could be seen as fundamental requirement. Dr. Khin Zaw (2001) claimed, "No educational system can ever be better than its teachers. No teacher, regardless of race, creed or grade, can emerge fully qualified from an inferior teacher education program." Therefore, teacher educators who undertake the function of producing teachers, whatever their background knowledge or field of study may be, should be recognized that they need to make efforts to upgrade themselves through various professional development (PD) activities.

Based on the quantitative and qualitative findings, teacher educators' pedagogical knowledge and practices in selected education colleges were found to be satisfactory despite the dimensions that need to be improved. The findings of the present study will cover up to 2018 because programmes for upgrading from Education College to Education Degree College (EDCs) and developing new curriculum for EDCs were being implemented. However, it can be expected that pedagogical knowledge (PK) questions developed in this study will be useful as an instrument

for investigating pedagogical knowledge of new teacher educators who enter in teacher education field. Moreover, it can be hoped that some important findings of this research can be a fruitful source of information for any teacher educators who produce qualified teachers in teacher education institutions.

Recommendations

The following recommendations are based on the analyses of the research findings.

- Teacher educators should demonstrate exemplary practice of teaching because their performance and teaching style can influence upon teaching practice of their student teachers.
- Teacher educators should pay attention to creating a social or emotional learning environment for students to be safe and supportive as well as modifying their behaviors.
- Teacher educators should study adult learning theory, educational technology, and innovative pedagogic practices to organize teaching-learning situation that meets the needs of student teachers.
- Teacher educators should conduct reflective practice concerning their pedagogy.
- Teacher educators should make efforts to develop partnerships with schools and have much direct contact with schools in supervision and mentoring of student teachers in their practicum.
- Teacher educators should disseminate new information in college after they have participated in seminars, workshops and training.
- Teacher educators should engage in peer observation, invite for others' ideas and accept their suggestion about practices of teaching.
- Teacher educators who had never attended teacher training, especially academic subject teachers and some co-curriculum subject teachers should be engaged in orientation programmes about teacher education and pedagogy.
- Teacher educators who taught educational subjects should also strive for holding Master and PhD degrees in accordance with the minimum requirements of teacher educators from the four-year degree colleges.
- School-based mentoring program for new teacher educators should be considered and this program can be helpful to experienced teacher educators to update their knowledge.
- Since enhancing teacher educators' pedagogical knowledge can be affected by the support and guidance of principal in education colleges, positive communication and collaboration with their principals should be built and maintained.

Need for Further Research

Further study should be conducted to pedagogical content knowledge (PCK) of teacher educators who taught various subjects. Pedagogical knowledge and practices of teacher educators in Universities of Education can be analyzed as further research.

In order to enhance the quality of pedagogical knowledge, how well the teacher educators of education colleges perform professional development activities should be investigated. In addition, the effect of principal's instructional leadership practices on enhancing teacher educators' pedagogical knowledge should be examined. Furthermore, the effect of teacher educators' pedagogical practices on academic performance of student teachers should be analyzed. In contrast to the present study, each dimension of teacher educators' pedagogical knowledge and practices such as teaching subject content using various teaching strategies, and assessing student learning should be investigated in further study.

While discussing the need for further research, it must be mentioned that the most important topic of future research should be much wider and deeper than just pedagogical knowledge and practices of teacher educators in education colleges. The researcher would like to put forward the dire need for research concerning teacher educators' pedagogic professionalism. A pedagogic professional is usually distinguished by the teacher's length of theoretical or professional training and his/her years of practical experience.

In some of the developing countries of the East, negative attitudes towards the teaching profession and professional pedagogues are still far too rampant, to say the least. This is an unfortunate state of affairs, indicative or suggestive of a lose-lose situation, for all stakeholders including students, parents, and teachers alike. This grave and mistaken opinion must be corrected, at all costs (Khin Zaw, 1994). Future research on pedagogic theory and subsequent practices must be based on the present status of respectable professional performance contributed by highly motivated professional pedagogues of the country, no more or no less. The researcher firmly believes that this is the number one, or priority one, future research in pedagogy.

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AN INVESTIGATION INTO HIGH SCHOOL PRINCIPALS' SUPPORT FOR WORK-RELATED STRESS MANAGEMENT OF TEACHERS

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Abstract

This study is intended to investigate high school principals' support for work-related stress management of teachers. Both quantitative and qualitative research methods were employed**.** The sample consisted of 30 high school principals and 240 senior teachers from high schools in Mandalay City Development Area who were selected as subject by using cluster sampling method. The questionnaire survey and interview were carried out to collect the required data. The internal consistency (Cronbach's alpha (α)) of questionnaire of teachers' stress was 0.95, that of questionnaire of teachers' coping strategies was 0.808 and that of questionnaire of principals' support was 0.97. Descriptive statistics, Pearson product-moment correlation and multiple regression analysis were used to analyze the quantitative data. According to the overall mean value, the level of teachers' work-related stress was moderate. Teachers adopted large extent of problem-focused coping strategies and emotion-focused coping strategies and adopted little extent of dysfunctional coping strategies. As the results of quantitative study, principals provide large extent of support for work-related stress management of teachers. According to the beta weight of multiple regression analysis, "Emotional Support", "Instrumental Support" and "Appraisal Support" significantly predict for work-related stress management of teachers. As the results of the qualitative study, interview responses of teachers were consistent with the findings of quantitative study.

Keywords: Stress, Stress Management, Coping Strategies and Principals' Support

Introduction

According to Hirsch (2001), workplace stress occurs in such situation as workplace demands exceed the worker's personal resources to change the worker's psychological or physiological condition. The teaching profession is particularly a stressful occupation. In some of the developing countries of the East, negative attitudes towards the teaching profession and professional pedagogues are still far too rampant, to say the least. This is an unfortunate state of affairs, indicative or suggestive of a lose–lose situation, for all stakeholders: students, parents, and teachers alike. This grave and mistaken opinion must be corrected, at all costs (Khin Zaw, 1994).

As a buffer for teachers' stress, there should be suitable support for teachers. The school system should hold the responsibility of providing organizational support to help teachers in managing stress for successful operations of the school system (Kelly & Colquhoun, 2005). Therefore, principals' support for stress management of teachers is critical for reducing teachers' stress level and coping with stress that come from various types of stressors encountered in schools (Sarros, 1989).

Significance of the Study

In the 21st century, education plays the key role for the development of a nation. The development of the nation is determined by the standard of its education system. For many nations, the role and functioning of schools are changing according to demands of external factors and internal factors. Managing changes and meeting and handling with the demands in education are unavoidable; it is important to implement effectively.

According to Alwi et al. (2015), the principal, the leader of a school, not only needs to have pedagogical knowledge but also could establish a positive and conducive working environment for

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teachers which provide meaningful professional development opportunities for them. Moreover, as the principal, he/she needs to hold accountability for everything happening in the school. Especially for principals, focusing on job satisfaction and preventing, reducing and managing stress are assigned as the important things to be focused on within the school context.

As our country, the new National Education Law highlights the requirement for attaining the standard of Myanmar education system to the international level (Ministry of Education, 2015). In order to attain education system in international standard, it is important to attain high quality teachers in schools. For attaining high quality teachers, it is critical to pay close attention to preventing, reducing and managing teachers' stress. For preventing, reducing and managing teachers' work-related stress, principals' support takes an important role that can help to dissipate feelings of stress. Therefore, it is important to investigate the prominent stressors for teachers' work-related stress, coping strategies that teachers used to manage stress themselves and principals support for work-related stress management of teachers.

Aims of the Study

The main aim of this study is to investigate high school principals' support for work-related stress management of teachers.

The specific aims of this study are defined as follows:

1. To investigate the level of teachers' work-related stress
2. To examine coping strategies adopted by teachers to deal with work-related stress
3. To analyze the principals' support for teachers' work-related stress management
4. To investigate the relationship between principals' support for teachers' work-related stress management and level of teachers' work-related stress
5. To investigate the relationship between principals' support for teachers' work-related stress management and teachers' coping strategies
6. To identify the relative importance of different types of principals' support in reducing teachers' work-related stress
7. To identify the relative importance of different types of principals' support in predicting teachers' coping strategies

Research Questions

This research deals with the following questions:

1. What are the levels of teachers' work-related stress?
2. What are the most adopted coping strategies that teachers use in managing stress?
3. To what extent do principals provide support for teachers' work-related stress management?
4. Is there any relationship between principals' support for teachers' work-related stress management and level of teachers' work-related stress?
5. Are there any relationships between principals' support for teachers' work-related stress management and teachers' coping strategies?
6. What is the relative importance of different types of principals' support in reducing teachers' work-related stress?
7. What is the relative importance of different types of principals' support in predicting teachers' coping strategies?

Limitations of the Study

The limitations of the study are described as follows:

(1) The study occurres in Basic Education High Schools in Mandalay City Development Area.

(2) Participants of the study are senior teachers and high school principals from Basic Education High Schools.

(3) This study is designed to investigate high school principals' support for work-related stress management of teachers.

Definitions of Key Terms

Important terms are carefully defined so that the readers may understand the concepts underlying the development of the investigation.

1. **Stress** is defined as the physical, mental, or emotional reaction resulting from an individual's response to environmental tensions, conflicts, pressures, and other stimuli (Greenberg, 1984).

2. **Stress management** can be defined as interventions designed to reduce the impact of stress in the work place (Suramardhini, 2014).

3. **Principals' support** will refer to the collection of affirming actions by the school principals that assist teachers in performing their responsibilities and withstanding the stress of their positions (Weiss, 2001).

Operational Definitions

In this study, **work-related stress** refers to teachers' unpleasant feeling caused by negative aspects of role overload, role ambiguity, collegiality, parents, students' behaviour, empowerment, professional development opportunities and working conditions in the school. Perceived level of teachers' work-related stress was examined by the mean values of responses of teachers from Basic Education High Schools on five-point Likert-scale questionnaire consisting of forty eight items about teachers' work-related stress. The higher the mean values of responses, the greater the level of teachers' stress.

Stress management refers to using coping strategies to prevent, reduce and overcome work-related stress. The extent of teachers' use of coping strategies was examined by the mean values of responses of teachers from Basic Education High Schools on five-point Likert-scale questionnaire consisting of twenty eight items about coping strategies. The higher the mean values of responses, the higher the extent of teachers' use of coping strategies.

Principals' support refers to providing emotional support, instrumental support, informational support and appraisal support by the principals leading teachers to believe that they are cared, supported, valued and belong to an effective network of communication. The extent of principals' support was examined by the mean values of responses of principals and teachers from Basic Education High Schools on five-point Likert-scale questionnaire consisting of forty items about principals' support. The higher the mean values of responses, the higher the extent of principals' support.

Theoretical Framework

Stress

In this study, teachers' work-related stress was investigated based on the stress come from the negative aspects of the following sources; role overload, role ambiguity, collegiality, parents, students' behaviour, professional development opportunities, empowerment and working

conditions (Srivastava & Singh, 1981; Sutton, 1984; Fimian, 1988; EI, ETUCE & WHO, 1999; Johannsen, 2011).

Coping

Teachers' use of coping strategies is measured with three types of coping strategies: problem-focused coping, emotion-focused coping and dysfunctional coping (Carver et al., 1989).

Principals' Support

In this study, principals' support is related to four separate types of support as defined by House (1981): emotional support, instrumental support, informational support and appraisal support.

Review of Related Literature

A review of related literature deals with three main parts: stress, stress management and coping, and principals' support.

Stress

With regard to Lazarus (1966), stress is defined as transactions between individuals and situations, rather than of either one in isolation. Moreover, Kyriacou (2000) has defined teacher stress as the experience by a teacher of unpleasant negative emotions such as anger, frustration, anxiety, depression and nervousness, resulting from some aspects of their work.

Stress Management and Coping

Stress management includes techniques and strategies that equip a person with effective coping mechanisms in order to deal with psychological stress (Rajasekar, 2013). When stress is regarded as an individual's reaction to the environmental demands, coping can be seen as the process through which the stressor is managed. Coping with stressors can lessen the level of stress and decrease the negative effects of stress on the individual. (Lazarus & Folkman, 1984). Lazarus (1966) has defined coping as an individual's efforts to change the stressor or the meaning of the stressor to the individual, thus lessening the impacts of the stress on the emotional, physical or psychological well-being of the individual.

Principals' Support

Ingersoll (2001) has described that the most important reasons teachers leave is lack of poor administrative support, empowerment, and dissatisfaction with the beliefs and practices within the school. Littrell (1992) has confirmed that principals' support has effect on teacher job stress, satisfaction, school commitment, health, and intent to stay in teaching and principals' support was positively related to teacher performance. According to Kahn and Antonucci (1980), social support comprises of three key elements: affect, affirmation and aid. According to House (1981), social support is defined as an interpersonal transaction which involves providing emotional concern (liking, love, empathy), instrumental aid (goods or services), information (about the environment) or appraisal (information relevant to self-evaluation).

Emotional Support

Emotional support involves providing empathy, caring, love, and trust (House, 1981). Frequently, individuals consider other people as being "supportive" towards them when they receive emotional support from those people. According to Littrell and Billingsley (1994), emotional support includes showing appreciation of teachers' effort, keeping open lines of

communication, encouraging collegial support and recognizing teacher's opinions. National Association of School Psychologists (2009) suggested that the principals should validate the current feelings of teachers to reduce teachers' stress in stressful situation. Validating teacher's feeling and acknowledging how challenging issues are overcome are the most powerful tools to help teachers through stressful time. Therefore, the principals should provide the opportunities to open dialogue for teachers to feel comfortable by discussing their concerns and problems.

Instrumental Support

Instrumental support is most obviously different from emotional support and this type of support may provide direct help to a person in need (House, 1981). DiPaola (2012) has stated that instrumental support consists of providing adequate planning time, time for various nonteaching responsibilities and extra assistance to teachers while they are overloaded. Successful principals do not entangle teachers in the activities of the different bodies within the school and they also arranged and organized meetings to be useful (Ahghar, 2008). Boyd et al. (2011) have argued that teachers who perceive that their schools provide adequate resources and enough facilities feel better prepared to perform their related jobs and are more likely to stay in their schools. Prather-Jones (2011) also indicated that discipline policies were a key component of administrative support, and that they need a principal who enforces reasonable consequences and actions for student misconduct and behaviour, and includes them in the decision making behind these consequences. Therefore, the principals should focus on developing positive students' behaviors for maintaining a caring and supportive school environment and facilitating feelings of safety and security for teachers and students.

Informational Support

According to House (1981), informational support is giving advice or information that the person may use to cope with personal and environmental problems. In contrast to instrumental support, such information is not in and of itself helpful, rather it helps people to help themselves. Littrell and Billingsley (1994) have defined informational support as providing information and professional development opportunities for teachers to work effectively.

Balfour (2001) has described that when principals know what changes are needed to improve or show continual growth, they can provide structured support. Hughes (2012) explained that when information regarding standards and curriculum was passed along without explanation, there was little obedience from those who must implement the curriculum. Implementing curriculum without understanding or prior exposure to the changes could result in negative effect not only on the individuals involved but on the school as a whole. Therefore, the principals should share information about educational affairs to teachers and provide professional support to teachers.

Appraisal Support

Appraisal support involves the transmission of information that is relevant to self-evaluation or social comparison where other people are sources of information that individuals can use in evaluating themselves; hence such information can be implicitly or explicitly evaluative (House, 1981). In addition, Littrell and Billingsley (1994) described appraisal support as providing frequent and constructive feedback about teacher performance. According to DiPaola (2012), appraisal support includes offering constructive feedback to teachers after observing teaching, providing frequent feedback about teachers' performance, helping teachers to evaluate their needs and providing suggestions for teachers to improve instruction.

In order to provide appraisal support, it is important to get a better understanding of how teachers want to be supported by their principal. Different groups of teachers need a consistent and structured support from the principal. Structured support can be demonstrated by providing feedback about teachers' job performance and fostering the practices that the principal deemed important in meeting the educational goals of the school (Balfour, 2001). National Education Association (2006) suggested that by encouraging and providing more formal support through professional learning communities and teaching teams, principals can provide teachers with reliable suggestions that enable teachers to effectively carry out increased instructional demands and other challenges.

Theories related to the Study

Motivation-hygiene Theory

- Herzberg found that job dissatisfaction and job satisfaction generated from two sets of factors: motivation and hygiene factors.
- Motivation factors (satisfiers) gratify individuals with satisfaction of job when these factors are fulfilled and adequate.
- Hygiene factors (dissatisfier) can cause dissatisfaction with job when these elements are inadequate. (Silver, 1983)

Person–Environment Fit Theory

- According to Lewin (1935) (as cited in Dewe et al., 2012), to realize the reaction of a person, it is needed to understand the interaction between that person (P) and his/her environment (E).
- The fit concept has been characterized with two types. The first type is concerned with the match/mismatch between the abilities of a person and the pressures/demands of the environment placed on that person. The other type is related to the match or congruence of the needs of the person with the supplies provided by the environment.

Transactional Model of Stress

- According to Holroyd and Lazarus (1982), stress arises when a person appraises that he/she needs to make a lot of efforts to overcome the challenges, problems and demands of the environmental, it can threaten overall well-being of that person. There are two types of appraisal – primary appraisal and secondary appraisal. According to Lazarus and Folkman (1984), there are two types of coping: problem-focused and emotion-focused coping.

Job Demands–Control–Support Model

- Job Demands–Control–Support model is proposed initially by Karasek (1979). This model stated that the amount of stress depends on the person's appraisal of whether or not he/she has control over the demands and pressures in their work place.
- Karasek and Theorell (1990) expand this perspective and proposed the Job Demands–Control–Support (JDCS) model by adding social support factor. They suggest that if the person receives social support from others in workplace, the effect of coping and control over the job demands and pressures will be increased.
- This model proposed the buffering hypothesis in which social support can alleviate stress in workers directly or indirectly.

Social Support Theory

- According to Lakey and Cohen (2000), social support lessens the impacts of stress on individual's health and acts as a stress buffer by either the support of others in the form of advice and encouragement or the perception that supportive action is accessible.
- Social support is helpful in effectively coping and reducing the effects of a stressor, to the extent that the form of supportive action matches the demands of the stressor.
- Social support keeps persons from the negative effects of stressors because it can lead them to appraise stressful situations as less negative.

Methodology

Research Method

Both quantitative and qualitative research methods were employed in this study.

Population and Sample

For this study**,** the population consisted of all of the high school principals and senior teachers in Basic Education High Schools in Mandalay City Development Area (MCDA). For quantitative study, the sample comprised of 30 high school principals and 240 senior teachers from high schools in MCDA who were selected as subject by using cluster sampling method. For qualitative study, three principals with highest mean score selected from the group of principals who provided high level of principals' support (Group I) and three principals with lowest mean score selected from the group of principals who provided moderate level of principals' support (Group II) were selected to interview in this study. Besides, three teachers were selected from each school of these principals. Totally, six principals and eighteen senior teachers were selected as interviewees.

Instrumentation

In this study, questionnaire survey and interviews were carried out to investigate high school principals' support for work-related stress management of teachers. There are two sets of questionnaire (Questionnaire 1 for principals and Questionnaire 2 for teachers) developed by the researcher through review of related literature. The internal consistency (α) of teachers' stress was 0.95, that of teachers' coping strategies was 0.808 and that of principals' support was 0.97. For qualitative study, interview forms were also prepared for principals and teachers.

Data Collection Procedures

For quantitative study, the pilot study was conducted to polish the developed questionnaire. And then, the questionnaires were distributed to the participants in the selected schools. For qualitative study, interviews were conducted with selected principals and teachers in selected schools.

Data Analysis

In quantitative study, the data were coded after the questionnaires were recollected. The Statistical Package for the Social Science (SPSS) version (25) was applied for analyzing the collected quantitative data. Descriptive statistics, independent samples *t* test, one-way ANOVA, Pearson product moment correlation and multiple regression analysis were used to analyze the collected data. In qualitative study, data analysis was based on classifying and interpreting the interview results, the responses of principals and teachers.

Findings

Based on the research questions, the quantitative findings of this study can be described as follows:

Q-1: What are the levels of teachers' work-related stress?

As the results of analyzing the level of teachers' work-related stress based on their responses, the level of teachers' work-related stress was moderate (Mean=2.63). Moreover, moderate level of work-related stress of teachers was caused by: "Students' Behaviour" (Mean=3.10), "Parents" (Mean= 2.88), "Role Overload" (Mean= 2.87), "Role Ambiguity" (Mean= 2.83) and "Working Conditions" (Mean= 2.79). Then again, teachers experienced low level of work-related stress caused by: "Collegiality" (Mean= 2.30), "Professional Development Opportunities" (Mean= 2.17) and "Empowerment"   (Mean= 2.12) (See: Table 1).

Table 1 Mean Values and Standard Deviations of Work-related Stress of Teachers

No.	Variables	Mean	SD	Remark
1.	Role Overload	2.87	.84	Moderate level
2.	Role Ambiguity	2.83	.96	Moderate level
3.	Collegiality	2.30	.96	Low level
4.	Parents	2.88	.93	Moderate level
5.	Students' Behaviour	3.10	.99	Moderate level
6.	Empowerment	2.12	.87	Low level
7.	Professional Development Opportunities	2.17	.91	Low level
8.	Working Conditions	2.79	.97	Moderate level
	Work-related stress	**2.63**	**.73**	**Moderate level**

1.00-2.33=low level,   2.34-3.67=moderate level,   3.68-5.00=high level

Q-2: What are the most adopted coping strategies that teachers use in managing stress?

As the results of findings, teachers adopted large extent of problem-focused coping strategies and emotion-focused coping strategies (mean= 3.76 and 3.82) and adopted little extent of dysfunctional coping strategies (mean=2.19). So, the most adopted coping strategies are emotion-focused coping strategies and problem-focused coping strategies. (See: Table 2)

Table 2 Mean Values and Standard Deviations of Teachers' Perceptions of Their Use of Dysfunctional Coping Strategies in Managing Work-related Stress

No.	Coping Strategies	Mean	SD	Remark
1	Problem-focused coping	3.76	.66	large extent
2	Emotional-focused coping	3.82	.63	large extent
3	Dysfunctional coping	2.19	.55	little extent

1.00-2.33=little extent,   2.34-3.67=moderate extent,   3.68-5.00=large extent

Q-3: To what extent do principals provide support for teachers' work-related stress management?

According to the results from analyzing the extent of principals' support for teachers' work-related stress management on the responses of teachers and principals, it could be found that the principals provided large extent of support for work-related stress management of teachers. Specifically, they also provided large extent in all of the areas of principals' support for work-

related stress management of teachers: "Emotional Support", "Instrumental Support", "Informational Support" and "Appraisal Support". (See: Table 3)

Table 3 Mean Values and Standard Deviations of Principals' Support for Teachers' Work-related Stress Management

No.	Variables	Principals Mean (SD)	Teachers Mean (SD)	Remark
1.	Emotional Support	4.55 (.74)	3.73 (.75)	Large Extent
2.	Instrumental Support	4.54 (.50)	3.84 (.75)	Large Extent
3.	Informational Support	4.57 (.42)	3.91 (.77)	Large Extent
4.	Appraisal Support	4.57 (.50)	3.68 (.85)	Large Extent
	Overall Support	**4.56** (.49)	**3.79 (.67)**	**Large Extent**

1.00-2.33=little extent,   2.34-3.67=moderate extent,   3.68-5.00=large extent

Q-4: Is there any relationship between principals' support for teachers' work-related stress management and level of teachers' work-related stress?

According to the results of the findings for the relationship between principals' support for teachers' work-related stress management and level of teachers' work-related stress, it was found that there was a negative relationship between two variables (r=-.35, *p*<0.01). (See: Table 4)

Table 4   Correlation between Principals' Support for Work-related Stress Management of Teachers and Teachers' Stress

Two Groups	Principals' Support	Teachers' Stress
Principals' Support	1	-.35**
Teachers' Stress	-.35**	1

**Correlation is significant at the 0.01 level (2-tailed).

Q-5: Are there any relationships between principals' support for teachers' work-related stress management and teachers' coping strategies?

According to Table 5, it was found that there was a positive relationship between principals' support for teachers' work-related stress management and problem-focused coping strategies (r=.303, *p*<0.01). There was also positive relationship between principals' support for teachers' work-related stress management and emotion-focused coping strategies (r=.27, *p*<0.01). It was also found that the correlation between principals' support for teachers' work-related stress management and dysfunctional coping strategies was not statistically significant.

Table 5 Correlation between Principals' Support for Work-related Stress Management of Teachers and Teachers' Coping Strategies

Two Groups	Problem-focused Coping	Emotion-focused Coping	Dysfunctional Coping
Principals' Support	.303**	.27 **	-.022

**Correlation is significant at the 0.01 level (2-tailed).

Q-6: What is the relative importance of different types of principals' support in reducing teachers' work-related stress?

According to Table 6, "Instrumental Support" (*β*=-.318, *p*<.001) and "Appraisal Support" (*β* = -.421, *p* < .01) significantly reversely predicted teachers' work-related stress. Among these two variables, according to beta weight, the study found that appraisal support was the most striking or potential factor.

Table 6 Simultaneous Multiple Regression Analysis for Principals' Support Dimensions Predicting Teachers' Work-related Stress

Dimensions	B	SEB	β	t	p
Emotional Support	.146	.094	.151	1.551	.122
Instrumental Support	-.308	.114	-.318	-2.697	.008**
Informational Support	.192	.103	.203	1.867	.063
Appraisal Support	-.363	.083	-.421	-4.368	.000***
Constant	3.852	.252		15.267	.000***

Note. R= .418, R^2= .161, F(4,235)= 12.433,
*p< .05, **p< .01, *** p< .001

Q-7: What is the relative importance of different types of principals' support in predicting teachers' coping strategies?

In order to find the relative importance of different types of principals' support in predicting teachers' coping strategies, simultaneous multiple regression was conducted.

Table 7 Simultaneous Multiple Regression Analysis for Principals' Support Dimensions Predicting Teachers' Use of Problem-focused Coping Strategies

Dimensions	B	SEB	β	t	p
Emotional Support	.286	.089	.324	3.219	.001**
Instrumental Support	-.152	.108	-.173	-1.418	.158
Informational Support	.132	.097	.153	1.360	.175
Appraisal Support	.055	.078	.070	.703	.483
Constant	2.562	.237		10.797	.000***

Note. *R= .340, R^2= .100, F(4,235)= 7.662,*
*p< .05, **p< .01, *** p< .001

According to beta weight, "Emotional Support" (*β*=.324, *p* < .01) appeared to be the best predictor of teachers' use of problem-focused coping strategies. (See: Table 7)

Besides, "Emotional Support" (*β* = .272, *p* < .01) also appeared to be the best predictor of teachers' use of emotion-focused coping strategies. (See: Table 8)

Table 8 Simultaneous Multiple Regression Analysis for Principals' Support Dimensions Predicting Teachers' Use of Emotion-focused Coping Strategies

Dimensions	B	SEB	β	t	p
Emotional Support	.228	.086	.272	2.663	.008**
Instrumental Support	-.134	.104	-.160	-1.292	.198
Informational Support	.148	.094	.181	1.584	.114
Appraisal Support	.028	.075	.038	.373	.709
Constant	2.804	.229		12.244	.000***

Note. *R= .300, R^2= .074, F(4,235)= 5.793,*
*p< .05, **p< .01, *** p< .001

As the results of the qualitative study, by analysing interview responses, some important findings are noted and summarized as follows:

Emotional Support*:* Group I principals were considered as easy to approach warm, helpful, considerate towards teachers and compassionate. They were justice. They recognised and celebrated teachers' efforts and accomplishments. They allowed teachers to give opinions and advices and valued teachers' idea. They frequently observed the classrooms with the purpose of caring.

Group II principals were unapproachable. They were not frequently supportive in solving the concerns and problems that the teachers encountered. Some principals in Group II created a very rigid environment in which it was very difficult for teachers to work. They had rarely recognized and celebrated teachers' efforts and accomplishments. They placed less value on teachers' ideas and views. Some of group II principals took everyone's thoughts, opinions, feelings and ideas into consideration. They tried to address everyone's concerns and problems.

Instrumental Support: Group I principals fairly distributed the workload and unpopular chores among teachers. They arranged to spend minimum time on additional paperwork and in meetings as possible as they could. They provide funds and material support for educational and school affairs. They helped teachers with students' discipline problems and have willingness to stand on teachers' side when teachers encountered problems and made confrontations with students and parents. They tried to improve parent involvement and community involvement in the school affairs. They tried to have increased level of team spirit among teachers in the schools.

In Group II principals' schools, workloads were extremely high. There were more schoolwork activities than they could comfortably manage. There were insufficient numbers of teachers for some subjects. So, some teachers were assigned to teach subjects which were not their specialized subjects. Student's disciplinary problems and parents' complaints were frequently occurred in these schools. They sometimes ordered teachers to put time to schoolwork on weekends. Occasionally, the school meeting took long hours. They provided less support of funds and materials for educational and classroom maintenance.

Informational Support: Principals in Group I disseminated latest information about current educational reforms, changing trends in educational policies and modern instructional techniques. They actually communicated instructions and information from the education departments. They informed professional development opportunities for professional growth of teachers.

Principals in Group II did not know and explain clearly latest information about current educational reforms and changing trends in educational policies and modern instructional techniques. They sometimes did not clearly communicate instructions and information from the education departments.

Appraisal Support: Group I principals provided clear guidelines for teachers concerning job responsibilities in schools. They were good in planning and set appropriate goals and realistic expectations for teachers and students. They provided teachers with constructive feedback about teachers' performance and practices based on evidences obtained by classroom walkthroughs and observations. They arranged discussion sessions and professional development activities based on teachers' needs by asking teacher's preferences for which they would like to learn. Principals also encouraged teachers to read books and provided literature on various topics in the areas of their specialized fields and education that could help teachers to improve in their jobs. They provided suggestions on improving students' achievement and always checked notes of lesson, lesson plans and teacher diaries.

Group II principals sometimes gave unclear expectations and guidelines for school works. There is no open discussion about what was expected of them. Some of principals in Group II set

unrealistic expectation for teachers. Some of them forced teachers for high pass rate of school and students' progress. They sometimes checked teachers' performance and practices.

Conclusion and Discussion

Firstly, the researcher found that the right kind of emotional support provided by their principal can reduce work-related stress and even decreased the negative effect of work-related stress. Graham et al. (2014) highlighted that the principals' relational skills with teachers such as valuing teachers' ideas and opinions, acting teachers in a friendly way, showing consistency in relationship with teachers, having enough interpersonal skills and developing teachers' strengths were prominently effected on positive emotional feeling of teachers. School principal's embraced type of relationship is a dominant predictor of degree of stress among teachers. In this study, it was also found that instrumental support of principals was the second best predictor for directly reducing teachers' work-related stress. According to Liu and Meyer (2005), one of the leading causes of teacher dissatisfaction was concerned with students' disciplinary problems. Principals who provided large extent of instrumental support set the school-wide discipline plans, communicated to all of the students and their parents and maintained students' discipline. In this study, according to interview responses, it was found that teachers who received large extent of informational support from their principals experienced lower level of work-related stress than teachers who received moderate extent of informational support from their principals. Moreover, findings in this study indicated that appraisal support of principals was the best predictor for reducing teachers' work-related stress. According to Evans (2003), teachers who were unsure of their job responsibilities within the school experienced a high degree of stress. Moreover, Katz and Kahn (1966) stated that employees experienced work-related stress when they were unclear about the duties and actions required in their job. Dworkin et al. (1990) reported that supportive principals who were supportive of their teachers could break the functional connection with work-related stress. To sum up, this study found that principals' emotional support, instrumental support and appraisal support are important potential factors for work-related stress management of teachers.

Recommendations

The following proposed recommendations are based on the analyses of the quantitative and qualitative research findings. The findings showed and claimed that the principals were necessary to possess the following measures for work-related stress management of teachers in order to prevent, manage and alleviate teachers' work-related stress.

- Principals should establish positive atmosphere in the schools particularly with supportive behaviours such as friendliness and noticing what teachers do.
- Principals should offer classroom autonomy to teachers and should try not to reduce teachers' authority in making classroom decisions.
- Principals should know the limitation of their teachers and set realistic expectations for what teachers would be done.
- Principals should fairly allocate the manageable amount workload and unpopular chores to teachers.
- Principals should facilitate resources and materials for educational and school affairs.
- Principals should provide informal support to teachers in handling students' motivational issues and disciplinary problems by validating students' concerns, allowing them to be heard and encouraging students with positive things happening in schools.

- Principals should establish good relationship with parents and community members and involve them in school affairs.

- Principals should disseminate instructions and information from the education departments and give reliable information about due dates for works.

- Principals should not only actively participate themselves in professional development activities but also share and discuss new information about teaching experiences and new practices to teachers after attending courses, seminars, workshops.

- Principals should provide clear guidelines and instructions for teachers regarding job responsibilities in schools so that there is no role ambiguity.

- Principals should observe the classrooms, gather data about instructional practices, provide teachers with reliable, constructive and specific feedback to teachers, and discuss the themes that the teachers need to improve based on the observed evidences.

However, some sources of teachers' work-related stress came from beyond the boundary of principals. Based on interview results, Ministry of Education should provide support for work-related stress management of teachers in the following ways.

- The organizational goals should be realistic, specific and stimulating.

- There should have a sufficient and fair distribution of funds, school facilities and classroom materials.

- There should have a fair and just distribution of incentives and salary structure.

- The sufficient numbers of teachers are needed to allocate reduce workloads of teachers and to assign teachers to teach specialized subjects with which they are trained to teach.

- Good communication system should be implemented in order to facilitate flow of information at different levels.

- Clear instructions and guidelines about educational affairs should be provided.

- Information about recent advancement in education such as current educational reforms and changing trends in educational policies, instructional techniques and teacher competency standard framework should be clearly shared to principals and teachers.

- Current educational reforms and changing educational policies should be clearly communicated to increase public awareness.

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DEVELOPING THE FACTORS FOR CREATING PROFESSIONAL LEARNING COMMUNITIES IN BASIC EDUCATION HIGH SCHOOLS

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Abstract

In 21st century, there has been increasing interest in professional learning community (PLC) because of its valuable effects on education not only in western context but also in eastern context. Teaching as a profession needs a team of collaborating in various functions together with, and developing countries are appropriate reasons to implement professional learning communities (PLCs) in schools as school-based professional development. In order to explore in-depth the concept of PLC in this context, the professional learning community model of Basic Education High Schools (BEHSs) was intended to study. Exploratory factor analysis was used to get the validity of the research findings. Questionnaires were developed based on thorough reviewing of literature related to PLC and PLC models of high education performing countries. A total of 610 teachers and 30 principals from 30 Basic Education High Schools in Mandalay City Development Area was selected as a sample through proportional stratified sampling method. Supportive and shared leadership, collaborative professional culture, deprivatized instructional practices, facilitative structure and relationship to teacher learning, and collective implementing to shared values and vision were found as factors of professional learning community by exploratory factor analysis.

Keywords: Professional Learning Community, Supportive and Shared Leadership, Collaborative Professional Culture, Deprivatized Instructional Practices, Facilitative Structure and Relationship to Teacher Learning, Collective Implementing to Shared Values and Vision

Introduction

Educators today face the difficult task of increased accountability for student learning of the 21st century with the context of rapidly changing society in various ways. In Myanmar's new national curriculum framework for basic education, it prescribed as one of the thirteen guiding principles of basic education curriculum. Therefore, principals and teachers must consider how to improve learning for all students to have 21st century skills by reculturing their school systems. Moreover, teacher is the heart of education system and the quality of teacher is the root of quality education. In the title of teacher, it already has many roles to perform and ethics to pay observance. Thus, the continuing professional development of teachers has received extensive international attention in endeavours to implement new and revised curricula, to improve the learning in schools within complex teaching environments and even to improve the overall performance of an education system (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009).

The concept of professional learning community began in western context. With public concern on education sparked by the 1983 report, *A Nation at Risk*, of the National Commission on Excellence in Education, American education was embarking on various attempts in school reform and teacher professionalization and teacher development are significant in United States (Underwood, 2007). The learning organization concept which introduced by Senge (1990), in the book of *The Fifth Discipline: The Art of Practice of Fine Learning Organization* which showed "when members of an organization learn, the entire organization learns". With announcing No Child Left Behind Act of 2001 that demands the needs of every child by meeting with schooling, educators are considering professional learning community as an option for school improvement

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because of its positive effects on school (Schmoker, 2004). Now this concept spread over the world and was found in practising among high education performing countries not only in Europe such as United States, Canada, British Colombia, etc. but also in Asia such as Hong Kong, Singapore, Thailand, etc.

Each of the words of "professional learning community" has their own meanings. Little (2002) stated that the word "professional" is a specialized and technical knowledge base, and a service-oriented member who meets client needs, having a strong collective identity to a practice; the word "learning" states working together towards a common understanding, and the word "community" refers to a group of individuals who shares a common mission, values, goals, and experiences to accomplish a task. The meaning of professional is very simple and imperfect according to Little. Therefore, the added meaning is that a professional must have a collective personality of expertise, autonomy, commitment and responsibility (Khin Zaw, 2001).

Research Objective

The objective of this study is to develop the factors for creating professional learning communities in Basic Education High Schools.

Research Question

This research explores the following question in order to explore professional learning community model of Basic Education High Schools.

- What are the factors for creating professional learning communities in Basic Education High Schools?

Definition of Key Term

Professional Learning Community: Professional learning community is a group of teachers who meet regularly as a team to identify essential and valuable materials in student learning, develop formative assessments, analyze current achievement level of students, set achievement goals, share teaching strategies, and then create lessons to improve upon status quo (DuFour, DuFour, Eaker, & Many, 2005).

Theoretical Framework

This research study will be led by the following theoretical framework. In this study, five dimensions of Shirley M. Hord (1997) will be used to investigate the professional learning community (PLC) because these are not only the most appropriate dimensions with the country's context but also the most commonly used dimensions in PLC researches. These dimensions are supportive and shared leadership, collective creativity, shared values and vision, supportive conditions (physical conditions and people capacities) and shared personal practice. Moreover, it considered characteristics of DuFour's, and Murphy and Licks' models that shed light on understanding professional learning community. And then, the concepts of Vygotsky's social development theory (1978) and adult learning theory of Knowles, Holton and Swanson (2005) are included in this study because PLC is a teacher collaborative learning community.

Supportive and Shared Leadership: Supportive and shared leadership offers the opportunity for shared decision-making and authority that is enhanced by supportive structural and relational conditions for success. In nurturing supportive and shared leadership, principals use consistently broad-based decision-making on most of the school's issues; develop democratic conceptions and behaviours by taking into account all the teachers' opinions and advice in decision making;

organize teams according to grade and subject areas in making decisions; inform important information and decisions about schools and students to all teachers.

Collective Creativity: Collective creativity sets the stage for the professional learning community to be involved in shared practice that supports change and improvement for individuals and the organization. Teachers work collaboratively in sharing information, seeking new knowledge, skills and strategies by reflective dialogue in which teachers conduct conversations about students and teaching and learning, identifying related issues and problems, and apply what they learned together to their classroom.

Shared Values and Vision: Shared values and vision are demonstrated by a focus on student learning that is strengthened by the learning of the PLC. Sharing vision is a particular mental image of important things of an individual and an organization. Staff engagement in developing a shared vision, and using that vision as a guidepost in decision making about teaching and learning in the school are the essential features of PLC.

Supportive Conditions: Supportive conditions determine *where and when,* and *how* staff meet and work regularly together as a team to do learning, decision making, problem solving, and creative work that characterize a professional learning community. Two types of conditions are necessary for learning communities to function productively: the structural or physical conditions, and the relationship among people and people capacities.

Physical conditions involve discussion time and space to meet allocated to teachers as to facilitate collaborative works; balanced student: teacher ratio and teacher: classroom ratio; necessary financial resources, material and resource person for professional development; access to ICT technology as to get teaching materials; small size of the school and physical proximity of the staff to one another; effective flow of information among teachers; and clean, inviting and delightful school environment.

People capacities are positive, caring student-teacher-administrator relationship; teachers are not being penalized or fined for unpurposive mistakes; loving culture that is built on mutual trust, respect and support among colleagues at the school and district level; openness and honesty; and recognition and celebration in outstanding achievements inside and outside school.

Shared Personal Practice: Reviewing and observing teachers' behaviours with each other is the norm of professional learning community. This process is "peers helping peers" process and it is important not to be evaluative manner. Such review must be conducted regularly by teachers who visit each other's classrooms to observe, script notes, and discuss and feedback observations with each other to increase individual and organizational capacity.

Review of Related Literature

Literature review includes definitions, characteristics and some models of PLC that laid down the foundation for the problem statement and the research procedure.

Definitions of Professional Learning Community

Professional learning community (PLC) is defined differently in diversified contexts by many researchers. This concept of PLC started as learning organization developed by Senge (1990) in business sector and later used it in education field. Senge defined PLC as organizations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole together.

Further, Hord (1997) referred to a professional learning community as a group of teachers, administrators, and staff in a school who continuously pursue and share learning and act on their learning. As the goal of PLC is to enhance their effectiveness as professionals for improving students' achievement, it was also termed as communities of continuous inquiry and improvement. She developed the attributes of PLC including (a) supportive and shared leadership, (b) collective creativity, (c) shared values and vision, (d) supportive conditions: physical conditions and people capacities, and (e) shared personal practice.

Moreover, Du Four and Eaker (1998) defined a PLC as an environment of educators that fosters mutual cooperation, emotional support, and personal growth seeks to work together in order to get unaccomplished vision alone.

Speck (1999, as cited in Sai & Siraj, 2015) explained that the school learning community is a continuous procedure of collaborative interactions among teachers, students, leaders, staff, parents by conversating to develop learning and life in school.

Stoll, Bolam, McMahom, Wallace, and Thomas (2006) identified PLC that is a group of people sharing and critically probing their practices in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way and operating as a collective activity.

Characteristics of Professional Learning Community

The literature reveals different characteristics of professional learning community. Newmann (1996) described five essential characteristics of PLCs: shared values and norms; clear and consistent focus on student learning; reflective dialogue; deprivatizing practice to make teaching public; and focusing on collaboration.

DuFour and Eaker (1998) described in detail a set of six characteristics that illustrate the process of professional learning communities. These characteristics are as follows:

- Shared mission, vision, and values
- Collective inquiry into best practices and current reality
- Collaborative teams focused on learning
- Action orientation and experimentation
- Commitment to continuous improvement
- Results orientation

Stoll, Bolam, McMahon, Wallace and Thomas (2006) identified five key characteristics which are intertwined and operating together. These are–

- Shared values and vision – having a shared of vision and sense of purpose and undeviatingly focus on students' learning
- Collective responsibility – share responsibility for student learning in order to sustain commitment and accountability
- Reflective professional inquiry – reflective dialogue on important educational issues, deprivatization of practice through mutual observation
- Collaboration – work collaboratively to improve feelings of interdependence among members of the school
- Group, as well as individual, learning is promoted – collective learning through interactive knowledge creation and active engagement in dialogue

Other three aspects are considered as important characteristics: mutual trust, respect and support among staff members; inclusive membership – the community extending beyond teachers

and school leaders to support staff, and it being a school-wide community rather than smaller groups of people; and openness, networks and partnerships.

Vescio, Ross, and Adams (2008) noted that the most successful PLCs shared four common characteristics: open collaboration of teachers, a focus on student learning, teacher authority and governance, and continuous teacher learning to accomplish goals.

Some Models of Professional Learning Community

DuFour's Model

DuFour emphasizes how important the word professional is in the word Professional Learning Community at Work model. "A professional is someone with expertise in a specialized field, an individual who has not only pursued advanced training to enter the field, but who is also expected to remain current in its evolving knowledge base" (DuFour & Eaker, 1998, pp. xi-xii). The Professional Learning Community Model requires extensive training, expectations to remain current, to learn continuously, and to put the needs of students first.

According to DuFour's views, as an organization, the foundation of professional learning communities is the development of teachers' cooperative work which focuses on improving the abilities of dealing with complicated work of teachers although helping students narrows the gaps of learning to achieve their learning goals. DuFour (2004) argues that the PLC should pay more attention to learning not teaching, cooperative working only to get individuals' achievements.

During the PLC meetings, educators focus on four essential questions at the core of all effective PLCs:

- What is it we want our students to know?
- How will we know if our students are learning?
- How will we respond when our students do not learn?
- How will we enrich and extend the learning for students who are proficient?

According to DuFour model, there are "three big ideas" that exemplify the fundamental principles of PLCs: (1) Ensuring that Students Learn, (2) A Culture of Collaboration, and (3) A Focus on Results (DuFour, 2004). The focus of the PLCs is bringing teachers together to build a community within the school that will encourage all personnel (students, teachers, staff and administration) and challenge them to thrive in all learning situations.

Hord's Model

Hord (1997) elaborated five attributes of PLC for organizational effectiveness. The first attribute is supportive and shared leadership, which requires school leaders to give teachers greater decision-making power, builds them leadership capacity and creates atmosphere and climate that promotes community empowerment practices to all PLC members. The second attribute, collective creativity, allows collaborative relationships in the school community focused on improving the effectiveness of information delivery and discussing methods and strategies to overcome instructional issues. The third attribute of PLC is shared values and vision: this attribute refers to the learning community to show their shared values, goals, mission and vision among its members. This can be seen through daily practices and are embedded in a PLC. Missions and vision are transparent to all. Established missions and vision focus on improvement in student achievement and student learning. The fourth attribute deals with supportive conditions: the physical or structural conditions and the human capacities of the people involved. The final attribute is shared personal practice, that is more concerned about the process that encourages teachers to interact, provide feedback and share the results of student learning experiences. It involves research-based

models of schools and classrooms such as action research, coaching, creating a mentor-mentee system and do joint decision making.

Murphy and Lick's Model

The Whole-Faculty Study Groups (WFSG) model draws from Senge's (1990) learning organization theory and is grounded in what is known about collaborative learning (Murphy & Lick, 2005). Initially created and implemented as a staff development model for the school system, WFSG is a framework for implementing changes in curriculum, instruction, and classroom assessment in the school. It links or connects professional development on curriculum, instruction, and classroom assessment to collaborative teams of teachers working together to apply their new learning to the student needs they are addressing through their study group action plans.

"Whole-Faculty" means that every faculty member at the school is a member as a study group focusing on data-based student instructional needs. In such a context, a study group is a small number of individuals, three to five joining together to increase their capacities to enable students to reach higher levels of performance. The collective synergy of all the study groups advances the whole school. The goal of WFSGs is to focus the entire school faculty on creating, implementing, and integrating effective teaching and learning practices into school programs that will result in an increase in student learning and a decrease in negative behaviours of students.

The WFSG process is a step-by-step practical methodology for the development of study groups in schools to facilitate school-wide change and enhance learning processes and outcomes. There are five guiding principles for WFSG:

- Students are first
- Everyone participates
- Leadership is shared
- Responsibility is equal
- The work is public

Methodology

Population and Sample

The population included all principals and teachers from the Basic Education High Schools (BEHSs) in Mandalay City Development Area (MCDA). The sample of this study was 30 principals and 610 teachers from 30 BEHSs in MCDA, that was selected by using proportional stratified sampling based on teacher's position.

Instrumentation

The instruments used for data collection were two questionnaires: professional learning community questionnaire for principals (Questionnaire 1) and professional learning community questionnaire for teachers (Questionnaire 2). Two questionnaires included two parts: the first part for respondents' demographic data and the second part for the investigation of perceptions of importance of professional learning community practices.

Data Collection Procedure

As the scope of this study was located in Mandalay City Development Area (MCDA), the researcher took permission from the Deputy Director General (Education) of Mandalay Region. And then, the researcher sought and obtained background information of schools in MCDA from

Regional Office in order to select sample schools. After preparing necessary data and condition, questionnaires were distributed to participants on 2nd July 2019, along with a cover letter introducing and explaining the purpose of the study and highlighting the confidentiality of participants and their responses. Finally, completed questionnaires were collected after one week.

Data Analysis

The data were systematically analyzed using the Statistical Package for the Social Studies (SPSS) Software version 23. The data were analysed using factor analysis and descriptive statistics.

Findings

There were three aspects that needed to be examined the appropriateness of the data for factor analysis. The three aspects were sample size, factorability of the correlation matrix, and the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity. For sample size, Comrey and Lee (1992, as cited in Pearson & Mundform, 2010) suggested to the sample sizes: 100 as poor, 200 as fair, 300 as good, 500 as very good, and 1000 or more as excellent for a factor analysis to return reliable factors. Ho (2014) suggested that the number of sample size would be more acceptable of 10 times the number of variables and other rule of thumb is five times. Based on these arguments about determining the suitability of sample size for factor analysis, a sample size of 640 respondents was involved in this study, providing a ratio of over 10 cases per variable. Inspection of the Correlation Matrix showed evidence of many correlation $r=.3$ or greater.

For measure of sampling adequacy or whether data could factor well, Hair, Black, Babin, and Anderson (2014) suggested that if the Kaiser-Meyer-Olkin (KMO) was greater than 0.6 and the Bartlett's Test of Sphericity (BTS) must be significant at $p < .05$ then factorability of the correlation matrix was assumed. The KMO measure of sampling adequacy yielded a value of 0.98, indicating that the sample size was large enough to assess the factor structure. BTS was significant ($\chi2\ (1770) = 35993.79$, $p=.000$), indicating that the variables were correlated highly enough to provide a reasonable basis for factor analysis (Tabachnick & Fidell, 2013). Besides, the results provided for all items had a communality that was above 0.3 (Tabachnick & Fidell, 2013). The communalities were determined for each item. The communalities of the items ranged from 0.43 to 0.74.

An exploratory factor analysis (EFA) was used to construct new factors affecting professional learning community practices. It was conducted on the 60 questionnaire items with principal axis factoring as the extraction technique and varimax rotation, using Statistical Package for Social Science (SPSS) version 23. EFA was an analysis of exploratory type and was used to identify the complex interrelationships among the variables, and group of these variables as part of unified concepts. This method helped the researcher to draw the main dimensions of the area of interest to derive a theory or a model from the reasonably large set of variables. The groups formed from interrelated variables were called factors. The distinctive feature of EFA was that the factors were derived from statistical results, not from theory (Hair et al., 2014).

Various criteria were used to assist the factor extraction. The 'Kaiser's criteria' based on 'Eigenvalues', the 'Scree test', and the 'cumulative percentage of variance extracted' were the commonly used criteria for factor extraction (Williams, Brown, & Onsman, 2010). Factors were extracted with the rules of Eigenvalues either greater than one or by fixing the number of factors to be a fixed one, based on prior expectations. Five factors had eigenvalues greater than 1.0, which was a common criterion for a factor to be useful. And then, cumulative percentages of variance were above 50%, ranging from 52.01% to 62.61% (See Table 1). The total variances explained in social science were acceptable for a minimum value from 50-60 percentages (Pett, Lackey, & Sullivan, 2003).

Table 1 Extraction Sums of Squared Loadings for Professional Learning Community Factors

Extraction Sums of Squared Loadings			
Factors	**Eigenvalues**	**% of variance**	**Cumulative %**
Factor (1)	31.21	52.01	52.01
Factor (2)	2.49	4.15	56.16
Factor (3)	1.59	2.65	58.82
Factor (4)	1.15	1.92	60.73
Factor (5)	1.13	1.88	62.61

Extraction method: Principal Axis Factoring

The Scree plots were the graphical representation of Scree tests by drawing a straight line through the smaller Eigenvalues, at which the above conditions were fixed. Figure 1 shows that the Scree plot flattens out after the five factors.
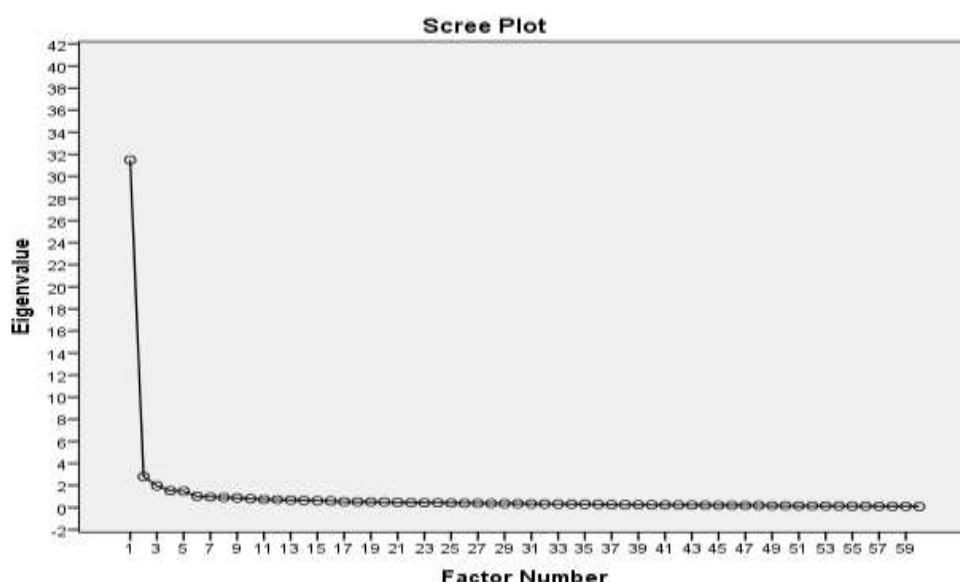
Figure 1 Scree Plot Showing Factors for Professional Learning Community Practices

Rotation Sums of Squared Loadings indicated that the presence of five factors exceeding 1, explaining 14.20%, 13.35%, 13.26%, 12.73% and 9.06% of the variance respectively (See Table 2). Based on the Rotated Factor Matrix, a total of sixty items were retained because they all passed minimum factor loading of 0.35 and above.

Table 2 Rotation Sums of Squared Loadings for Professional Learning Community Factors

Rotation Sums of Squared Loadings			
Factors	**Eigenvalues**	**% of variance**	**Cumulative %**
Factor (1)	8.52	14.20	14.20
Factor (2)	8.01	13.35	27.55
Factor (3)	7.96	13.26	40.82
Factor (4)	7.64	12.73	53.55
Factor (5)	5.44	9.06	62.61

Rotation Method: Varimax with Kaiser Normalization

The factors were generated, and attributed variables were examined to identify the common property to name the variables (Williams et al., 2010). The labelling of factors was a subjective, logical, and inductive process (Pett et al., 2003). The meaningfulness of latent factors was ultimately dependent on the logical definitions named by the researcher (Henson & Roberts, 2006).

Table 3 Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Professional Learning Community Practices

Variables	Factor Loadings					Communalities
	1	2	3	4	5	
Behaving proactively and facilitating as needed	.74					.66
Deciding and performing according to subject teams	.74					.67
Sharing equal responsibilities among teachers	.70					.68
Taking into account all teachers' opinions and advice in decision making	.69					.61
Consistent participation of teachers in decision making	.66					.55
Giving chance to make innovative changes	.66					.61
Informing important information and decisions to all teachers	.65					.53
Nurturing leadership abilities and assigning alternatively	.59					.52
Giving power and authority in line with responsibilities	.58					.54
Treating teachers with respect and as professionals	.53					.49
Focusing undeviatingly on student learning rather than teaching	.46					.56
Praising and recognizing teachers' triumphs	.41					.53
Pursuing for professional self-renewal	.40					.57
Having interdependency among colleagues		.63				.71
Applying what teachers learned together		.62				.74
Engaging actively in instructional seminars and workshops		.61				.72
Focusing more on effective teaching methods than finishing monthly course		.58				.62
Sharing successful teaching strategies		.58				.68
Discussing teaching strategies and contents with each other to improve teaching		.58				.66
Developing more capacity by working collaboratively		.57				.61
Taking help from experienced teachers and colleagues		.55				.64
Communicating openly and honestly		.50				.67
Supporting and helping each other to improve instruction		.50				.67
Supporting and helping each other to improve instruction		.50				.67
Doing inquiry activities together to reduce ability gap		.50				.61
Performing school activities based on mutual trust and respect		.48				.73
Pursuing teaching experiences from veteran teachers		.46				.53
Collaborating to develop shared sense of values and respect among teachers		.44				.59
Sharing collaboratively knowledge and experiences in groups			.76			.73
Giving constructive feedback on observations			.70			.71
Having opportunities to share knowledge individually			.65			.68
Observing others' teaching practices and taking notes			.64			.68
Allocating fixed time to professional learning			.62			.64
Sharing one's successes and failures in instructional practices to others			.62			.65
Mentoring for professional growth			.59			.64
Reserving places or rooms to professional learning			.59			.60

Table 3 Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Professional Learning Community Practices   (continued)

Variables	Factor Loadings					Communalities
	1	2	3	4	5	
Holding regularly subject meeting once a week			.55			.56
Guiding correct ways, not evaluative judgements			.53			.59
Informing procedures and guidelines in time				.68		.79
Getting access to ICT technology and teaching aids				.66		.67
Supporting necessary resources for teacher competencies				.63		.63
Cooperating on school activities not discriminating between roles				.62		.72
Balancing teacher-student ratio and teacher-classroom ratio				.59		.58
Collaborating with each other in implementing established school policies				.56		.71
Having positive and caring student-teacher-administrator relationship				.53		.65
Allowing teachers' opinions and advice to principal				.52		.61
Having community support and participation				.52		.61
Seeking a good infrastructure and conducive school environment				.51		.66
Recognizing and celebrating in outstanding achievements				.50		.55
Getting appropriate training programs for capacity building of the administrators and teachers				.47		.55
Neglecting unpurposive mistakes among teachers				.47		.65
Risk-taking to improve on status quo				.38		.43
Implementing short-term and long-term plans to achieve school vision					.64	.70
Setting up all school programs and procedures in line with school vision					.63	.67
Working collaboratively on the quality of teaching profession					.58	.63
Having high expectations on school and students					.58	.66
Aligning decisions about teaching and learning with school values and vision					.57	.68
Setting school's own mottos or vision with teachers					.53	.55
Supervising teaching and learning to improve student learning					.52	.62
Encouraging and helping teachers to create continuous learning environment					.50	.59
Having active involvement of parents and community					.39	.50
Eigenvalues	**8.52**	**8.01**	**7.96**	**7.64**	**5.44**	
% of variance	**14.20**	**13.35**	**13.26**	**12.73**	**9.06**	

Note. Loading <.35 are suppressed   **Extraction method: Principal Axis Factoring**

Rotation Method: Varimax with Kaiser Normalization

According to the results of EFA described in Table 3, Factor (1) measured leadership in professional learning community practices naming "Supportive and Shared Leadership" (SSL). There were 13 items: behaving proactively and facilitating as needed; deciding and performing according to subject teams; sharing equal responsibilities among teachers; taking into account all teachers' opinions and advice in decision making; consistent participation of teachers in decision making; giving chances to make innovative changes; informing important information and decisions to all teachers; nurturing leadership abilities and assigning alternatively; giving power and authority in line with responsibilities; treating teachers with respect and as professionals;

focusing undeviatingly on student learning rather than teaching; praising and recognizing teachers' triumphs; and pursuing for professional self-renewal.

Factor (2) consisted of 14 items: having interdependency among colleagues; applying what teachers learned together; engaging actively in instructional seminars and workshops; focusing more on effective teaching methods than finishing monthly course; sharing successful teaching strategies; discussing teaching strategies and contents with each other to improve teaching; developing more capacity by working collaboratively; taking help from experienced teachers and colleagues; communicating openly and honestly; supporting and helping each other to improve instruction; doing inquiry activities together to reduce ability gap; performing school activities based on mutual trust and respect; pursuing teaching experiences from veteran teachers; and collaborating to develop shared sense of values and respect among teachers that were labelled as "Collaborative Professional Culture" (CPC).

Factor (3) was loaded with 10 items: sharing collaboratively knowledge and experiences in groups; giving constructive feedback on observations; having opportunities to share knowledge individually; observing others' teaching practices and taking notes; allocating fixed time to professional learning; sharing one's successes and failures in instructional practices to others; mentoring for professional growth; reserving places or rooms to professional learning; holding regularly subject meeting once a week; and guiding correct ways, not evaluative judgements that were labelled as "Deprivatized Instructional Practices" (DIP).

Fourteen items that loaded into Factor (4) were informing procedures and guidelines in time, getting access to ICT technology and teaching aids, supporting necessary resources for teaching competencies, cooperating on school activities not discriminating between roles, balancing teacher-student ratio and teacher-classroom ratio, collaborating with each other in implementing established school policies, having positive and caring student-teacher-administrator relationship, allowing teachers' opinions and advice to principal, having community support and participation, seeking a good infrastructure and conducive school environment, recognizing and celebrating in outstanding achievements, getting appropriate training programs for capacity building of the administrators and teachers, neglecting unpurposive mistakes among teachers, and risk-taking to improve on status quo. This factor was labelled, "Facilitative Structure and Relationship to Teacher Learning" (FSRTL).

Factor (5) was made up of 9 items: implementing short-term and long-term plans to achieve school vision; setting up all school programs and procedures in line with school vision; working collaboratively on the quality of teaching profession; having high expectations on school and students; aligning decisions about teaching and learning with school values and vision; setting school's own mottos or vision with teachers; supervising teaching and learning to improve student learning; encouraging and helping teachers to create continuous learning environment; and having active involvement of parents and community that were mainly concerned with "Collective Implementing to Shared Values and Vision" (CISVV). The factor labels proposed by the researcher suited the extracted factors and were retained. Internal consistency for each of the scales was examined using Cronbach's alpha. The alphas were high (See Table 4).

Table 4 Descriptive Statistics for Factors Affecting Professional Learning Community Practices in Basic Education High Schools (*N=640*)

Factors	No. of Items	*M*	*SD*	Alpha
Supportive and Shared Leadership	13	3.60	.53	.94
Collaborative Professional Culture	14	3.61	.52	.96
Deprivatized Instructional Practices	10	3.46	.58	.94
Facilitative Structure and Relationship to Teacher Learning	14	3.57	.54	.96
Collective Implementing to Shared Values and Vision	9	3.58	.53	.93
PLC Practices	**60**	**3.50**	**.48**	**.98**

In naming the factors resulting from factor analysis, the researchers asked for check the reasonability of the names of factors and the meanings of items in each factor from expert and experienced educators of the Department of Educational Theory, Yangon University of Education and Sagaing University of Education. Some items were rewarded and revised, and the names of the factors were reviewed succinctly so that the appropriateness of the names of the factors and their related items were confirmed. After discussing with them, valuable and imaginative advice were got not only for the names of factors but also for this study. This PLC model had both construct validity by calculating factor analysis and content validity by examining with experts, so the validated factors for professional learning community model for Basic Education High Schools were specified as follows:

(i) Supportive and Shared Leadership

(ii) Collaborative Professional Culture

(iii) Deprivatized Instructional Practices

(iv) Facilitative Structure and Relationship to Teacher Learning

(v) Collective Implementing to Shared Values and Vision

Conclusion and Discussion

Discussion

The objective of this study was to develop the factors for creating professional learning communities in Basic Education High Schools. Therefore, exploratory factor analysis, specifically Principal Axis Factoring (PAF), was used to investigate factors affecting professional learning community practices of teachers and principals. Analysis found five factors that represented each of interrelated variables. These five factors were supportive and shared leadership, collaborative professional culture, deprivatized instructional practices, facilitative structure and relationship to teacher learning, and collective implementing to shared values and vision. These factors resulted from the findings of exploratory factor analysis using principal axis factoring method based on the responses of teachers and principals on the importance level of professional learning community practices.

A composite scale for professional learning community was developed using all five factors explaining above 50%, ranging from 52.01% to 62.61%. Internal scale reliabilities for the five factors were generally excellent with all Cronbach alpha values higher than .90 and the alpha value of overall professional learning community practices is 0.98. The research findings have supported previous researchers such as Hord (1997) and Harris and Jones (2010) in affirming that shared and

supportive leadership, collective learning and its application, shared values and vision, supportive conditions, and shared personal practice are the attributes of PLCs.

Conclusion

Based on factor analysis results, the proposed professional learning community model for Basic Education High Schools was presented in Figure 2. *Supportive and shared leadership, collaborative professional culture, deprivatized instructional practices, facilitative structure and relationship to teacher learning, and collective implementing to shared values and vision* were the main factors for creating professional learning communities in Basic Education High Schools.

Supportive and Shared Leadership refers to that school administrators support and encourage leadership and continuous learning, share leadership, power and authority democratically with teachers, and make a concerted effort to nurture authentic teacher leadership.

Collaborative Professional Culture means that school administrators and teachers work together within and between content areas, and grade levels to share information, plan collaboratively, and improve student learning opportunities in the school.

Deprivatized Instructional Practices mean that teachers observe teaching and professional behaviours with each other, and review and give constructive feedback in a non-evaluative manner.

Facilitative Structure and Relationship to Teacher Learning mean that having structure which supports appropriate conditions (exact time and space) and creates professional culture to consistently hold as a PLC, and warm relationship that strengthens mutual respect and trust among school administrators and teachers.

Collective Implementing to Shared Values and Vision refers to guiding behaviours of members as a whole that are a common vision and a total commitment of how to improve teaching and learning towards attaining shared values and vision.
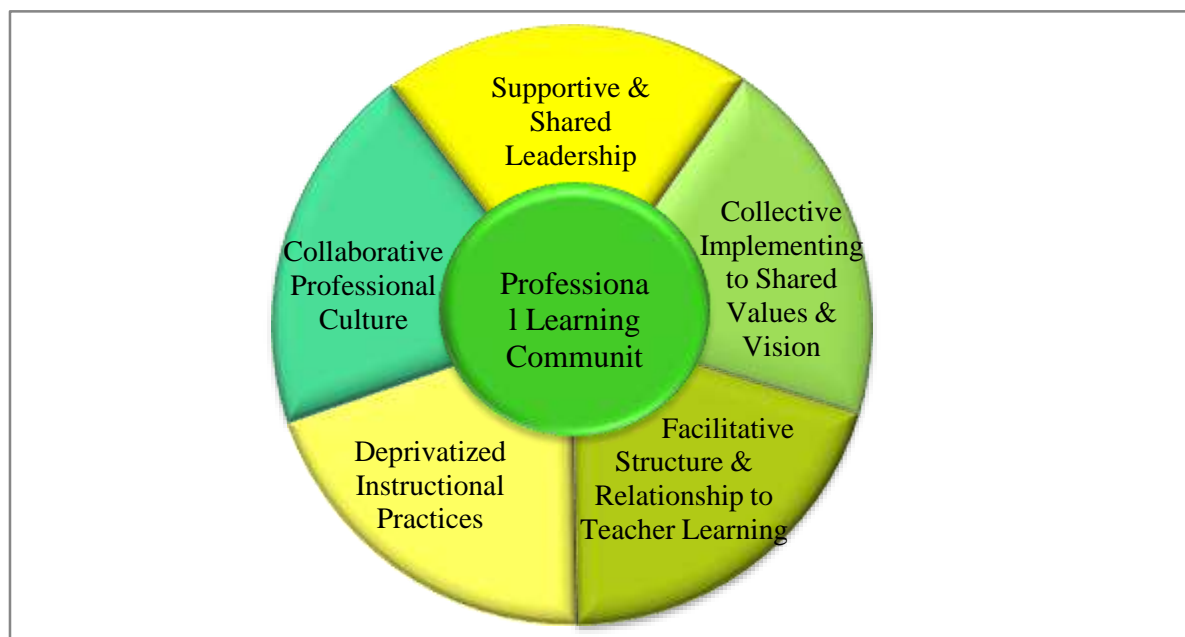
Figure 2 Proposed Professional Learning Community Model for Basic Education High Schools

Recommendations

A number of recommendations could be made for the improvement of professional learning community practices based on the findings:

- Educators and policy makers need to explore how to implement school-based PLCs for enhancing authenticity and quality of teacher engagement in it rather than increasing the frequency of holding it.

- Educational policy makers must mentor and guide schools to focus on improving student achievement, and enhance teacher professionalism through increasing the professional status of teaching and providing teachers with greater opportunities for professional growth.

- School principals who are combining PLCs and faculty meetings are recommended not to combine PLCs and faculty meetings to provide and promote teacher professional development.

- School principals need to reinforce and lead in Boards of Studies and Continuous professional development as much as they can so that teachers can participate actively in it and commit running them effectively.

- Teachers have to change their traditional ways of teaching; they have a strong perception of themselves as professionals and behave and try well as such.

- Teachers have to work collaboratively to apply teaching strategies that promote student learning. In order to improve their classroom practices, teachers need to work together and organize learning teams in an ongoing manner.

- The community have to provide the needs of school as much as they can. To be effective schools, only school members can not able to do. Community support is the best facilitator to improve teacher morale and school achievement.

Acknowledgements

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PRINCIPALS' LEADERSHIP BEHAVIOURS ON TEACHERS' PROFESSIONAL DEVELOPMENT IN BASIC EDUCATION HIGH SCHOOLS

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Abstract

The main aim of the paper was to study principals' leadership behaviours on teachers' professional development in Basic Education High Schools, Tada-U Township. The specific aims were to study the levels of teachers' perception of principals' leadership behaviours, to study the levels of teachers' professional development, to investigate the relationship between principals' leadership behaviours and teachers' professional development, and to identify the predictors of principals' leadership behaviours on teachers' professional development. Principals' leadership behaviours questionnaire developed by House (1996) and the teachers' professional development questionnaire developed by Loucks-Horsely, Stiles, Mundry, Love and Hewson (2010) were used to collect the necessary information. A total of 198 teachers participated in the study. Descriptive statistics, Pearson product-moment correlation and multiple regression analysis were used to analyze the data. There were moderate level of teachers' perceptions of principals' leadership behaviours and moderate level of teachers' professional development. Moreover, there is a strong and positive relationship between the dimensions of principals' leadership behaviours and teachers' professional development. The multiple regression result of the study showed that directive leadership behaviour was appeared as the most influential predictor of teachers' professional development. Open-ended responses verified that the impact of leadership behaviours is organized and directed by the principals that lead to a great change in teachers' professional development.

Keywords: principals' leadership behaviour, teachers' professional development

Introduction

Many schools today are in strong need of understanding the purpose of the effective and the importance of principals' leadership behaviour. The school leaders, principals, need to understand the new modern strategies to achieve success in the education process. Principals' leadership behaviours in schools play a vital role in achieving the growth of instructional process and improving the development of administrative process.

Teachers' development is the main reason for enhancing the students' educational level and their achievement. Thus, the principals should focus on teachers' professional development, as teachers are considered to be the most important element in the educational process. The role of the principal in supporting teachers' professional development activities appears to be crucial to the success of the professional growth of teachers (Berube, Gaston, & Stepans, 2004).

It is essential to have principals who create a positive school climate in the school that allows teachers to realize their potential. They can support a learning environment in which teachers can experiment with new ideas and practices for teaching and exercise creativity. They ought to look into their sense of fulfillment of teachers' needs, which will let them focus on their work and improve their job involvement.

Therefore, the principals need to have the strong theoretical knowledge, skill and adequate experiences in school leadership. They should have various trainings on school leadership that can play active and effective teachers' professional development in school improvement programs.

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Aims of the Study

The main aim is to study principals' leadership behaviours on teachers' professional development in Basic Education High Schools, Tada-U Township.

The specific aims are:

1. to study the teachers' perception of principals' leadership behaviours in Basic Education High Schools of Tada-U Township,
2. to study the levels of teachers' professional development in Basic Education High Schools of Tada-U Township,
3. to investigate the relationship between principals' leadership behaviours and teachers' professional development, and
4. to identify the predictors of principals' leadership behaviours on teachers' professional development.

Research Questions

1. What are the teachers' perceptions of principals' leadership behaviours in Basic Education High Schools of Tada-U Township?
2. What are the levels of teachers 'professional development perceived by teachers in Basic Education High Schools of Tada-U Township?
3. Is there any relationship between principals' leadership behaviours and teachers' professional development?
4. What are the predictors of principals' leadership behaviours on teachers' professional development?

Theoretical Framework

The study is concerned with the principals' leadership behaviors on teachers' professional development. Principal leadership behaviours were developed into four dimensions based on House (1996). They are directive leadership behaviour, supportive leadership behaviour, participative leadership behaviour and achievement-oriented leadership behaviour.

Directive leadership behaviour is the principal behaviour that tells teachers what are expected from them and shows how to perform jobs assigned to them. This includes giving teachers schedules of specific work to be done at a specific time.

Supportive leadership behaviour is the principal behaviour directs towards the satisfaction of teachers' needs and preferences, such as displaying concern for their welfare and creating a friendly and psychologically supportive work environment.

Participative leadership behaviour is the principal behaviour that directs towards encouragement of teachers and taking their opinions and suggestions into account when making decisions.

Achievement-oriented leadership behaviour is the principal behaviour that directs towards motivating performance in setting challenging goals, seeking improvement, emphasizing excellence in performance, and showing confidence that teachers will attain high standards of performance.

Teachers' professional development was developed into six dimensions: aligning and implementing curriculum, collaborative structures, examining teaching and learning, immersion experiences, practicing teaching and vehicles and mechanisms developed by Loucks-Horsely, Stiles, Mundry, Love and Hewson (2010).

Aligning and implementing curriculum refers to studying how to implement new curriculum materials, teaching a unit on a topic that is new to them or is taught in a new way, all of which can build in teachers new content knowledge, teaching skills, and dispositions towards other ways of teaching.

Collaborative structures refer to teachers' professional networks inside schools and across school boundaries, and partnerships with experienced teachers. These afford teachers important opportunities to share and build a professional culture that focuses collective energy on student learning.

Examining teaching and learning refers to teachers' own practice afford direct "job-embedded" learning. This includes students' work, their responses to assessments, and thinking, as carefully observed and documented by their teachers.

Immersion experiences refer to being immersed in intensive experiences in which they focus on subject and content in-depth, learning through inquiry and problem solving.

Practicing teaching refers to peering and coaching among teachers. Experienced teachers mentor and demonstrate the lesson and share experiences with teachers to get the desired the student learning outcomes.

Vehicles and mechanisms refer to activities that teachers have opportunities to attend workshops based on new initiatives or changing teaching strategies, giving training to use technology-based professional learning opportunities.

Definitions of Key Terms

Principal Leadership Behaviours: Principal leadership behaviours are defined as the process of motivating other people to act in particular ways in order to achieve specific goals (Hannagan, 2002, as cited in Porter, 2014).

Teachers' Professional Development: Teachers' professional development refers to any activities engaged in by principals that enhance teachers' knowledge and skills and enable them to consider their attitudes and approaches to the education of learners, with a view to improving the quality of teaching and learning (Van der Nest, 2012, as cited in Mashaba, 2015).

Operational Definition

Principals' Leadership Behaviours on Teachers' Professional Development refers to teachers' view of principals' behaviours that their teachers' professional development that help them build their academic content knowledge and how to reach students with this knowledge as being the most valuable.

Review of Related Literature

Leadership Behaviour

Leadership behaviour is a process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task (Hoy & Miskel, 2013). Hannagan (2002, as cited in Porter, 2014) defined leadership behaviour as the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives.

Principals' Leadership Behaviour

Laschinger (1999) defined leadership behaviour as the behaviour that significantly influenced teachers' perceptions of formal and informal power and access to empowerment

structures (information, support, resources and opportunity).According to Huber-Dilbeck (1988), leadership behavior is the interpersonal influence, exercised in situations and directed through the communication process, toward the attainment of a special goal or goals.

The Path-goal Leadership Theory

The path-goal theory is a leadership theory in the field of organizational studies developed in 1971 and revised in 1996 by Robert House. This theory of leadership styles are also used as leadership behaviours.

Directive Leadership Style: Letting subordinates know what is expected of them, giving guidance and direction, and scheduling work (similar to initiating-structure and task-oriented behavior).

Supporting Leadership Style: Being friendly and approachable, showing concern for subordinate welfare and treating members as equals (similar to consideration and relationship-oriented behavior).

Participative Leadership Style: Consulting subordinates, soliciting suggestions and allowing participation in decision making.

Achievement-oriented Leadership Style: Setting challenging goals, expecting subordinates to perform a high level, encouraging them and showing confidence in subordinates' abilities.

Principal Leadership Styles

Harris (2003) divided principals' leadership into four leadership styles.

Autocratic or authoritative leadership style: An autocratic leader tries to exert powerful authority using reward and coercion to influence his/her follower, focusing his/her attention on the product instead of making human needs the centre of attention. An autocratic or authoritative style leader shows consistent behavioural patterns involving acting alone and making unilateral decisions.

Democratic or participative leadership style: A democratic or participative leader is a leader who can motivate humanness, teamwork and participation of teachers. Democratic or participative leadership style is used by leaders to involve followers in the managerial task giving guidance and support. It is also one of the most convenient styles that allow followers to present their ideas or opinions freely in the organization for which they are working.

Laissez-faire or permissive leadership style: A laissez-faire or permissive leader is a leader who gives complete freedom to followers to make decisions regarding any issue in the organization and to solve any problems they encounter on their own with very little guidance from their leader. However, working on different activities and making various decisions on different issues or topics alone without a leader, leads to low productivity and low job satisfaction.

Teacher Professional Development

Teacher professional development is the process of improving staff skills and competencies needed to produce outstanding educational results for students (Hassel, 1999). Professional development is a lifelong collaborative learning process that nourishes the growth of individuals, teams, and the school through a daily job-embedded, learner centered, focused approach (Du Four, 2006, as cited in Trehearn, 2010).

Professional development is a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement (National Staff Development Council, 2007, as cited in Porter, 2014).

California University's Dr. Kornhauser (n.d, as cited in Khin Zaw, 2001) had distinguished the features of the professions with the following characteristics:

1. Expertise
2. Autonomy
3. Commitment
4. Responsibility

In-service preparation is also one of the most important components in the total teacher education programme. Growth into a full professional teacher is also aided by reading of three types:

1. Professional
2. Expansive and
3. Slice-of-life and variety reading (Khin Zaw, 2001).

Loucks-Horsley et al., (2010) identified six categories which included eighteen different strategies that are used for professional development of teachers

1. Aligning and Implementing Curriculum

Curriculum Alignment and Instructional Materials Selection: It refers to studying the national standard to identify the meeting and intent of student learning goals, developing a clear picture what curriculum was needed based on the standards and students learning goals.

Curriculum Implementation: It refers to learning content and teaching strategies, organizing the support for teaching strategies and learning environments, and using them, preparing such as selecting teaching learning materials and planning teaching steps to teach curriculum.

Curriculum Replacement Units: It refers to having access to replace quality units suitable, learning some parts or some lessons of curriculum, having opportunities to broaden their application of the new approach to other parts of the curriculum.

2. Collaborative Structures

Partnerships with Schools and Universities: It refers to being two ways exchange of knowledge and resources with experts from other schools, discussing subject matter and teaching learning strategies through network that can make important contribution to students' learning improvement.

Professional Networks: It refers to joining network voluntarily to share their own knowledge and experience and learn from other network participants, broadening members' perceptions by learning the lesson's content, learning situation of students, etc.

Study Groups: It refers to structuring study groups to support teachers' implementation strategies recently learned in the workshops or other short team sessions and using study groups once teacher have already implemented new practices in the classroom.

3. Examining Teaching and Learning

Doing Research: It refers to identifying a problem to be solved, planning, action, observing, reflection and collaborating with other teachers to contribute to the teaching learning process.

Case Discussions: It refers to writing case materials presented a focus picture of specific aspects of teaching and learning involved students' participation, discussion and thinking and learning and offering groups of teacher the opportunities to reflect on teaching and learning.

Examining Student Work and Thinking, and Scoring Assessments: It refers to being a power examining students' work as a team, applying what is learned and discussed to practice through colleagues' thinking and perceptions and reflecting on individual thinking.

Lesson Study: It refers to using lesson study for the result in teachers developing a thorough understanding of how particular lesson should be conducted and why, based on data that go on teaching learning improvement.

4. Immersion Experiences

Immersion in Inquiry in Subjects and Problem Solving: It refers to being immersed in an intensive experience in which teachers focus on subject and content in-depth, learning through inquiry and problem solving, changing through strategies as a result of teachers' conceptions about subjects and experiences.

Immersion into the World of Science and Art: It refers to having opportunities for them as learning the content, process, culture and development work, attending lectures and seminars and reflection on their experiences as members of research teams and content experts.

5. Practicing Teaching

Coaching: It refers to enhancing the learning of both the coach (experienced teachers) and the one being coached (beginner teachers), sharing ideas and providing feedback, examining together particular teaching strategies and learning strategies and having opportunities for interaction with trust.

Demonstration Lessons: It refers to presenting the exemplary model of teaching facilitated by an experienced teachers while other teachers observe and discuss, having clear purpose and intent focus on the discussion and observation, using a pre-lesson and classroom observation.

Mentoring: It refers to occurring between a teacher new to the field and a more experienced teachers that sustain long-term ongoing professional learning, having valuable expertise to share each other, paying attention to match mentor and new teachers on the alignment in content areas.

6. Vehicles and Mechanisms

Developing Professional Developers: It refers to designating teachers as leaders of other teachers in regard to lead their professional development activities, training professional developers as skillful organizers, coordinators and flexible, adaptable and creative problem solvers.

Technology for Professional Development: It refers to giving training to use technology-based professional learning opportunities, meeting participants learning needs, improving qualities by using technology such as computer, internet, etc.,

Workshops, Institutes, Courses, and Seminars: It refers to having opportunities to attend workshops based on new initiatives or changing teaching strategies, etc. and having chances to attend seminars for sharing subject, teaching learning experiences.

Quality professional development and experiences help teachers recognize the high-quality ongoing professional development that deepen teachers' content knowledge and pedagogical skills: provides opportunities for practice and reflection and includes efforts that are job-embedded, sustained and collaborative will assist in the goal to remain make up-to-date (Spark, 2002).

Research Methodology

Research Method

Descriptive research method was used to collect the required data in this study.

Population and Sample

The participants of this study were chosen from Basic Education High Schools in Tada-U Township, Mandalay Region. There are nine Basic Education High Schools in Tada-U Township. These schools were labeled as S1, S2, S3, S4, S5, S6, S7, S8 and S9. All the teachers from nine Basic Education High Schools in Tada-U Township were chosen as sample. Totally 198 teachers participated in this study. The respondent rate was 94.29%.

Instrumentation

The set of questionnaire for all participants was developed after reviewing the related research and literature thoroughly. Then, in order to get the required data, an instrument was developed and made necessary changes under the advices and guidance of the supervisor.

The questionnaire was composed of three parts: part (A) demographic information of teachers, part (B) principals' leadership behaviour questionnaire and part (C) teachers' professional development questionnaire. Part (A) consisted of demographic information about gender, age, qualification, total services, current position teaching services, class and subject taught. Part (B) was composed of 28 items based on the four dimensions of leadership behaviour that were developed by House (1996): 7 items were related to directive leadership behaviour, 7 items were related to supportive leadership behaviour, 7 items were related to participative leadership behaviour and 7 items were related to achievement-oriented leadership behaviour.

Part (C) was composed of 54 items based on the six dimensions of teachers' professional development that were developed by Loucks-Horsely et al (2010): 9 items were related to aligning and implementing curriculum, 9 items were related to collaborative structures, 12 items were related to examining teaching and learning, 6 items were related to immersion experiences, 9 items were related to practicing teaching and 9 items were related to vehicles and mechanisms.

All items of the questionnaires were analyzed through the use of five point Likert type scale ranging from 1 to 5 (1=never, 2=seldom, 3=sometimes, 4=often, 5=always) was used to measure teachers' perception of principals' leadership practices and teachers' professional development.

Open-ended questionnaires were used to know the ways that improve the principals' leadership practices and teachers' professional development. These questionnaires were interpreted based on the teachers' answers. The respondent rate for open-ended questionnaires was 92%.

Procedures

The researcher thoroughly reviewed related research and literature and received some pieces of advice and guidance for the questionnaire from the panel of experienced teachers from Department of Educational Theory, Yangon University of Education. The uses of words and contents items were modified. Piloting was conducted with 42 teachers in Basic Education High School, No. (3) and Basic Education High School No. (4) in San Chaung Township, Yangon Region, in 16th January, 2018. According to the test of pilot study, the reliability coefficient (Cronbach's alpha) were (0.89) for questionnaire part (A) and (0.81) for questionnaire part (B). The reliability coefficient (Cronbach's alpha) of overall questionnaires was (0.84).

In 2nd February, 2018, the questionnaires for teachers were distributed to the schools. One week later, the distributed questionnaires were recollected. The respondent rate was (94.29%).

Data Analysis

The collected data of this study were analyzed by using the Statistical Package for the Social Science (SPSS) version 22. The descriptive analysis technique, One Way ANOVA, Pearson product-moment correlation and multiple regressions were used to analyze the required data. Open-ended responses were grouped into similar groups to interpret the collected data.

Research Findings

The analysis of collected data concerned with principals' leadership behaviours on teachers' professional development as research findings are presented. The descriptive analysis technique was used to find out the levels of teachers' perceptions of principals' leadership behaviours and teachers' professional development.

Table 1   Means and Standard Deviations for Teachers' Perception on Levels of Dimensions of Principals' Leadership Behaviours in Basic Education High Schools

Dimensions	Schools									Total
	S1	S2	S3	S4	S5	S6	S7	S8	S9	
Directive Behaviour	3.01 (.57)	**3.71** (.36)	3.42 (.62)	3.13 (.53)	3.58 (.24)	3.56 (.47)	3.63 (.38)	3.57 (.39)	3.67 (.24)	3.46 (.50)
Supportive Behaviour	3.22 (.39)	3.27 (.47)	3.44 (.47)	3.27 (.35)	3.34 (.63)	3.51 (.66)	**3.76** (.50)	3.57 (.40)	3.53 (.49)	3.43 (.51)
Participative Behaviour	3.00 (.43)	3.30 (.40)	3.29 (.38)	2.90 (.75)	3.41 (.31)	3.39 (.36)	3.55 (.38)	3.41 (.41)	3.65 (.77)	3.31 (.53)
Achievement-oriented Behaviour	3.03 (.46)	3.30 (.42)	3.25 (.35)	3.06 (.59)	3.56 (.44)	3.21 (.47)	3.27 (.36)	3.20 (.41)	3.64 (.38)	3.27 (.47)

Note: 1.00-2.33 = Low level   2.34-3.67 = Moderate level   3.68-5.00 = High level

Table 1 displayed the means and standard deviations of principals' leadership behaviours. According to the data presented in the table, all schools had moderate levels of teachers' perception on the four principals' leadership behaviour: directive leadership behaviour, supportive leadership behaviour, participative leadership and achievement-oriented leadership behaviour. Moreover, S2 had a high level of directive leadership behaviour. Then, S7 had high level of supportive leadership behaviour.

One-way ANOVA was used to analyze whether there were significant variations in the teachers' perceptions of principals' leadership practices. Table 2 described the ANOVA result for the levels of teachers' perceptions of principals' leadership behaviour in Basic Education High schools, Tada-U Township.

Table 2 showed that the teachers' perceptions on levels of dimensions for principal' leadership behavior regarding directive leadership behaviour ($df=8$, $F=6.833$, $P<.001$), supportive leadership behavior ($df=8$, $F=2.793$, $P<.01$), participative leadership behavior ($df=8$, $F=5.244$, $P<.001$) and achievement-oriented leadership behavior ($df=8$, $F=4.669$, $P<.001$). There were significant variations on teachers' perceptions on all levels of dimensions of principals' leadership behaviours in schools.

Table 2 One-Way ANOVA Results Showing Teachers' Perceptions on Dimensions of Principals' Leadership Behaviours in Basic Education High Schools

Dimensions		Sum of Squares	*df*	Mean Square	*F*	*p*
Directive Behaviour	Between Groups Within Groups Total	11.114 38.424 49.538	8 189 197	1.389 .203	6.833	**.000*****
Supportive Behaviour	Between Groups Within Groups Total	5.510 46.605 52.116	8 189 197	.689 .247	2.793	**.006****
Participative Behaviour	Between Groups Within Groups Total	9.295 37.297 46.593	8 189 197	1.162 .197	5.244	**.000*****
Achievement-oriented Behaviour	Between Groups Within Groups Total	7.028 29.261 36.289	8 189 197	.879 .155	4.669	**.000*****

Note: ***$p<.001$, **$p<.01$

According to the data presented in the Table 3, S7 and S9 had a high level of teachers' professional development.S2 had a high level of teachers' practicing teaching.S5 had high level of teachers' immersion experiences and practicing teaching. Moreover, S7 had a high level of teachers' aligning and implementing curriculum, collaborative curriculum, practicing teaching and teachers' professional development. Then, S9 had a high level of teachers' collaborative curriculum, examining teaching and learning, immersion experiences, practicing teaching, vehicles and mechanism, and teachers' professional development.

Table 3 Means and Standard Deviations for Levels of Teachers' Professional Development in Basic Education High Schools

Dimensions	Schools									Total
	S1	S2	S3	S4	S5	S6	S7	S8	S9	
AIC	2.93 (.64)	3.17 (.39)	3.25 (.79)	2.82 (.68)	3.44 (.66)	3.51 (.72)	**3.91** (.55)	3.50 (.54)	3.51 (.40)	3.34 (.68)
CS	2.84 (.62)	3.27 (.56)	3.04 (.58)	2.71 (.58)	3.35 (.64)	3.29 (.80)	**3.75** (.66)	3.39 (.69)	**3.77** (.49)	3.26 (.71)
ETL	2.88 (.65)	3.59 (.46)	3.22 (.72)	2.72 (.67)	3.66 (.64)	3.38 (.88)	3.55 (.52)	3.48 (.50)	**3.68** (.36)	3.34 (.69)
IE	2.93 (.77)	3.53 (.80)	3.44 (.98)	2.83 (.88)	**3.74** (.88)	3.47 (.99)	3.59 (.52)	3.33 (.46)	**3.71** (.61)	3.38 (.83)
PT	3.02 (.68)	**3.89** (.44)	3.41 (.75)	2.80 (.51)	**3.81** (.56)	3.50 (.95)	**3.71** (.46)	3.50 (.55)	**3.76** (.36)	3.47 (.69)
VM	2.88 (.65)	3.59 (.46)	3.22 (.72)	2.72 (.67)	3.66 (.64)	3.38 (.88)	3.55 (.52)	3.48 (.50)	**3.68** (.36)	3.34 (.69)
TPD	2.91 (.60)	3.51 (.39)	3.26 (.69)	2.77 (.62)	3.61 (.55)	3.42 (.81)	**3.68** (.46)	3.45 (.43)	**3.69** (.26)	3.35 (.63)

Note: 1.00-2.33 = Low level   2.34-3.67 = Moderate level   3.68-5.00 = High level

AIC	= Aligning and implementing curriculum	IE	= Immersion experiences
CS	= Collaborative structures	PT	= Practicing teaching
ETL	= Examining teaching and learning	VM	= Vehicles and mechanisms
TPD	= Teachers' professional development		

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In order to analyze whether there were significant variations in the teachers' professional development, One-way ANOVA was showed in Table 4.

Table 4 ANOVA Table for Teachers' Professional Development in Basic Education High Schools

Dimensions		Sum of Squares	df	Mean Square	F	P
Aligning and implementing curriculum	Between Groups Within Groups Total	20.260 73.089 93.349	8 189 197	2.532 .387	6.549	.000***
Collaborative structures	Between Groups Within Groups Total	23.495 76.483 99.978	8 189 197	2.937 .405	7.257	.000***
Examining teaching and learning	Between Groups Within Groups Total	21.466 73.641 95.108	8 189 197	2.683 .390	6.887	.000***
Immersion experiences	Between Groups Within Groups Total	18.530 117.809 136.339	8 189 197	2.316 .623	3.716	.000***
Practicing teaching	Between Groups Within Groups Total	23.726 71.068 94.794	8 189 197	2.966 .376	7.877	.000***
Vehicles mechanisms	Between Groups Within Groups Total	21.466 73.641 95.108	8 189 197	2.683 .390	6.587	.000***
Professional Development	Between Groups Within Groups Total	19.419 60.146 79.565	8 189 197	2.427 .318	7.627	.000***

Note: *** $p<.001$

As shown in Table 4, there was significant difference on teachers' perceptions of levels of teachers' professional development ($df=8$, $F=7.627$, $P<.001$). Then, there were significant differences on the teachers' professional development regarding aligning and implementing curriculum ($df=8$, $F=6.549$, $P<.001$), collaborative curriculum ($df=8$, $F=7.257$, $P<.001$), examining teaching and learning ($df=8$, $F=6.887$, $P<.001$), immersion experiences ($df=8$, $F=3.716$, $P<.001$), practicing teaching ($df=8$, $F=7.877$, $P<.001$)and vehicles mechanisms ($df=8$, $F=6.587$, $P<.001$).

To find out the relationship between principals' leadership behaviour and teachers' professional development in Basic Education High Schools, Pearson product-moment correlation was used to analyze the data.

As presented in Table 5, there was a strong and positive relationship between teachers' perceptions of directive leadership behaviour and teachers' professional development in Basic Education High Schools (r = .705). Moreover, there was a moderate and positive relationship between teachers' perceptions of supportive leadership behaviour and teachers' professional development (r = .613). There was a Moderate and positive relationship between teachers' perceptions of participative leadership behaviour and teachers' professional development (r = .633). There was also a moderate and positive relationship between teachers' perceptions of achievement-oriented leadership behaviour and teachers' professional development (r = .557). The relationship was statistically significant at 0.01 levels. This implies that increase in principals' leadership behaviours helps to increase professional development of teachers.

**Table 5   Relationship between Teachers' Perception on Dimensions of Principals'
Leadership Behaviours and Teachers' Professional Development in Basic
Education High Schools**

	1	**2**	**3**	**4**	**5**
1. Directive Behaviour	1				
2. Supportive Behaviour	.401** .000	1			
3. Participative Behaviour	.505** .000	.419** .000	1		
4. Achievement-oriented Behaviour	.523** .000	.253** .000	.541** .000	1	
5. Teachers' Professional development	.705** .000	.613** .000	.633** .000	.557** .000	1

**Correlation is significant at 0.01 level (2 tailed).

Regression analysis was used to identify the predictors that influence the teachers' professional development in Basic Education High Schools, Tada-U Township.

**Table 6 Regression Model (Principals' Leadership Behaviour on All Variables) Model
Summary**

Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	**.834ᵃ**	.695	**.689**	.354

**Predictors: (Constant), Directive leadership behaviour, Supportive leadership behaviour,
Participative leadership behaviour, Achievement-oriented leadership
behaviour.**

Table 6 showed that the adjusted R squared value was .689 and this indicated that 68.9% of the variance in principals' leadership behaviour was predicted from teachers' professional development.

The Potential Factors Affecting Teachers' Professional Development

A standardized beta coefficient compares the strength of the effect of principals' leadership behaviour to teachers' professional development was presented in Table 7.

**Table 7   Simultaneous Multiple Regression Analysis for Principals' Leadership
Behaviours Dimensions Predicting Teacher Professional Development**

Dimensions	**B**	**Std. Error**	**β**	***p***
Constant	2.738	.366		**.000***
Directive Behaviour	.451	.064	.356	**.000***
Supportive Behaviour	.396	.055	.320	**.000***
Participative Behaviour	.294	.068	.225	**.000***
Achievement-oriented Behaviour	.275	.077	.186	**.002**

Note: *R=.834, R²=.689, F (4,198) = 110.143,*

*** p< .001, p< .01*

All leadership behaviours were significantly predicted teachers' professional development. The adjusted R squared value was .689 (R=.834). This indicates that 68.9% of the variance in

teachers' professional development was explained by the model, and this is a typical effect according to Cohen (1988).

According to the β weights, directive leadership behaviour variable (β=.356, *p<*.001) appears to be the best predictor of teachers' professional development. Supportive leadership behaviour variable (β=.32, *p<*.001) appears to be the second predictor of teachers' professional development. Participative leadership behaviour variable (β=.225, *p<*.001) appears to be the third predictor of teachers' professional development. Achievement-oriented leadership behaviour variable (β=.186, *p<*.001) appears to be the fourth predictor of teachers' professional development.

Figure 1: Potential Factors Affecting Teachers' Professional Development

➡ Predicting on Teachers' Professional Development (Statistically significant)

Open-Ended Responses

Teachers' responses to open-ended questions were used to fulfill the meaningful answers. The first question was "Do the leadership behaviours of principal affect teachers' professional development in your school? Discuss?" According to open-ended response, principals' leadership behavior was necessary for professional development of teachers. Most of the teachers in school knew how to prepare their subjects and how to teach their subjects well when they were good and motivated professional development by their principals.

The second question was "Do your principals give the opportunities to improve your professional development?" According to open-ended response, their principals gave opportunities to attend workshops based on new initiatives or changing teaching strategies, etc. Teachers also had the opportunities that they can join or seek to enhance their efficacy by going through continuous learning programs or by getting diplomas and master's degrees in order to reach higher professional levels and to reflect on the educational attainment for students.

The third question was "List principals' actions that you want to improve your professional development at school?" According to their responses, they wanted to provide reflective teaching aids for their professional development. They wanted to have a good support of updated teaching methodology to reach the desired target. Moreover, they wanted to work together to improve classroom instruction. Teachers wanted to be considered as active learners and wanted to participate in professional development to refine their knowledge and teaching strategies.

Discussion and Conclusion

Analyses of quantitative data collected from the study attempted to answer the four questions.

Research question 1 studied the levels of principals' leadership behaviours in schools. When studying teachers' perception of principals' leadership behaviour, it was found that all schools have moderate levels of teachers' perception on the four kinds principals' leadership behaviour. S2 had a high level of directive leadership behaviour and S7 had high level of supportive leadership behaviour. There were significant variations on teachers' perceptions on levels of principals' leadership behaviours in schools.

Research question 2 examined the levels of teachers' professional development in schools. According to the result, S2 had a high level of teachers' practicing teaching.S5 had high level of teachers' immersion experiences and practicing teaching. S7 had a high level of teachers' aligning and implementing curriculum, collaborative curriculum, practicing teaching and teachers' professional development.   S7 had a high level of teachers' collaborative curriculum, examining teaching and learning, immersion experiences, practicing teaching, vehicles and mechanism, and teachers' professional development.

Research question 3 investigated the relationship between the principals' leadership behaviours and teachers' professional development in school. The result showed that there was a strong and positive relationship between teachers' perceptions of directive leadership behaviour and teachers' professional development (r = .705). Moreover, there was a moderate and positive relationship between teachers' perceptions of supportive leadership behaviour and teachers' professional development (r = .613), between teachers' perceptions of participative leadership behaviour and teachers' professional development (r = .633) and between teachers' perceptions of achievement-oriented leadership behaviour and teachers' professional development (r = .557).

Research question 4 predicted the indicators of teachers' professional development in schools. According to beta coefficients, all leadership behaviours were significantly predicted teachers' professional development. The value of adjusted R squared was .689 (R=.834). This implies that 68.9% of the variance in teachers' professional development was explained by the model. According to result, principals' leadership behaviour affects the teachers' professional development in the schools.

β weights indicated that directive leadership behaviour variable (β=.356, *p*<.001) was the best predictor of teachers' professional development. Supportive leadership behaviour variable (β=.32, *p*<.001) was the second predictor of teachers' professional development. Participative leadership behavior was to be the third predictor of teachers' professional development (β=.225, *p*<.001). Achievement-oriented leadership behaviour (β=.186, *p*<.001) was the fourth predictor of teachers' professional development.

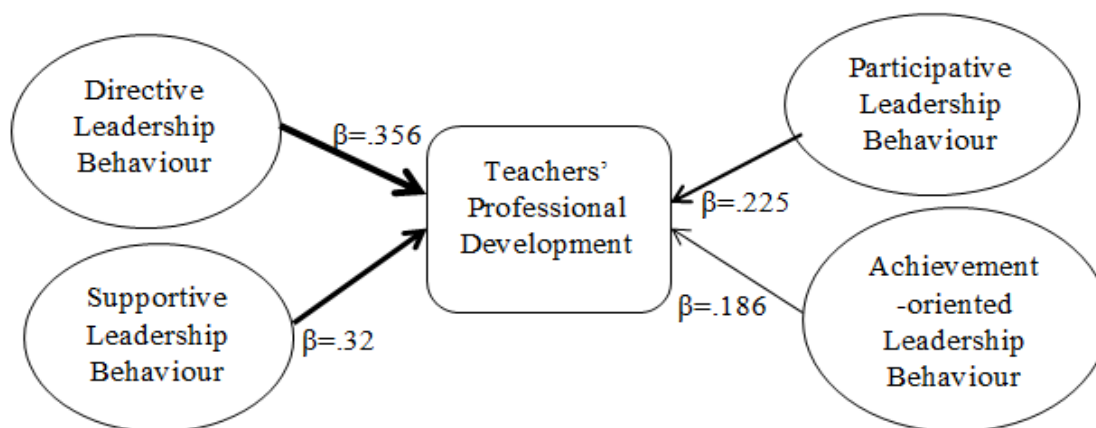According to open-ended response, teachers' professional development was organized and rolled by the schools' principals and they lead to a great change in teachers' academic performance. Principals played a major role in professional development of teachers who guided one another in improving instruction. The main focus of the school principal was developing and maintaining effective educational programs and promoting the improvement of teaching and learning within their schools. They worked together to improve classroom instruction. Teachers also considered themselves as active learners and participated in professional development to refine their knowledge and teaching strategies.

In conclusions, principals should be effective leaders who should motivate teachers by acting as a supporter, professional developer, a resource provider, a team member, an identifier of talent and an architect of change, a transformer, a facilitator, a coordinator, a good communicator

and a visionary leader. They should interact directly with teachers on instructional issues, and they should provide professional support to teachers to actively participate in the process. They need to consistently communicate with teachers and persuade them that academic gains are priorities. Thus, the principals need to provide teachers with all modern teaching strategies and with updated modern curricula in order to comply with the 21st century culture and requirements.

Recommendations for Further Research

This paper contributed to study principals' leadership behaviour on teachers' professional development in Basic Education High Schools, Tada-U Township. According to the finding of this study, the following recommendations are made for further research. Like this paper, principals' leadership behaviour and teachers' professional development should be expended to the schools in other schools and universities of our country, Myanmar. Moreover, factors affecting principals' leadership behaviour on teachers' professional development should be studied. Then, a qualitative research should be conducted to bring a deeper understanding of knowledge, skills and attitudes of participants about their perceptions of the effective principals' leadership behaviour.

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A STUDY OF PRINCIPAL'S LEADERSHIP STYLES ON TEACHERS' JOB PERFORMANCE IN BASIC EDUCATION HIGH SCHOOLS

Kathy Winn[1] and Cho Cho Sett[2]

Abstract

The main aim of this study is to examine the leadership styles adopted by school principals and their influence on the job performance of basic education high school principals' current leadership styles. Descriptive research method was used in this study. 139 teachers at five selected Basic Education High Schools working in Waw Township, Bago Region were studied, using purposive sampling method. Questionnaires for teachers composing four main portions, demographic data, the perceptions on teachers' on leadership styles, the perceptions on teachers' on job performance and the open-ended questions were used. Instrument was reviewed by the teacher-experts. The reliability coefficient for the principals' leadership styles was 0.87 and for the teachers' performance was 0.91. Based on the findings obtained from the questionnaires, the total mean values for the principals' leadership styles were 4.48, 4.45, 4.42 and 4.41 respectively. It could be concluded that the principals mostly used supportive styles and directive styles than participative styles and achievement-oriented styles. Moreover, the total mean values for teachers' job performance for School A, B, C, D and E were 4.68, 4.62, 4.71, 4.65 and 4.47 respectively. The result of the data analysis indicated that the principals of School A, C and D always used supportive leadership style and directive leadership style was frequently used by the principals of School B and E. According to the result, the dimensions teachers' job performance were significantly correlated with principal's leadership styles. Computing to the result of Pearson correlation, the result indicated that the principal's leadership styles have a positively impact on the teachers' job performance in this study.

Keywords: leadership, leadership style, job performance

Introduction

Normally, principals' leadership styles are seen in their behaviors and how they interrelate with teachers, students, parents, and other school staff. If the principal has an effective leadership style, he or she can engender a positive climate in the school. Teachers, students, staff, and parents will come to feel more comfortable and satisfied with their children's educational experience. However, if the principal is ineffective, then the opposite may equally be held true (Wachira, Gitumu, & Mbugua, 2017).

Teachers' job performance is the duties performed by a teacher at a particular period in the school system in achieving organizational goals. Principals can therefore encourage effective performance of their teachers by identifying their needs and trying to satisfy or meeting them (Adeyemi, 2004).

Since teachers have different cultural backgrounds, come from different socio-economic groups and have different personalities, it is important to realize that each will have his/her own way of teaching. Principals need to keep this in mind when employing leadership styles to get the most out of their teachers, and to enhance the performance of the teachers. The purpose of this study is to explore the principals' leadership styles on teacher performance in complete the basic education high schools in Waw Township.

Significance of the Study

This study is to support the current endeavors of the government of the Republic of the Union of Myanmar to improve educational quality by various changes to the education system,

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such as decentralized management. Furthermore, the results of the study could be applied to the management of the education system in Education Sector. The findings derived from this study can also be useful with regard to improving school principals' leadership styles and their effect on teachers' job performance. Moreover, it will strive to determine whether the directive, supportive, participative and achievement oriented styles or a combination of these leadership styles have a greater effect on the performance of teachers (Adeyemi, 2006). This study only focuses on the leadership styles of principals and their effects on teacher performance at Basic Education High Schools in Waw Township since it would need a considerable amount of time to conduct this study in all the basic education schools in Myanmar. It also focuses on the effect of the leadership styles of school leaders on teacher performance. Participants in the research were principals and teachers at Basic Education High Schools in Waw Township, Bago Region.

Objectives

(a) General Objective

The general objective is to study the principal's leadership styles on teachers' job performance at Basic Education High Schools in Waw Township, Bago Region.

(b) Specific Objectives

The specific objectives are

- to explore the leadership styles of the principals
- to investigate the job performance level of the teachers, and
- to find out the relationship between the principal's leadership styles on teachers' job performance

Research Questions

The research questions are as follows:

(1) Which leadership styles are most commonly adopted by the principals?
(2) What is the job performance level of the teachers?
(3) Is there any significant relationship between the principal's leadership styles and the teachers' job performance?

Scope of the Study

This study is concerned with principal's leadership styles on teachers' job performance at basic education high schools. Due to the time constraint, this study was restricted to the areas of Waw Township, Bago Region.

Definitions of Key Terms

Leadership

Leadership refers to the power of an individual in a group, which provides him/her with an opportunity to practice interpersonal influence on the group members to lead their efforts towards certain goals (Atsebeha, 2016).

Leadership Style

A leadership style as the dependent variable is influenced by situational factors while as the independent variable it influences the actions of teachers, the learning conditions within the

school and the attainment of outcomes such as teacher's job performance and directly and indirectly student learning outcomes (Hoy & Miskel, 2001, cited in Atsebeha, 2016).

Job Performance

Teachers' job performance can be described either in terms of activities that are performed by teachers themselves during a specific period of time in the school system to reach goals already set by the organization, or as the ability of teachers to make a considerable condition to the teaching and learning process (Akinyemi, 1993, cited in Adeyemi, 2010).

Theoretical Framework

The term "path-goal" draws from the principle that successful leaders clarify the path that should be followed by their subordinates in order to achieve their work goals and to make the journey along the path easier by avoiding difficulties that stand in the way of achieving of the goal (House, 1971, as cited in Yang & Lim, 2016). The path-goal leadership theory assumes that the most important part of the "leader's job is to assist followers in attaining their goals and to provide the necessary direction and support to ensure that their goals are compatible with the overall objectives of the group or organization" (House, 1971, as cited in Yang & Lim, 2016). The main assumption of Path-Goal Theory is based on that effective leaders influence employee satisfaction and job performance.

The Path-Goal Theory suggests that leaders motivate and satisfy employees in a particular situation by adapting the following leadership styles. Directive Style where the leader clarifies performance goals, means of reaching the goals, specifies standards against which the goals are measured and uses rewards to motivate the employees. Supportive style where the leader provides psychological support to the staff, the leader is friendly and approachable treats staff with respect, shows concern for the well-being of staff members and goes out of his way to make work pleasant. Participative style of leadership is where the leader encourages and facilitates staff involvement in decision making beyond their normal work activities. The leader consults with staff, seeks their suggestion before making any decision. Achievement-oriented behavior is a style directed towards motivating performance in setting challenging goals, seeking improvement, emphasizing excellence in performance, and showing confidence that subordinates will attain high standards of performance (Daniel et al., 2003, cited in Astebeha, 2016).

Review of Related Literature

Leadership Styles

Path-Goal Theory, originally developed by Evans (1970, as cited in Malik, 2012) and later modified by House (1971, as cited in Malik, 2012), was designed to identify a leader's most practiced style as a motivation to get subordinates to accomplish goals. It is a contingency theory rooted in the expectancy theory of motivation developed by Victor Vroom, Daniel, Villa, Howell, and Dorfman (2003, as cited in Malik, 2012).

Leader supportiveness is in itself a reward that the leader has at his or her disposal, and the judicious use of this reward increases the motivation of subordinates. Evans also studied the relationship between the behavior of leaders and the subordinates' expectations that effort leads to rewards and also studied the resulting impact on ratings of the subordinates' performance. He found that when subordinates viewed leaders as being supportive (considerate of their needs) and when these superiors provided directions and guidance to the subordinates, there was a positive relationship between leader behavior and subordinates' performance ratings (Evans, 1970 cited in Adeyemi, 2010).

House advanced that the theory intends to explain the effects of four specific kinds of leader behavior on the following three subordinate attitudes or expectations: (1) the satisfaction of subordinates, (2) the subordinates' acceptance of the leader and (3) the expectations of subordinates that effort will result in effective performance and that effective performance is the path to rewards. The four kinds of leader behavior included in the theory are: (1) directive leadership, (2) supportive leadership, (3) participative leadership and (4) achievement-oriented leadership.

Directive leadership is characterized by a leader who lets subordinates know what is expected of them, gives specific guidance as to what should be done and how it should be done, makes his or her part in the group understood schedules work to be done, maintains definite standards of performance and asks that group members follow standard rules and regulations. Directive leader tells subordinates exactly what they are supposed to do. It characterizes a leader who tells subordinates about their task, including what is expected of them, hoe it is to be done, and time line for the completion of particular task. He also sets standards of performance and defines clear rules and regulations for subordinates (Northouse, 2013, as cited in Atsebeha, 2016). Directive behavior is appropriate when task is complex or ambiguous, formal authority is strong and the work group provides job satisfaction (Lussier and Achua, 2010).

Supportive leadership is characterized by a friendly and approachable leader who shows concern for the status, well-being and needs of subordinates. Supportive leader shows concern for subordinates' wellbeing and personal needs. Supportive leadership consists of being friendly and approachable as a leader and includes attending to the well-being and human needs of subordinates (Northouse, 2013, as cited in Atsebeha, 2016). Supportive leadership is appropriate when task is simple, formal authority is weak, and the work group does not provide job satisfaction. Supportive leader behavior focuses on the personal needs of followers. Specific supportive leader behaviors include making the work environment an enjoyable place and expressing concern for the personal welfare of followers. House and Mitchell suggested that supportive leader behavior would be most effective when work-related activities were not intrinsically satisfying (Lussier and Achua, 2010, cited in Astebeha, 2016).

Participative leadership is characterized by a leader who consults with subordinates, solicits their suggestions and takes these suggestions seriously into consideration before making a decision. Participative leader consults with subordinates about decisions. A participative leader consults subordinates, obtains their ideas and opinions and integrates their suggestions into decision making (Northouse, 2013, as cited in Atsebeha, 2016). Participative leadership is appropriate when subordinates don't want autocratic leadership, have internal locus of control, and follower ability is high; when task is complex, authority is either weak or strong, and satisfaction from co-workers is either high or low (Lussier and Achua, 2010). House and Mitchell suggested that participative leader behaviors would be most effective when directed toward followers who prefer independence.

An achievement-oriented leader sets challenging goals, expects subordinates to perform at their highest level, continuously seeks improvement in performance and shows a high degree of confidence that the subordinates will assume responsibility, put forth effort and accomplish challenging goals. This kind of leader constantly emphasizes excellence in performance and simultaneously displays confidence that subordinates will meet high standards of excellence (House, 1971, as cited in Yang & Lim, 2016). Achievement-oriented leader sets clear and challenging goals for subordinates. The leader establishes a high standard of excellence for subordinates and seeks continuous improvement. Further leader shows a high degree of confidence in subordinates (Northouse, 2013, as cited in Atsebeha, 2016). Achievement-oriented leadership is appropriate when followers are open to autocratic leadership, have external locus of control, and follower's ability is high; when task is simple, authority is strong, and job satisfaction from

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co-workers is either high or low (Lussier and Achua, 2010). House and Mitchell (1975) posited that achievement-oriented behavior would be most effective for unstructured, ambiguous tasks because follower confidence in such situations is likely to be low.

Teacher Job Performance (JP)

The Path-Goal Theory is relevant to this study because it is based on the principle that an employee's expectation of the amount of effort and performance expected of him/her are affected greatly by a leader's style (House, 1971, cited in Atsebeha, 2016). Based on Atsebeha's (2016) performance indicators regarding classroom atmosphere and discipline, organization, planning, monitoring and evaluation, and leadership, the questionnaire can be designed to measure teacher's job performance.

1. Classroom atmosphere and discipline (CAD)

The teacher needs to feel comfortable in his/her workplace, which are the school and more specifically, the classroom. While a disciplined environment is preferred by some teachers, others have a preference to create an enjoyable classroom atmosphere where students feel safe to take risks and be creative (Atsebeha, 2016). Teachers' working conditions include aspects such as the workload, compensation, school support for teachers' professional development, school decision-making, school safety, students' readiness to learn and public respect for teachers (Ladebo, 2005 cited in Atsebeha, 2016). These issues are relevant to be taken into account by leaders in order to assist teachers in creating a conductive classroom atmosphere.

2. **Organization (Org)**

Atsebeha (2016) believed that for, if the rules and routine of the classrooms are clear and agreed upon, freedom for the teachers to teach and for the learners to learn can be increased by good organization. Good classroom organization provides teachers with more time to study the learners' learning difficulties and to plan suitable learning objectives. Classroom organization also focuses on the physical environment. Thus, a successful teacher organizes a safe classroom environment. Importantly, teachers place furniture, learning centres and materials strategically, in order to optimize learners' learning and to reduce distractions (Mekelle University, 2011). Good classroom organization promotes better work delivery by both teachers and learners.

3. Planning (Pl)

One of the important aspects with regard to planning is that it makes a teacher's teaching experience an exciting and challenging journey and reduces the chance of any costly detours. Planning is fundamental to effective teaching, and therefore needs to feature in any performance management system for teachers (Atsebeha, 2016). Successful teaching starts from a plan to create a good and respectful relationship between teachers and students. It is imperative for a new teacher to plan and prepare for managing various activities. One of the important aspects with regard to planning is that it makes a teacher's teaching experience an exciting and challenging journey and reduces the chance of any costly detours. Planning is fundamental to effective teaching, and therefore needs to feature in any performance management system for teachers (Wiggins & McTighe, 2000).

4. Monitoring and evaluation (ME)

Monitoring and evaluation are how data from projects or programs are gathered systematically for diverse reasons which are important for future initiatives. As effective monitoring and evaluation is a key to effective teaching, this is a cardinal aspect in teacher job performance (Atsebeha, 2016). Monitoring is used by people to check their progress against plans

and it entails an analysis of information to compare the progress against plans already set. The data obtained during monitoring are utilized to evaluate what is desired, as evaluation is used to assess a course already offered as analytically and objectively as possible. In addition, during an evaluation, the data are scanned that can assist a teacher to develop a course or the subject matter to be taught in the future (Crawford & Bryce, 2003).

5. Teacher leadership (TL)

According to Atsebeha (2016), teacher leaders assume roles such as "resource provider, instructional specialist, curriculum specialist, classroom supporter, learning facilitator, mentor, school leader, data coach, the catalyst for change" and finally as learners themselves. They always try to improve themselves to help all students achieve the required learning goals. Teacher leaders are ready to bring change to their schools. They are visionaries who are always looking for a better way of doing things. The role which is the most important that teacher leaders fulfill is that teachers are learners. They always try to improve themselves to help all students achieve the required learning goals. (Harrisson & Kilion 2007).

Methodology

In this study, descriptive research design was used to collect the required data through questionnaires and open ended questions. And so, this study was conducted during the 2018-2019 academic year and was carried out at basic education high schools in Waw Township, Bago Region.

Population and Sample

The five principals whose length of service is above one year in the current school and 139 teachers at five Basic Education High Schools were purposively chosen as the sample of this study.

Instrumentation

The questionnaires were based on House's (1971) Path-Goal Leadership Theory consists of 20 items relating to principals' leadership styles (Yang &s Lim, 2016). Each leadership style has 5 items. Moreover, it contains 34 items relating to teachers' job performance developed by Atsebeha, (2016); 7 items for classroom atmosphere and discipline, 6 items for organizing, 7 items for planning, 7 items for monitoring and evaluating, and 7 items for teacher leadership. There are two items for open-ended questions. The Likert's five points scaling technique was used for analyzing the data. The collected raw data were converted into meaningful data through the use of statistical tools.

Procedure

First, necessary references were thoroughly studied. References, papers, reports and periodicals for this study were obtained from the library of Yangon University of Education and the required data were searched on the Internet. Then, the questionnaires were developed to collect the required data with the guidance of the supervisor and co-supervisor. The pilot study was undertaken to refine the developed questionnaire. It produced evidence of the validity and reliability of the measure. In main study, responces from the questionnaires and open-ended questions were categorized and analyzed to implement findings in the study.

Data Analysis

In the quantitative analysis, the data obtained from questionnaire survey were analyzed by using the Statistical Package for the Social Sciences (SPSS) version 20. The data collected were analyzed in term of independent samples t-test and Pearson's Product Moment Correlation. The mean values for the leadership styles were interpreted as 1 to 1.49 is never, 1.5 to 2.49 is seldom, 2.5 to 3.49 is sometimes, 3.5 to 4.49 is often and 4.5 to 5 is always. The mean values for the level of job performance were interpreted as 1 to 2.44 is low performance level, 2.45 to 3.44 is moderate performance level and 3.45 to 5.00 is high performance level. Descriptive statistics were used to tabulate means and standard deviations for group of items. The collected data were analyzed and presented in the form of tables and bar graphs.

Findings

In this study, descriptive and Pearson correlation were used to examine the responses of principal's leadership styles and teachers' job performance. The higher the mean values of responses, the greater principals' leadership styles and teachers' job performance. The quantitative findings of basic education high schools, Waw Township were presented in the following tables and bar graphs.

Descriptive Statistics of Principals Leadership Styles Perceived by Teachers

Table 1   Mean Values and Standard Deviations of Principals' Leadership Styles at Basic Education High Schools, Waw Township

Leadership Styles	School A	School B	School C	School D	School E	Overall
Directive Style	4.40 (.48)	4.81 (.24)	4.57 (.37)	4.52 (.31)	**4.10 (.84)**	4.48 (.45)
Supportive Style	4.58 (.44)	4.62 (.36)	4.66 (.37)	4.68 (.41)	3.71 (.88)	4.45 (.49)
Participatie Style	4.56 (.48)	4.79 (.25)	4.59 (.50)	4.40 (.43)	3.75 (.87)	4.42 (.51)
Achievement-oriented style	4.56 (.41)	4.71 (.28)	4.59 (.31)	4.36 (.44)	3.82 (.82)	4.41 (.45)

1.00 – 1.49 = Never   1.50 – 2.49 =Rarely   2.50 – 3.49 =Sometimes
3.50 – 4.49 =Often   4.50 – 5.00 = Always

In table 1, the mean values and standard deviations of directive, supportive, participative and achievement-oriented leadership styles of School A were 4.40, 4.58, 4.56 and 4.56 respectively. It can be found that the mean score of the principal of School A for supportive style was the highest in this study.

The mean values and standard deviations of directive, supportive, participative and achievement-oriented leadership styles of School B were 4.81, 4.62, 4.79 and 4.71 respectively. It can be found that the mean score of the principal of School B for directive style was the highest in this study.

The mean values and standard deviations of directive, supportive, participative and achievement-oriented leadership styles of School C were 4.87, 4.78, 4.47, 4.65 and 4.77 respectively. It can be found that the mean score of the principal of School C for supportive style was the highest in this study.

The mean values and standard deviations of directive, supportive, participative and achievement-oriented leadership styles of School D were 4.52, 4.68, 4.40 and 4.36 respectively. It can be found that the mean score of the principal of School D for supportive style was the highest in this study.

The mean values and standard deviations of directive, supportive, participative and achievement-oriented leadership styles of School E were 4.10, 3.71, 3.75 and 3.82 respectively. It can be found that the mean score of the principal of School E for directive style was the highest in this study. It can be seen vividly in Figure 1.
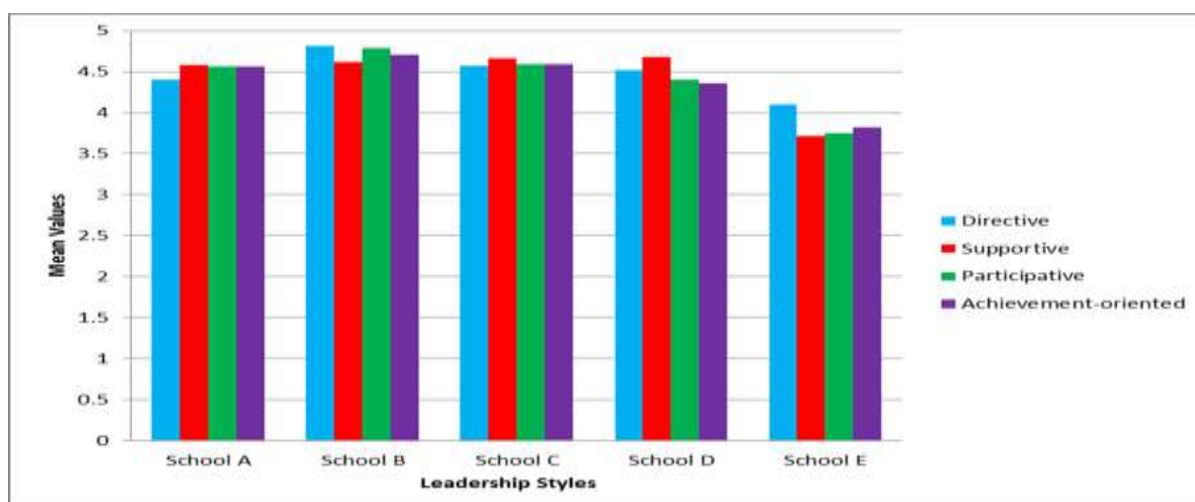
Figure 1　Comparison of Mean Values of Leadership Styles of Principals at Basic Education High Schools, Waw Township

Table 2 Mean Values and Standard Deviations of Teachers' Job Performance at Basic Education High Schools, Waw Township

Teachers' Job Performance	School A Mean(*SD*)	School B Mean(*SD*)	School C Mean(*SD*)	School D Mean(*SD*)	School E Mean(*SD*)
Classroom Atmosphere and Discipline	4.73 (*.24*)	4.72 (*.59*)	4.87 (*.18*)	4.74 (*.38*)	4.66 (*.32*)
Organizing	4.63 (*.36*)	4.64 (*.54*)	4.78 (*.18*)	4.63 (*.44*)	4.55 (*.36*)
Planning	4.64 (*.35*)	4.35 (*.50*)	4.47 (*.25*)	4.49 (*.57*)	4.19 (*.53*)
Monitoring and Evaluation	4.64 (*.35*)	4.65 (*.51*)	4.65 (*.22*)	4.61 (*.47*)	4.38 (*.58*)
Teacher Leadership	4.76 (*.50*)	4.74 (*.50*)	4.77 (*.28*)	4.65 (*.34*)	4.47 (*.48*)
Overall	4.68 (*.51*)	4.62 (*.50*)	4.71 (*.19*)	4.65 (*.41*)	4.47 (*.42*)

1.00-2.44=Low Performance Level,　　2.45-3.44=Moderate performance Level,
3.45-5.00=High Performance Level

According to Table 2, the mean values and standard deviation of classroom atmosphere and discipline, organizing, planning, monitoring and evaluation, and teacher leadership of School A (4.73, 4.63, 4.64, 4.64 and 4.76) rated by the teachers highlighted that the mean score of teachers' job performance of School A was the highest in the dimension of teacher leadership among all five job performance dimensions in this study.

The mean values and standard deviation of classroom atmosphere and discipline, organizing, planning, monitoring and evaluation, and teacher leadership of School B (4.72, 4.64, 4.35, 4.65 and 4.74) rated by the teachers highlighted that the the mean score of teachers' job performance of School B was the highest in the dimension of teacher leadership among all five job performance dimensions in this study.

The mean values and standard deviation of classroom atmosphere and discipline, organizing, planning, monitoring and evaluation, and teacher leadership of School C (4.87, 4.78, 4.47, 4.65 and 4.77) rated by the teachers highlighted that the the mean score of teachers' job

performance of School C was the highest in the dimension of classroom atmosphere and discipline among all five job performance dimensions in this study.

The mean values and standard deviation of classroom atmosphere and discipline, organizing, planning, monitoring and evaluation, and teacher leadership of School D (4.74, 4.63, 4.49, 4.61 and 4.76) rated by the teachers highlighted that the the mean score of teachers' job performance of School D was the highest in the dimension of classroom atmosphere and discipline among all five job performance dimensions in this study.

The mean values and standard deviation of classroom atmosphere and discipline, organizing, planning, monitoring and evaluation, and teacher leadership of School E (4.66, 4.55, 4.19, 4.38 and 4.55) rated by the teachers highlighted that the the mean score of teachers' job performance of School E was the highest in the dimension of classroom atmosphere and discipline among all five job performance dimensions in this study. It can be seen vividly in Figure 2.
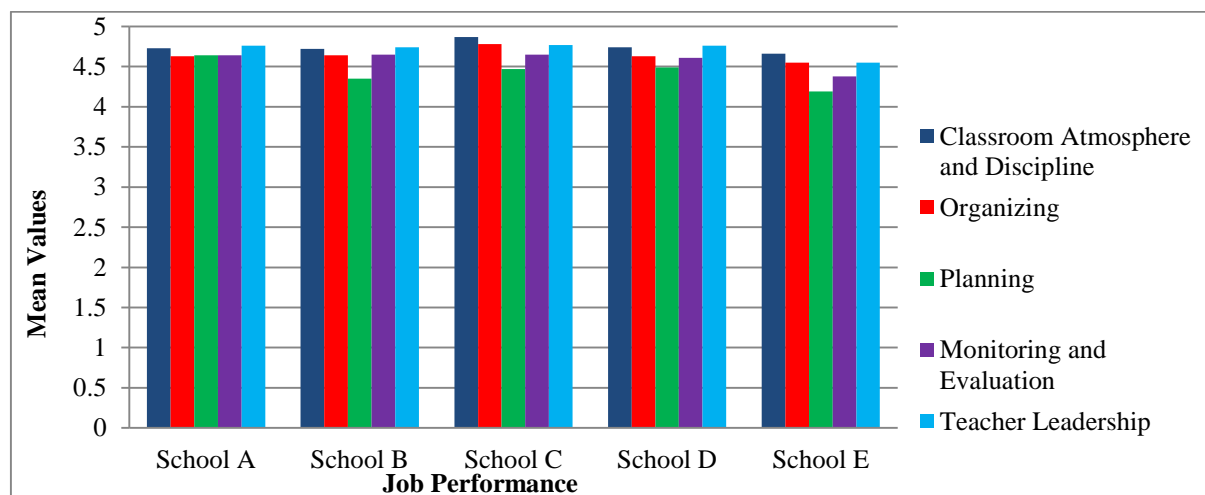
Figure 2 Comparison of Mean Values of Teachers' Job Performance at Basic Education High Schools, Waw Township

Table 3   Correlation between Perceived Principals' Leadership Styles and Teachers' Job Performance of Basic Education High Schools, Waw Township

Leadership Styles		CAD	Org	Pl	ME	TL	Overall JP
Directive	R	.153	.170*	.155	.087	.192*	.160
	Sig (2-tailed)	.072	.046	.069	.306	.023	.059
Supportive	R	.145	.155	.179*	.137	.253**	.187*
	Sig (2-tailed)	.090	.069	.035	.107	.003	.027
Participative	R	.210*	.197*	.245**	.247**	.300**	.262**
	Sig (2-tailed)	.013	.020	.004	.003	.000	.002
Achievement-oriented	R	.161	.239**	.260**	.231**	.272**	.252**
	Sig (2-tailed)	.059	.005	.002	.006	.001	.003

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

The results presented in table 3 show that the calculated Pearson's correlation coefficient for principal's directive leadership style was significantly correlated with organizing and teacher leadership, further principal's supportive leadership style and planning along with teacher leadership were significant. And principal's participative leadership style has significant

relationship with all of teachers' job performance variables. Then principal's achievement-oriented leadership style was also significantly correlated with teachers' job performance variables apart from classroom atmosphere and discipline.

Open-ended Responses

The teacher participants were asked two open-ended questions. The first question was "Express the contributions that the principal supports to his/her teachers concerning instructional tasks". The responses of the teacher participants at the five basic education high schools can be summarized as follows:

- In teaching and learning situation, the necessary instructional aids and media accessories were supported by the principal.
- In implementing the instructional tasks, the principal encouraged to progress the instructional work and accommodated the teachers' personal needs, if necessary.
- Concerning students' affairs, the meetings including teachers, students and parents were performed to liaise with parents' help and support in students' academic achievement.

Then, the second question was "Express any more contributions that the teachers expect from their principal concerning instructional tasks if there is any". The responses of the teacher participants at the five basic education high schools can be summarized as follows:

- Besides the instructional aids, the science laboratory materials will be expected to support by the principal.
- For physical development for students, the gymnasium will be anticipated to build in the school compound and also the complete and comfortable classrooms.
- The matriculation examination for the next academic year will be looked forward achievement to preplan and accomplish the target school mission.

Conclusion and Discussion

The main purpose of this study was to study the leadership styles adopted by school principals and their effect on teachers' job performance at Basic Education High Schools in Waw Township, Bago Region. In order to measure the teachers' perceptions on principals' leadership styles constructed by House's (1971) questionnaires and on teachers' job performance developed by Atsebeha's (2016) questionnaires were used. Based on the findings of study, the conclusion can be dawn as follows.

Research question one investigated to explore the leadership styles adopted by school principals. In school A, the mean values of directive, supportive, participative and achievement-oriented leadership styles were 4.40, 4.58, 4.56 and 4.56. The highest mean value of school A was supportive leadership style. It means that the school principal always used in supportive leadership style. In school B, the mean values of directive, supportive, participative and achievement-oriented leadership styles were 4.81, 4.62, 4.79 and 4.71. The highest mean value of school B was directive leadership style. It means that the school principal always used directive leadership style. In school C, the mean values of directive, supportive, participative and achievement-oriented leadership styles were 4.57, 4.66, 4.59 and 4.59. The highest mean value of school C was supportive leadership style. It means that the school principal always used in supportive leadership style. In school D, the mean values of directive, supportive, participative and achievement-oriented leadership styles were 4.52, 4.68, 4.40 and 4.36. The highest mean value of school D was supportive leadership style. It means that the school principal always used in supportive leadership

style. In school E, the mean values of directive, supportive, participative and achievement-oriented leadership styles were 4.10, 3.71, 3.75 and 3.82. The highest mean value of school E was directive leadership style. It means that the school principal often used in directive leadership style. According to the teachers' perceptions, the School A, C and D were the highest mean values in supportive leadership style while the School B and E were the highest mean values in directive leadership style.

Research question two aimed to investigate the job performance level among teachers at Basic Education High Schools in Waw Township, Bago Region. To investigate the level of teachers' job performance of among teachers in each school, the obtained-statistical mean scores were used. In calculating the mean value of teachers' job performance of School A, B, C, D, and E were 4.68, 4.62, 4.71, 4.65, and 4.47 respectively. According to the statistical data, teachers perceptions on their job performance at all 5 basic education high schools were high performance level in this study. Among five basic education high schools, it can be found that the perceptions of teachers' job performance of School C was the highest and the perceptions teachers' job performance of School E was the lowest in this study.

Research question three evaluated to find out the relationship between the leadership styles adopted by the principals and the job performance of the teachers by using Pearson's Product Moment. According to the research findings, there was a statistically significant correlation between principals' leadership styles and the dimensions of teachers' job performance at the $p<.01$ level and $o<.05$ level in this study. As the value of r is from the above .10 to .30, the effect size or the strength of the relationship between principals' leadership styles and teachers' job performance is considered medium or typical. In demographic data, moreover, the relationship between subordinates' teacher education, academic qualification and service in school and job performance were significant under the current principal' leadership styles while age, gender, rank, experience and teaching subject were not wise significant regarding teachers' job performance under the current principals' leadership styles.

According to open-ended questions in this study, the principals supported to the teaching and learning situations, especially teaching aids, professional development of the teachers and students affairs to progress the academic achievement of students. And also, according to the perception of the teachers, the teachers expected their principal to support laboratory materials for teachers, gymnasium for students' physical development and academic development future plan.

Recommendations

Based on the related literature and the findings of the study, it is hoped that this study will provide the importance of where a leader falls among the four types of leadership styles to be an effective leader: principal's directing, supporting, participating and achievement-orienting to teachers; teachers' performing and expecting to their principal; and parents and community's supporting to the principal and teachers in school. It is also hoped that the knowledge gained through the study of the leadership styles may allow adapting the principal' leadership style to the needs of his subordinates and his work tasks as a good leader within the school. The study has provided a better understanding of leadership styles in order to help and develop the abilities, skills, and knowledge as a future administrator.

The following recommendations were made based on the findings of the scores reflect:

The school administrator can adapt the leadership style to the needs of the subordinates and their work tasks and can adopt a different kind of impact on the subordinates' motivation and job performance.

As a leader, it can be changed between being a directive style leader when that fits the needs of the environment or a supportive style leader when a subordinate requires more nurturing and support.

The school administrator can also be participative or achievement-oriented leader if that is the style that is required when it is important to adopt that is most necessary to attend to the needs of subordinates.

In the researcher point of view, the danger or obstacles that may be unfortunately appeared that if a subordinate becomes too dependent on his leader, he may not be able to grow professionally to the most of his potential and may not ever develop the critical thinking and decision making skills that could benefit him in his career.

Need for Further Research

This study led to study the principal' leadership styles on improving teachers' job performance in Waw Township, Bago Region. Although the scores obtained in the questionnaires are high scoring in each of the four leadership styles. It is needed to study and to investigate about the information on how to effectively implement each leadership style and about the effectiveness of Path-Goal theory on subordinates who may have needs that fall under more than one leadership style.

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KNOWLEDGE MANAGEMENT PRACTICES OF TEACHER EDUCATORS

Khin Thet Swe[1] and Zin Nwe Than[2]

Abstract

The purpose of this study is to explore the knowledge management practices of teacher educators. Descriptive research method was applied to collect data from two hundred and twenty three teachers from two selected Universities in Sagaing Township. In this study, two instruments: "Knowledge Management Practices Questionnaire" to measure the knowledge management practices of teacher educators, and "Universities' Support for Knowledge Management Practices Questionnaire" to elicit the perceptions of teacher educators on universities' support for knowledge management were mainly used. Both instruments used in this study were developed by the researcher. The instrument for teacher educations' knowledge management practices was developed based on the SECI model of Nonaka and Takeuchi (1993, as cited in Cheng, 2015). Again, the instrument for universities' support for knowledge management was based on the use of KM system in universities developed by Al-Zoubi (2014). Data were analyzed by the use of descriptive statistics such as means and standard deviations, independent samples t test, one-way ANOVA and Post Hoc multiple comparison tests (Tukey HSD and Games-Howell) and bivariate correlation through SPSS software. The findings of this study indicated that teacher educators from the selected universities often practiced knowledge management. According to the teachers' perceptions, the level of universities' support for knowledge management was high. Moreover, there was a positive correlation between "knowledge management practice" and "universities' support for knowledge management" in selected universities. Therefore, the universities' support for knowledge management is very important for teacher educators in order to reach higher level of knowledge management practices.

Keywords: Tacit Knowledge, Explicit Knowledge, Knowledge Management

Introduction

Human beings live in an ever-changing society so they try to overcome the challenges of the knowledge age. According to the Bloom's Taxonomy, the cognitive domain involves knowledge and the development of intellectual skills. Educators notice how to manage such knowledge in order to promote learning. So, many scholars developed models and concept concerning with the knowledge management. At the era of information technology, a large portion of scientific activities is done in the university and therefore, it is necessary to clarify the position of knowledge management in higher education.

Teacher educators must recognize knowledge management as the most important strategic resource for ensuring their university's long-term success and survival. Knowledge is valuable for the organization but it becomes worthless when there is no transferring and sharing them in the organization. Knowledge management can control such problem since it is based on the best possible strategic design to create, maintain, transfer and apply organizational knowledge to reach competitive goals. Knowledge management helps them to use the right knowledge available to the right processor such as human or computer, at the right time in the right presentations for the right cost.

Significance of the Study

Teacher educators are typical knowledge workers. They are engaged in various knowledge activities, from the collection of teaching materials, writing of teaching plans, accumulation of teaching materials to the assessment of students' learning. Teacher educators try to produce

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qualified and proficient teachers who can make good contribution. They today face so many institutional changes and processes. Moreover, they encounter technological changes, curriculum changes, and they also involve in curriculum development. The existing curriculum is needed to update in accordance with the current situation. So, teacher educators who take a main role in producing skillful teachers need to upgrade, extend and expend knowledge. To win the world competition to all these changes, an education society needs to own teacher educators who can make wide contribution.

Educational institutions must focus how to cultivate knowledge creation culture. Knowledge management is one of teachers' key abilities to catch up with the knowledge society and keep pace with times (Wang, Zhang, Zhan, Li & Wang, 2018). To what extend teacher educators practice knowledge management and how the university manages knowledge management strategy need to be investigated in order to point out the importance of knowledge management and to highlight how to improve the implementation of knowledge management in higher education.

Aim of the Study

The general aim of the study is to investigate the knowledge management practices of teacher educators from selected universities in Sagaing Township. The specific objectives are:

- to find out the extent of knowledge management practices performed by teacher educators,
- to find out whether there are significant differences in teacher educators' knowledge management practices based on their demographic information (gender, age, academic qualification, position and teaching experience) or not,
- to find out the perceptions of teacher educators on universities' support for their knowledge management practices, and
- to examine whether there is a relationship between knowledge management practices of teacher educators and universities' support for their knowledge management practices or not.

Research Questions

The following research questions guide the direction of the study:

1. To what extent do teacher educators perform the knowledge management practices?
2. Are there any significant differences in teacher educators' knowledge management practices based on their demographic information (gender, age, academic qualification, position and teaching experience)?
3. What are the perceptions of teacher educators on universities' support for their knowledge management practices?
4. Is there any relationship between knowledge management practices of teacher educators and universities' support for their knowledge management practices?

Scope of the Study

1. The scope of this study is limited to two universities located in Sagaing Township which produce teachers for Basic Education.
2. The findings of this study may not be generalized to any other universities.

Definitions of Key Terms

This study is guided by the following definitions of key terms.

- **Tacit Knowledge:** Tacit knowledge is the knowledge that includes skills, experience, insight, intuition, and judgment and it is difficult to articulate. It tends to be shared among the employees through discussions and personal interactions (Kinyata, 2014). In this study, tacit knowledge can be defined as the personal quality or background knowledge.

- **Explicit Knowledge:** Explicit kno

- wledge is the knowledge that can be encoded and made available to others, since it is easily articulated and is transferable from one person to another (Kinyata, 2014). In this study, explicit knowledge can be defined as the knowledge which is in documented form and easily transferable.

- **Knowledge Management:** Knowledge management can be defined as a systematic and integrative process of coordinating the organization-wide activities to retrieve, use, share, create and store knowledge, actionable information and expertise of individuals and groups in pursuit of organizational goals (Cheng, 2017).

Theoretical Framework

In this study, knowledge management with the four components of *Externalization, Combination, Internalization, and Socialization* (Nonaka, Toyama, & Konno (2000) is used. In order to investigate knowledge management supported by the universities, the Knowledge Management Framework developed by Al-Zoubi (2014) is used.

SECI Model of Knowledge Management

- *Socialization (tacit - tacit)*: the process in which knowledge and information is informally shared through one's feelings, emotions, experiences and mental model with others in the organization (Kaur, 2015).

- *Externalization(tacit - explicit)*: the process of allowing acquired knowledge and information to be shared, disseminated and transferred to others in the organization through the use of ideas, images, and concepts, figurative and visual language or in a documented form. (Kaur, 2015).

- *Combination (explicit - explicit)*: the process in which explicit knowledge is collected, combined and edited from *Externalization* and then processed to form new knowledge, by using documents and databases (Ale, Chiotti & Galli, 2014).

- *Internalization (explicit - tacit)*: the process in which the old explicit concepts obtained from *Combination* are updated, expanded, extended transformed and then shared by the individuals of the organization in their own tacit knowledge, according to their own styles thus, starting again a new cycle (Kaur, 2015).

Framework for Knowledge Management Support

- *Research Service*: The administrative faculties encourage to hold research seminars, publish research journal annually, publish university annual magazines in order to share and get the new ideas and knowledge in conducting research.

- *Teaching Service*: The university held professional development programme, board of study so that the staff can distribute and refresh their existing knowledge. In addition, the administrative staff encourage group discussion, cooperation.

- *Student Service*: The administrative faculties manage activity to improve students' knowledge and skill. The university provides teaching aids such as projectors, scientific instruments, etc.

Review of Related Literature

Knowledge Management is a process where organizations have formulated ways in the attempt to recognize and archive knowledge assets within the organization that are derived from the employees of various department or faculties and in some cases, even from other organizations that share the similar area of interests or specialization (Firestone, 2001). It is also defined as the act of transforming information and intellectual assets into persisting value for the members of an organization (Laal, 2011). Knowledge starts as *data*—raw facts and numbers—for example, the market value of an institution's endowment. *Information* is data put into context—in the same example, the endowment per student at a particular institution. Information is readily captured in documents or in databases; even large amounts are fairly easy to retrieve with modern information technology systems. Only when information is combined with experience and judgment does it become *knowledge* (Gonzalez & Martins, 2017). In seeking to balance an organization's information culture and its technology culture, knowledge management brings together three core organizational resources people, processes, and technologies to enable the organization to use and share information more effectively (Donoghue, Harris & Weitzman, 1999).

Organizational Knowledge Creation Theory

The theory of organizational knowledge creation depicts the framework on how organizational leaders amplify the professional knowledge created by individuals and later knowledge becomes crystallized as part of knowledge network internally and externally (Hargreaves, 1999).Organizational knowledge creation theory aimed not only to explain the nature of knowledge assets and strategies for managing them, but also to complement the knowledge-based view of the firm and the theory of dynamic capabilities by explaining the dynamic processes of organizational knowledge creation (Nonaka 1994). Two premises were discussed in this effort: tacit and explicit knowledge can be conceptually distinguished along a continuum, and interaction between tacit and explicit knowledge is explained by knowledge conversion

This theory defined knowledge in three parts, indicating that it has complementary properties. First, knowledge is justified true belief. Individuals justify the truthfulness of their beliefs based on their interactions with the world (Nonaka, 1994). Second, knowledge is (i) the actuality of skillful action and/or (ii) the potentiality of defining a situation so as to permit (skillful) action (Stehr, 1994, as cited in Nonaka, 1994). Knowledge allows humans to define, prepare, shape, and learn to solve a task or problem (Nonaka & von Krogh, 2009). Third, knowledge is explicit and tacit along a continuum (Nonaka, 1994). Knowledge that is documented, uttered, formulated in sentences, and captured in drawings and writing is explicit. Tacit knowledge is rooted in action, procedures, routines, commitment, ideals, values, and emotions (Nonaka, Toyama, & Konno, 2000).

SECI Model of Knowledge Conversion

KM tries to gather, form, maintain, and distribute knowledge. Effective KM requires a continuous knowledge conversion process. Nonaka, Toyama, & Konno (2000) divide the KM process into four modes.

- *Socialization* (tacit to tacit): The first phase of the KM process is sharing and distributing the ideas and the interaction of tacit knowledge with tacit knowledge.
- *Externalization* (tacit to explicit): It requires the expression of tacit knowledge and its translation into comprehensible forms that can be understood by others.

▪ ***Combination*** (explicit to explicit): The explicit knowledge, already exchanged, distributed, and documented or discussed during meetings and sessions, is processed and categorized in order to create new knowledge.

Internalization (explicit to tacit): Internalizing these ideas is effective in creating an understanding and developing a learning culture (learning through action).
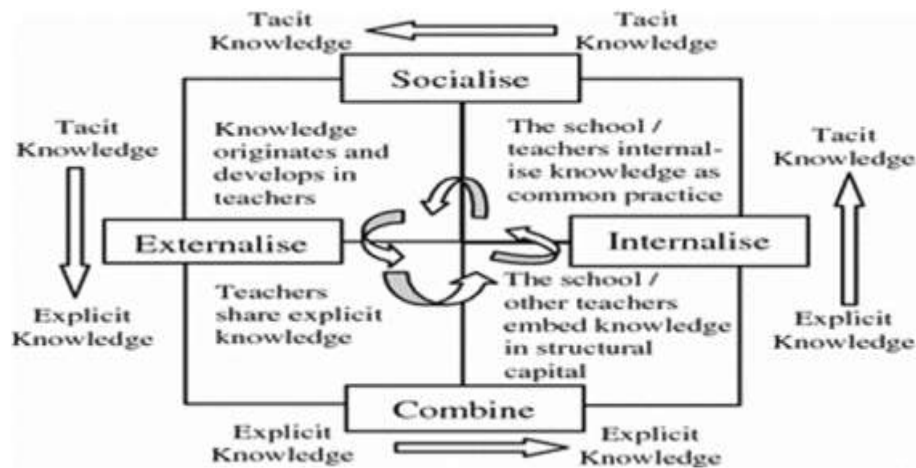
Source: Cheng (2015). ***Knowledge Management for School Education***.

Figure 1 Nonaka and Takeuchi's Four Modes of Knowledge Conversion in a School Context

On the other hand, basically, the modern university comprises two cultural hemispheres, the academicians and the management. The application and implementation of a KM system improve the quality of education at universities. An effective KM system requires every academician to practice appropriate management of knowledge in his or her teaching activities, which includes, generating, sharing, acquiring, storing and disseminating knowledge effectively to users of knowledge, especially students (Mohayidin, Azirawani, Kamaruddin & Margono, 2007, as cited in Al- Zoubi, 2014). It is clear that research is the real contribution of the university in knowledge community. The teaching process in student-oriented universities should lead to successful learning, which requires that university professors should concentrate on the learning process itself and its mechanisms represented by acquisition, socialization, externalization, combination, internalization, to produce new knowledge. The learning process is influenced by a variety of factors, such as the curriculum in terms of priority of issues it addresses, flexibility in dealing with these issues, as well as students' awareness and their practice of operations associated with KM in their learning. (Smant, et al., 1999, as cited in Al- Zoubi, 2014).

Methodology

Research Method

Descriptive research method was used to collect the required data in this study.

Participants

The target population of this study was all teacher educators form two selected universities located in Sagaing Township.

Instrumentation

Data were collected from teacher educators of two universities by using the questionnaire. The questionnaire including two parts was developed by the researcher based on the related

literature. In the first part of the questionnaire, 32 items which explored the knowledge management practice of teacher educators were included and each item was rated on five-point Likert scale ranging from never (1) to always (5). In the second part of the questionnaire, there were 22 items, which examined the universities' support for teacher educators' knowledge management practices and each item was rated on five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Data Collection Procedure

Before field testing the instrument with a sample of teachers, instruments used in this study were reviewed and revised by a panel of experts who had special knowledge and close relationship with this area from Department of Educational Theory. A sample of one Education College in Sagaing Township was selected for pilot study. The preliminary instrument was field tested with all teachers from that Education College.

In order to measure the reliability of the instrument, the Pearson product-moment correlation method **(Average Item Total Correlation)** was used for internal consistency reliability. The average coefficient of correlation for teacher educators' knowledge management practices and universities' support for knowledge management practices got the high reliability scores of 0.94 and 0.88. After taking the permission from the responsible person, the questionnaires were distributed to two selected Universities located in Sagaing Township on 11th December, 2018 to 15th December, 2018 and collected them after lasting 10 days. Data collected were listed by each university. Based on the results of responses, this study was conducted in order to explore knowledge management practices of teacher educators.

Data Analysis

Descriptive statistics such as means and standard deviations were calculated for teacher educators' perceptions on knowledge management practices and universities' support for knowledge management practices by using SPSS. The decision rules for determining the frequency of knowledge management practices were that the mean value from 1.00 to 1.49 was defined as "never", the mean value from 1.50 to 2.49 was defined as "rarely", the mean value from 2.50 to 3.49 was defined as "sometimes", the mean value from 3.50 to 4.49 was defined as "often" and the mean value from 4.50 to 5.00 was defined as "always". Again, the decision rules for determining the universities' support for knowledge management practices were that the mean value from 1 to 2.33 was defined as "low level", the mean value from 2.34 to 3.67 was defined as "moderate levels" and the mean value from 3.68 to 5 was defined as "high level".

Moreover, the independent samples *t* test and ANOVA were used to compare the differences of knowledge management practices of teacher educators and universities' support for knowledge management practices between two universities based on the demographic information. In addition, Pearson-product moment correlation coefficient was utilized to know the relationship between relationship between knowledge management practices and knowledge management support rated by teacher educators.

Research Findings

According to Table 1, it was found that teacher educators ***often*** performed three dimensions of knowledge management practices such as *Socialization*, *Combination* and *Internalization* but they ***sometimes*** performed only one dimension, *Externalization*. According to the overall mean value, teacher educators from both universities ***often*** performed knowledge management practices.

Table 1 Mean Values and Standard Deviations for Knowledge Management Practices Performed by Teacher Educators in Selected Universities

University	Socialization	Externalization	Combination	Internalization	KM Practices
U_A	3.91 (.687)	2.64 (.696)	3.88 (.717)	3.95 (.755)	3.62 (.796)
U_B	4.16 (.507)	3.00 (.750)	4.15 (.575)	4.22 (.573)	3.84 (.728)
All	**4.01 (.634)**	**2.78 (.738)**	**3.99 (.677)**	**4.05 (.702)**	**3.71 (.777)**

1.00 – 1.49 = never   1.50 – 2.49 = rarely   2.50 – 3.49 = sometimes   3.50 – 4.49 = often
4.50 – 5.00 = always

In order to explore whether there were significant differences in knowledge management practices between two universities, independent samples *t* test was used (See: Table 2). When analyzing the teachers' ratings of four dimensions of knowledge management practices between two groups, there were significantly differences in all dimensions and overall knowledge management practices at the 0.05 level. According to Table 2, it can be said that the perceived levels of teacher educators from the University B were higher than those of teacher educators from University A concerning the knowledge management practices.

Table 2 Independent Samples *t* Test Results for Knowledge Management Practices Performed by Teacher Educators between Two Universities

Dimension	University	*N*	Mean	*T*	Mean Difference	*df*	*p*
Socialization	U_A	136	3.92	-3.032	-2.45	211	**.003**
	U_B	84	4.16				
Externalization	U_A	133	2.64	-3.680	-.244	216	**.000**
	U_B	85	3.00				
Combination	U_A	135	3.88	-3.133	-.275	205.5	**.002**
	U_B	85	4.16				
Internalization	U_A	137	3.95	-2.991	-.268	211.2	**.003**
	U_B	85	4.22				
KM Practices	U_A	138	3.62	-2.106	-.224	221	**.036**
	U_B	85	3.85				

Note: $p<0.05$

In order to find out whether there were significant differences in the performance of knowledge management practices between male and female teacher educators or not, independent samples *t* test was calculated (See: Table 3). It was found that there was a significantly difference in perceptions of male and female teachers on only one dimension, *Externalization,* at 0.05 level.

Table 3 Independent Samples *t* Test Results for Knowledge Management Practices Performed by Male and Female Teacher Educators

Dimension	Gender	*N*	Mean	*t*	Mean Difference	*df*	*p*
Externalization	Male	45	2.9750	2.02	.247	216	**.046**
	Female	173	2.7283				

Note: $p<0.05$

On the other hand, there was no significant difference in perceptions of male and female teachers on other dimensions of knowledge management practices: *Socialization*, *Combination* and *Internalization*, and overall knowledge management practices.

In order to find out whether there were significant differences in teacher educators' knowledge management practices according to their age, or not, one-way ANOVA was calculated (See: Table 4). According to Table 4, there were significant differences in three dimensions of knowledge management practices, *Externalization*, *Combination* and *Internalization*, perceived by teacher educators according to their age.

Table 4 ANOVA Results of Knowledge Management Practices Performed by Teacher Educators according to their Age

Dimension		Sum of Squares	df	Mean Square	F	p
Externalization	Between Groups	12.207	7	1.744	3.489	**.001**
	Within Groups	104.468	209	.500		
	Total	116.676	216			
Combination	Between Groups	9.054	7	1.293	2.982	**.005**
	Within Groups	91.528	211	.434		
	Total	100.582	218			
Internalization	Between Groups	6.997	7	1.000	2.089	**.046**
	Within Groups	101.922	213	.479		
	Total	108.919	220			
KM Practices	Between Groups	4.995	7	.714	1.184	.313
	Within Groups	128.973	214	.603		
	Total	133.968	221			

Note: $p<0.05$

Post Hoc Comparisons (Tukey) was calculated to determine the significant source of differences in *Externalization*, *Combination* and *Internalization*. According to Table 5, there were significant differences in perceptions of *Externalization* between teacher educators who were 35-39 years old and teacher educators who were 50-54 years old and between teacher educators who were 35-39 years old and teacher educators who were 55 and above years old at $p<0.05$ level. Similarly, there was a significant difference in perceptions of *Externalization* between teacher educators who were 25-29 years old and teacher educators who were 50-54 years old (See: Table 5).

However, there was no significant difference in *Internalization* among the age groups of teacher educators.

Table 5 Results of Multiple Comparisons for Externalization Performed by Teachers Educators According to their Age

Dimension	Age (I)	Age (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Externalization	35-39	50-54	-.781*	.232	**.021**	-1.49	-.068
		55≥	-1.01*	.247	**.002**	-1.76	-.250
	55≥	25-29	.612*	.191	**.034**	.025	1.20
		35-39	1.01*	.247	**.002**	.250	1.76

Note: $p<0.05$

In order to determine the significant source of differences in *Combination*, Post Hoc Comparison (Games-Howell) was calculated. According to Table 6, there was a significant

difference in perceptions of *Combination* between teacher educators who were 30 to 34 years old and teachers who were 25 to 29 years old at the $p<0.05$ level.

Table 6 Results of Multiple Comparisons for Combination Performed by Teachers Educators according to their Age

Dimension	Age (I)	Age (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Combination	30-34	25-29	.388*	.114	**.024**	.030	.746

Note: $p<0.05$

In order to investigate whether there were significant differences in teacher educators' knowledge management practices according to their academic qualification or not, one-way ANOVA was used. According to Table 7, the findings showed that there were significant differences in perceptions of *Externalization* and *Combination* among teacher educators according to their academic qualification. Post Hoc Comparisons (Tukey) was calculated to determine the significant source of differences in these two dimensions.

Table 7 ANOVA Results of Knowledge Management Practices Performed by Teacher Educators according to their Academic Qualification

Dimension		Sum of Squares	df	Mean Square	F	p
Externalization	Between Groups	9.695	2	4.847	9.607	**.000**
	Within Groups	108.478	215	.505		
	Total	118.173	217			
Combination	Between Groups	5.748	2	2.874	6.575	**.002**
	Within Groups	94.851	217	.437		
	Total	100.599	219			

Note: $p<0.05$

Table 8 shows the results of multiple comparisons of two dimensions according to their academic qualification.

Table 8 Results of Multiple Comparison for Externalization and Combination Performed by Teacher Educators according to their Academic Qualification

Dimensions of Knowledge Management	Academic Qualification (I)	Academic Qualification (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Externalization	PhD	Bachelor degree	.738*	.171	**.000**	.3354	1.1421
		Master degree	.487*	.140	**.002**	.1557	.8180
Combination	Bachelor Degree	Master degree	-.396*	.121	**.004**	-.6817	-.1097
		PhD	-.521*	.161	**.004**	-.9003	-.1405

Note: $p<0.05$

       Bachelor degree = BA, BSc   PhD = PhD (Education), PhD (Arts),
       Master degree   = MEd, MA, MSc   PhD (Science)

There were significant differences in perceptions of *Externalization* between PhD degree holders and Master degree holders and between PhD degree holders, and Bachelor degree holders at $p<0.05$ level (See: Table 8). On the other hand, there were significant differences in perceptions of *Combination* between Bachelor degree holders and PhD degree holders and between Bachelor degree holders and Master degree holders.

Again, Table 9 depicts the ANOVA results of knowledge management practices performed by teacher educators according to their position.

Table 9 ANOVA Results of Knowledge Management Practices Performed by Teacher Educators According to their Position

Dimensions of KM Practice		Sum of Squares	df	Mean Square	F	p
Externalization	Between Groups	16.731	4	4.183	8.782	**.000**
	Within Groups	101.442	213	.476		
	Total	118.173	217			

Note: $p<0.05$

According to Table 9, the findings showed that there was a significant difference in teacher educators' perceptions of *Externalization* according to their position. However, there was no significant difference in teacher educators' perceptions of other dimensions such as *Socialization*, *Combination* and *Internalization* and KM Practices according to their position.

Table 10 Results of Multiple Comparisons for Externalization Performed by Teachers Educators according to their Position

Dimensions of Knowledge Management	Position (I)	Position (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Externalization	AP	T/D	.949*	.187	**.000**	.4333	1.4662
		AL	.738*	.185	**.001**	.2293	1.2481
		L	.625*	.193	**.012**	.0933	1.1567
	P	T/D	.948*	.258	**.003**	.2371	1.6587
		AL	.736*	.256	**.036**	.0311	1.4426

Note: $p<0.05$

P= Professor   AP= Associate Professor   L= Lecturer   AL= Assistant Lecturer
T/D= Tutor/ Demonstrator

In order to find out which particular groups had the significant differences in *Externalization*, Post Hoc Multiple Comparisons Test (Tukey) was conducted. As shown in Table 10, significant differences were found in perceptions of teacher educators on *Externalization* between associate professor and tutor or demonstrator, between associate professor and assistant lecturer and between associate professor and lecturer. On the other hand, there were significant differences in perceptions of teacher educators on *Externalization* between professor and tutor or demonstrator and between professor and assistant lecturer.

Again, in order to investigate whether there were significant differences in teacher educators' knowledge management practices according to their teaching experiences or not, one-way ANOVA was calculated (See: Table 11).

Table 11 ANOVA Results of Knowledge Management Practices Performed by Teacher Educators according to their Teaching Experiences

Dimension		Sum of Squares	df	Mean Square	F	p
Externalization	Between Groups	11.797	3	3.932	7.911	**.000**
	Within Groups	106.376	214	.497		
	Total	118.173	217			

Note: *p*<0.05

According to Table 11, the findings showed that there were significant differences in perceptions of teacher educators on *Externalization* according to their teaching experiences.

Table 12 Results of Multiple Comparisons for Externalization Performed by Teachers Educators According to their Teaching Experiences

Dimensions of Knowledge Management	Teaching Experiences (I)	Teaching Experiences (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Externalization	20-29	1-9	.597*	.152	**.001**	.2032	.9913
		10-19	.509*	.159	**.009**	.0953	.9226
	x≥30	1-9	.496*	.141	**.003**	.1300	.8628
		10-19	.408*	.149	**.035**	.0207	.7955

Note: *p*<0.05

According to the results of Post Hoc Comparisons (Tukey) shown in Table 12, there were significant differences in perceptions of *Externalization* between teacher educators who had 20-29 years of teaching experience and teacher educators who had 1-9 years of teaching experience and between teacher educators who had 20-29 years of teaching experience and teacher educators who had 10-19 years of teaching experience. Similarly, there were significant differences in perceptions of *Externalization* between teacher educators who had 30 years and above teaching experience and teacher educators who had 1-9 years of teaching experience and between teacher educators who had 30 years and above teaching experience and teacher educators who had 10-19 years of teaching experience.

Table 13 Mean Values and Standard Deviations of Universities' Support for Knowledge Management Practices

University	Research Service	Teaching Service	Student Service	Support
U$_A$	4.02 (.476)	3.97 (.535)	4.23 (.441)	4.21 (.494)
U$_B$	4.01 (.464)	4.02 (.461)	4.23 (.415)	4.17 (.532)
All	4.05 (.472)	3.99 (.508)	4.22 (.430)	4.19 (.508)

1.00 - 2.33 = low level   2.34 - 3.67 = moderate level   3.68 - 5.00 = high level

Again, Table 13 depicts the mean values and standard deviations of universities' support for knowledge management practices. According to Table 13, teacher educators perceived that they received high levels of support by their universities in all three dimensions: *Research Service, Teaching Service* and *Student Service*. The overall mean value of universities' support for knowledge management practices was 4.19 and it indicated that teacher educators from both universities had high levels of support for knowledge management practices.

In order to analyze the significant differences in perceptions of teacher educators on universities' support for knowledge management practices between two selected universities, independent samples *t* test was calculated but the results showed that there was no significant differences in perceptions of teacher educators on universities' support for knowledge management practices between two selected universities.

Table 14   Correlation between Knowledge Management Practice and Universities' Support for Knowledge Management Practices Rated by Teacher Educators

	KM Practice	KM Support
Pearson Correlation Sig. (2-tailed)	1	.256** .000
Pearson Correlation Sig. (2-tailed)	.256** .000	1

**. Correlation is significant at the 0.01 level (2-tailed).

According to Table 14, the correlation between knowledge management practices and universities support for knowledge management practices was .256. In other words, teacher educators' knowledge management practices was positively significantly related to universities' support for knowledge management practices at two universities.

Open-ended Responses

Teachers were asked **three** open-ended questions. The **first** question asked teacher educators to express how they create, capture and restore new knowledge. According to teacher educators' responses, 71 (32.38%) teacher educators answered that they acquired new knowledge by reading academic books or research journals. In addition, 51 (24.3%) teacher educators presented that they could get new knowledge and new idea from group discussions. Similarly, 44 (20.59%) teacher educators proposed that they created new knowledge by doing research themselves or by supervising postgraduate candidates' studies. Again, 27 (12.86%) teacher educators reported that they received knew information by observing other teachers' teaching. Moreover, 17 (8.6%) teacher educators expressed that they could get new knowledge from their superiors or expert teachers.

The **second** open-ended question asked selected teacher educators to express how they share or distribute their existing knowledge. According to their responses, 84 (39.52%) teacher educators said that they shared their knowledge by discussing at professional development program in their universities. Besides, 58 (27.62%) teacher educators proposed that knowledge transfer occurred at the meetings of board of study, workshops or seminars. Moreover, 44 (20.95%) teacher educators reported that they shared their knowledge through social media. Finally, 25 (11.92%) teacher educators expressed that they shared their knowledge by reading research paper at research seminars or conferences.

The **third** open-ended question asked teacher educators to express how their university managed for the extension of knowledge management. According to their responses, 78 (37.86%) teacher educators asserted that their university provided money to buy the required books and journals. Then, 61 (29.61%) teacher educators suggested that the university should hold seminars or workshops annually to improve the research skills and professional development of them. Again, 38 (18.44%) teacher educators proposed that the university should provide professional development activities for teachers. Moreover, 29 (14.04%) teacher educators reported that their

university should also provide English language proficiency course for them to study teaching methods and updated knowledge about education employed in international universities.

Conclusion and Discussion

The word "knowledge" is the most fundamental things for an educational institution. It is considered a valuable resource for organizations and individuals, a precondition for success and a response to modern challenges (Masic, Nesic, Nikolic, & Dzeletovic, 2017). Moreover, this organizations need to prepare themselves internally so that knowledge can circulate among individuals and, in addition, be used in actions that result in some kind of improvement (Gonzalez & Martins, 2017).

Analyses of quantitative data collected from the study attempted to answer the four research questions. **Research question one** evaluated the extent of knowledge management practiced by teacher educators. According to the teacher educators' ratings, it was found that four dimensions of knowledge management: *Socialization*, *Externalization*, *Combination* and *Internalization* were highly practiced by all teacher educators from the selected universities. The results showed that teacher educators from both universities mostly practiced *Internalization* but *Externalization* was the least practiced by teacher educators. It can be assumed that teacher educators often shared and received new knowledge through social interaction or informally. Next, they tried to get knowledge by reading, observing or using Internet website. On the other hand, teacher educators sometimes read the papers in research seminars and they sometimes tried to public their research. This finding can be provided by the study of Hassan Easa (2012) that discovered knowledge management and the SECI model. When analyzing the significant difference in knowledge management practices between two universities, there were significantly differences in all dimension and overall knowledge management practices. According to the result, it can be said that the perceived levels of teacher educators from the University B were higher than those of teacher educators from University A concerning the knowledge management practices.

Next, **research question two** was to find out whether there were significant differences in the performance of knowledge management practices of teacher educators based on their demographic information. According to the teacher educators' rating, there were significant differences in one of the dimensions of knowledge management practices, *Externalization* between male and female teacher educators, among position and among teaching experiences. Moreover, according to the age group, there were significant differences in three dimensions of knowledge management practices: *Externalization, Combination* and *Internalization*. On the other hand, there were also significant differences in two dimensions of knowledge management practices: *Externalization* and *Combination*. This can be assumed that teacher educators who have more experiences with high position often shared their knowledge at the research seminar, board of study and professional development programme.

Again, **research question three** was to find out the levels of teacher educators' perceptions on universities' support for knowledge management practices. According to the result, teacher educators perceived that they received high levels of support by their universities in all three dimensions: *Research Service, Teaching Service* and *Student Service*. Therefore, it indicated that teacher educators from both universities had higher levels of support for knowledge management practices. It indicated that both universities provided required books, journal, internet access and offered professional development programme to teacher educators. According to the independent samples *t* test results, there was no significant difference in all dimensions of universities' support for knowledge management. It can be assumed that both universities provided the available resources for knowledge management. The finding of this research was in line with the previous

study of Lin (2007) who claimed that management needed to cultivate a knowledge management culture involving two phases: research space and evaluation process.

Research question four investigated the relationship between knowledge management practice and universities' support for knowledge management at two selected universities. Based on the research findings, teacher educators' knowledge management practices was positively significantly related to universities support for knowledge management practices at two universities. In other words, it can be assumed that the more the universities' support for knowledge management practices, the higher level of teacher educators' perceptions on knowledge management practices. The result of this study was supported by the framework of the use of KM system in universities developed by Al-Zoubi (2014).

Recommendations for Further Research

This section presents recommendations for further study. According to the available time and resources, a larger sample size should be conducted to increase the statistical power of the results. As this study was conducted in two educational universities, it would be effective to do this research in other educational institutions. Moreover, a qualitative study was also necessary to get more reliable data and to study facilitators and barriers in implementing knowledge management in educational institutions.

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AN ANALYTICAL STUDY OF BENEFITS AND CHALLENGES OF CONDUCTING ACTION RESEARCH IN EDUCATION COLLEGES

Pyae Phyo Thu[1] and Zin Nwe Than[2]

Abstract

This study highlights the challenges and benefits of conducting action research in Education College. In this study, 32 teachers from five Education Colleges were interviewed to investigate the benefits and challenges of conducting action research. *Semi-structured interview* was utilized to explore the perceived benefits and the challenges teachers faced. Based on the responses of teacher-participants and research findings, it can be concluded that there were many benefits as well as challenges when conducting action research for Education College-teachers. The benefits teachers perceived were improving knowledge about action research, knowing and practicing new teaching methods, understanding deeply about the subject matters, improving good relationship and having a habit of reflective practice. The challenges were insufficient knowledge, insufficient time, insufficient supports, insufficient reference materials and experts and finally insufficient attitudes.

Keywords: Action Research, Benefits, Challenges

Introduction

Research is about exploring new understanding and solves the actual problems in a respective area. Classroom research, school-based research, teacher research, and action research have been defined as a research undertaken and conducted by teachers in the classroom and/or in the school. This kind of research is conducted primarily to examine and identify a problem or an issue within the classroom and in the school for which teacher - researchers want to find a solution, by understanding it thoroughly (Burns & Kurtoglu- Hooton, 2014). Action research is one of the systematic methods of research in solving problems or making practice better. It aims at immediate application of theory and places its emphasis on the solution of a problem in a local setting. Kemmis and McTaggart (2000) indicated that action research is deliberate and solution-oriented investigation that is group or individually conducted. Additionally, action research allows teachers the opportunities to identify changes they need to make in their teaching practices by providing them with the framework to build their own classroom projects.

The importance that conducting action research has upon the professional development of teachers and their practices has been widely acknowledged in the literature. For one, it provides teachers and other educational leaders with the skills and knowledge necessary for identifying what the problem is in a school or classroom, and knowing how to address that problem systematically and effectively. Two, it supplies a chance for teachers to self-evaluate their teaching practices. Three, it allows teachers to make a change in their teaching practices that will have a positive and significant impact upon teaching-learning process. Lastly, it is a great opportunity to improve lifelong learning and of continuing professional development teachers (Cain & Milovic, 2010, Ulla, Barrera & Acompanado, 2017, cited in Ulla, 2018). Action Research is essential to professional development in which teachers systematically and effectively reflect on their work and make changes in their teaching. Furthermore, action research provides a chance to teachers to evaluate themselves about their teaching practices. It is conducted action research to investigate what effects their teaching have on students' learning, how they could work better with colleagues, and how can they work to change the whole teaching-learning environment for the better (Gilles, Wilson, & Elias, 2010).

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This study will be significant because it will provide information about the benefits and challenges of conducting action research in Education Colleges. At the current time, Department of Higher Education emphasizes the importance of action research in Education Colleges. According to the policy of teacher education, teacher-educators in Education Colleges are required to engage in action research activities. Therefore, in Education Colleges, action researches are widely conducted by teacher-educators and action research competitions are held two times in one academic year. Teacher-educators conduct action researches but they have many difficulties and challenges. On the contrary, there are many benefits of conducting action research. That is why, this study will help in the development of a better understanding of the benefits and challenges of conducting action research in Education Colleges for implementation of the educational objectives and production of qualified teachers although it is likely to have shortcoming and weakness.

Teacher Education in Myanmar

In Myanmar, teacher education has been providing two Universities of Education and twenty five Education Colleges under the guidance of Ministry of Education. Two universities of Education: Yangon University of Education and Sagaing University of Education, produce senior teachers for Basic Education. Twenty five education colleges, such as Mandalay Education College, Pakokku Education College, Sagaing Education College, Monywa Education College, Magway Education College, Meikhtila Education College, Myitkyina Education College, Taunggyi Education College, Lashio Education College, Loikaw Education College, Katha Education College, Hakha Education College, Kyine Tone Education College, Taungngu Education College, Yankin Education College, Thingan Kyun Education College, Mawlamyine Education College, Hleku Education College, Dawei Education College, Pyay Education College, Kyaukphyu Education College, Pathein Education College, Bokalay Education College, Myaungmya Education College, Education College and Pha-an Education College produce junior teachers and primary teachers.

Until Batch 23/2018, twenty five Education Colleges provided D.T.Ed (Diploma in Teacher Education), P.P.T.T (Post Primary Teacher Training), P.A.T.C (Primary Assistant Teacher Certificate) and J.A.T.C (Junior Assistant Teacher Certificate) programs for teachers. Two year program of D.T.Ed is given for pre-service teachers who want to enter teaching profession after passing matriculation examination. Four month program of P.P.T.T is given for pre-service teachers who have got a degree from one university or degree college. Two month program of P.A.T.C is given for in-service teachers who are not permanent and do not have any teacher certificate. Two month program of J.A.T.C is given for in-service primary teachers who want to be junior teachers in Basic Education schools. In 2019, Education Colleges started four-year program and will provide bachelor degree for pre-service teachers who want to enter teaching profession after passing matriculation examination.

Purpose of the Study

General Objective

- To explore the benefits and challenges of conducting action research at selected Education Colleges located in Upper Myanmar.

Specific Objectives

- To investigate the benefits of conducting action research perceived by teacher-educators themselves at selected Education Colleges, and

- To analyze the challenges of conducting action research perceived by teacher-educators themselves at selected Education Colleges.

Research Questions

1. What are the benefits of conducting action research perceived by teacher-educators themselves at selected Education Colleges?

2. What are the challenges of conducting action research perceived by teacher-educators themselves at selected Education Colleges?

Definitions of Key Terms

The terms used throughout the current study are identified below for clarity and understanding.

- *Action Research* refers to a method of systematic inquiry undertaken and documented by teachers for the purpose of improving their own practices (Vula, 2010).

- *Benefits* refer to positive impacts that improve teachers' professional development from carrying out action research (Erda, 2013).

- *Challenges* refer to constraints that inhibit teacher-researchers from carrying out action research (Erda, 2013).

Operational Definitions

- *Action research* is one type of research that is conducted by teacher-educators to improve their professional and personal development in Education Colleges.

- *Benefits* refer to improving professional and personal developments of teacher-educators such as improving knowledge about action research, improving good relationship by conducting action research, etc.

- *Challenges* refer to the difficulties of teacher-educators to conduct action research effectively and systematically such as insufficient knowledge, insufficient time, insufficient supports, etc.

Limitation of the Study

This study was limited to selected Education Colleges in Upper Myanmar because the researcher had available time and the necessity for effective communication between the researcher and participants. Among thirteen Education Colleges in Upper Myanmar, all teacher-educators who had experiences about action research from five selected Education Colleges in Upper Myanmar were selected as sample of this study.

Review of Related Literature

Theoretical Framework

Lewin developed a Unified Change Theory based on four distinct elements; Field Theory, Group Dynamics, Action Research and Three Step Model of Change. Action research is the foundation stone of organization development practice; it is what underpins the theory and practice of the discipline in the organization. The theory is based on what Lewin advised, "no action without research, no research without action" (Dick, 2009).

Action research can be defined as the process of studying a classroom or school in order to improve the quality of teaching. It is, however, a very systematic and scientific study which promotes inquiry-based and contextually-driven professional development (Hathorn & Dillon, 2008). The four main types of action research design are individual research, collaborative research, school-wide research and district-wide research. The action research process has five

main steps: identify a problem or question, determine the data collection needs and method, collect and analyze the data, create an action plan and describe how findings can be used, and report data and plan for future action. This is actually more of a cyclical process than a step process. The most commonly cited cycle was plan-action-observe-reflect devised by Kemmis & McTaggart (2000). These steps help to ensure that the action research will be professional, complete, and valid. Action research does not start with an answer, although it is structured, and the question to be explored may be refined or changed during the course of the research. Regular observations are very important to action research (Johnson, 2002). Action research is not meant to be complicated, elaborate, lengthy, or quantitative in nature. Due to these characteristics, action research is user-friendly and requires little prior experience on the part of the researcher (Glathar, 2008).

Conducting action researches are the most important activities to bring changes and improvements in teaching learning process. Based on the literature review and pilot study, when teacher- researchers were asked about their perceived benefits of conducting research, a number of them stated that conducting action research can have improving knowledge about action research, knowing and practicing new teaching methods, understanding deeply about the subject matters, improving friends and good relationship and having a habit of reflective practice. However, the most of the teacher-researchers from Education Colleges revealed that five challenges were faced when conducting action research; insufficient knowledge, insufficient time, insufficient reference materials and experts, insufficient supports and insufficient attitudes.

Benefits of Conducting Action Research

Many benefits of action research for teacher development personally and professionally have been pointed out in recent action research studies. One such study interpreted that action research afforded to produce significant gains for organization professional development. Some of the gains included: improved skills and knowledge about action research, amplified motivation to develop new teaching methods, enhanced collaboration and interpersonal relationships with colleagues, and increased teacher reflection (Raudenheimer, 2003). Results of action research studies show that teachers believe that engaging in action research enhances their personal and professional growth (Neapolitan, 2000).

Teachers also identify action research as a useful tool for impacting and influencing other teachers and their professional development. Action research aids teachers to become role models, change agents, and in establishing their credibility with other teachers (Neapolitan, 2000). Teacher participants in action research gain more confidence in delivering their classroom instruction. Teachers who are empowering are able to bring their talents, experiences, skills and creative ideas into the classroom and implement programs and strategies that best meet the needs of their students (Johnson, 2002). In addition to an empowered approach to change in classroom instruction, teachers gain other skills through action research. They report more autonomy, a higher level of problem-solving skills and an increased ability to use classroom data more effectively (Neapolitan, 2000).

Another benefit of action research is the transformation that occurs in teacher communication. Teachers who have participated in action research improve their relationships with their colleagues (Russo & Beyerbach, 2001, cited in Glather, 2008). As communication between teachers becomes more warm and close, opportunity for support, sharing, development and growth increase. Additionally, cooperation and collaboration flourish as a result. Action research emphasizes meaningful and collaborative teacher-teacher relationships and provides opportunities for focused, helpful dialogue (Levin & Rock, 2003, cited in Glather, 2008).

The benefits of action research as a tool for professional development are many and varied. They range from subtle impacts on individual teachers' views of their teaching to continuing efforts

to engage in action research and report findings (Salzman & Snodgrass, 2003, cited in Glather, 2008). Action research can be used as a meaningful replacement of traditional teacher in-services (Johnson, 2002). This study is valuable in understanding how action research can function as professional development for teachers. The experiences of the participants can inform education leaders about the pros and cons of conducting action research for teachers as a professional development model.

Challenges of Conducting Action Research

Conducting action researches are the most important activities to bring changes and improvements in teaching learning process. However, it is expected while conducting it, constraints become difficulties for teacher practitioners so as to perform things easily. For instance, from the constraints that affect those teachers in conducting action research, problem related with lack of in-service training, lack of knowledge and skills, lack of attitude and interest, shortage of materials or resources and financial problems plays a great role in affecting teacher practitioners in schools.

Different research results reported that research knowledge and skills of school teacher were insignificant to conduct research systematically (Ashenafi, 2007 & Gebeyew, 2007). Similarly, the result pointed out that teachers did not understand how to conduct action research and the interest to practice in the research process was extremely influenced by the involvement of teachers in research activities.

Additionally, Mc kerman (1996) and Seyoum (1998) cited in Dereje (2011) indicated that there are many challenges that hinder teacher in conducting action research at school or classroom level. Among these challenges, institutional and other teacher related problems could be mentioned. School climate, leader-follower relationship, lack of time and lack of resources are of the school based problems.

Similarly, Dame (2011) found that insufficient time due to teaching and administrative work load, inadequate support systems, lack of commitment of the responsible persons, lack of adequate resource, inadequate knowledge and skills about action research, and inadequate incentives available for teacher-researchers as the most strong constraints that encountered the teacher educators to effectively undertake action research in their study fields.

Additionally, Yohannis (2011) indicated that lack of sufficient research knowledge and skills, lack of resource materials and support from the responsible department as a intense problem that hinder teachers not to participate in educational research activities and practices. Similarly, Burns (1999, cited in Yohannis, 2011) classified challenges of teachers in conducting action research into three: as lack of enough time, lack of resources, school lack of research knowledge and skills are the most frequently found research challenges among participants. On the other hand, Johnson (2011, cited in Yohannis, 2011) pointed out that five challenges of conducting action research that some teachers face in schools - lack of enough time, lack of resources such as research books and supports, difficulty of formulating the research question, resistance to change and ethical considerations.

To be concluded, even though challenges are classified differently according to different scholars and researchers, they affect negatively the participation of teachers in conducting action research in the classroom and school where they are working.

Methodology

The present study is qualitative as it explores and analyses the benefits and challenges of 32 Education College-teachers who had experiences about conducting action research. In this study, semi-structured interview was used as data collection instrument. Seven interview guide questions were developed from the literature review and the pilot study. The interview data obtained from semi-structured interviews were subjected to content analysis in order to answer the research questions. All the responses were transcribed and were read many times in order to understand the content and the message that the participants wanted to give. They were then categorized into different themes and subthemes under the categories of benefits and challenges they had perceived.

Participants of the Study

This study focused on all Education Colleges in Upper Myanmar. There were thirteen Education Colleges in Upper Myanmar. Among them, three Education Colleges were used for pilot testing. Out of ten Education Colleges, five Education Colleges were randomly selected as sample colleges for the main study. As teacher sample, all teacher-educators from selected Education Colleges who had experience of conducting action research were used as teacher sample. There were 32 teacher-educators who had experience of conducting action research in selected Education Colleges. Among them, 8 teachers (25%) were male and 24 teachers (75%) were female. Concerning their academic qualification, 18 teachers (56%) were MEd degree holders and 14 teachers (43%) were MA/MSc degree holders. Furthermore, according to their positions, 9 teachers (28%) were lecturers and 23 teachers (72%) were assistant lecturers.

Data Collection Procedures and Data Analysis

After taking permission from the responsible persons, interviews were made to teachers from five selected Education Colleges in Upper Myanmar. Data were recorded by using mobile phone from all teachers who had conducted action research. Teacher-participants answered the interview questions about their benefits and challenges of conducting action research. All the responses were listened and transcribed and were read many times in order to understand the content and the message that the participants would like to give. They were then categorized into different themes under the categories of benefits and challenges they had perceived and met concerning conducting action research.

Research Findings

This study attempted to find out the benefits and challenges of conducting action research perceived by teacher-researchers in Education Colleges. Concerning benefits, there were six themes that the teacher researchers perceived by conducting action research. The themes were improving knowledge about action research, knowing and practicing new teaching methods, understanding deeply about subject matter, improving good relationship, having a habit of reflective practices and others. As the challenges, there were five themes that emerged from the interview data. The themes were lack of knowledge, lack of enough time, lack of reference materials and experts, lack of supports and finally lack of attitudes.

Benefits of Conducting Action Research

When teacher-researchers were asked about their perceived benefits of conduction action research, a number of them stated that conducting action research could improve knowledge about action research, know new teaching methods, understand deeply about the subject matters, improve good relationship and have a habit of reflective practice while a few said others.

1. Improving knowledge about action research

Among 32 teachers, 30 teacher-researchers (94%) claimed that they searched and studied research books and articles in the library and internet how to conduct action research. This made them improve knowledge level about action research. The teachers who had conducted about action research shared their knowledge and experience how to conduct it. When competing at national level competition, they had much knowledge about action research and understood clearly the procedures and trend of action research because of the judges' suggestions and comments. They also inspired new ideas by studying action researches of other Education Colleges.

2. Knowing and practicing new teaching methods

The 23 teacher-researchers (72%) argued that they knew new teaching methods (brain storming, presentation, think-pair-share, using videos as teaching aids, etc.) applying in conducting action research. They understood which teaching methods were convenient and consistent which lessons. They realized that the effectiveness of each teaching method used in action research. They also practically applied new teaching methods in teaching. The students also had learnt new teaching methods in practice not in theory. Teacher-researchers shared new teaching methods applying in action research to other Education Colleges and they were successful in using new teaching methods.

3. Understanding deeply about subject matter

For all 32 teacher-researchers (100%), they pointed out that they improved a lot of knowledge beyond the subject matter as they read a lot of books related to the content and used internet for further more readings. They could create more successful and effective teaching. For students, the students were more interested in the subject matter. They were bored in lecture method and more active when using new teaching methods in action research. All students were expert and understood deeply about the subject matter.

4. Improving friends and good relationship

The 18 teacher-researchers (56%) expressed that conducting action research made them improve good relationship. The relationship between the teacher-researcher and the students was more close, warm and open. Teacher-teacher relationship was more united and cooperative when conducting action research. In conducting action research, they become more flexible in their thinking and more open to new ideas. In competing at the national level competition, the teacher researchers had a chance to improve a number of friends. They were acknowledged by the principals and other departmental persons not because winning the prize but because conducting action research and competing it at the national level.

5. Having a habit of reflective practice

Besides, 21 teacher-researchers (66%) mentioned that they had a habit of reflective practice by conducting action research. The teachers had reflected themselves what their teaching needed after finishing one teaching period of time. Reflection or self-study was a powerful way to know about the self in teaching practice. Moreover, they pointed out that action research was a way of thinking about a problematic situation that needs to be resolved. They said that action research could be a very powerful tool enabling practitioners not only to solve practical problems, but also to reflect on their understanding of how to develop practice.

6. Others

After conducting action research, 5 teacher-researchers (15%) revealed that

- They had decided that they must use more activity based-teaching methods than traditional lectured-methods.
- They gained more confidence in redesigning their classroom instruction.
- Their creative thinking and problem solving skills had improved.

Challenges to Conduct Action Research

In the interview, the most of the teacher-researchers from Education Colleges revealed that five challenges were faced when conducting action research; insufficient knowledge, insufficient time, insufficient reference materials and experts, insufficient supports and insufficient attitudes.

1. Insufficient knowledge

Among 32 teacher-researchers, 22 teacher-researchers (69%) said that most of them did not understand clearly what action research was. As the previous action research articles were different formats, there was no exact format of action research (e.g. which font and font size would be used in action research). As the department, it did not announce officially the correct format of action research. They also had no enough knowledge how to conduct action research and the procedures of action research. In addition, concerning skill, they had no enough experience and expertise about doing action research. They were weak of technological skill such as drawing tables and graphs in computer.

2. Insufficient time

According to 27 teacher-researchers (84%), action research needed a lot of time. They had many teaching periods, departmental jobs and other school activities. Furthermore, there was no clear instruction about action research; when to start, when to finish and the amount of time that a teacher-researcher gets to conduct action research. They had to know the date of action research competition that they would go to compete only if the action research competition was so close. The time to conduct action research was not insufficient for teacher researcher. On the other hand, the students were very busy with so many activities and they have full periods of time on the whole day. It was one of the difficulties to adjust time between the teacher researchers and the students.

3. Insufficient reference materials and experts

The 21 teacher-researchers (71%) claimed that there were insufficient research books to be referenced in the libraries of Education Colleges. There were only a few research journals and previous action research articles in most of the libraries of Education Colleges. Previous action research articles that had competed at the national level were not the same with each other in format, procedure, trend, etc. It was difficult to choose which one to be referenced. In the same way, as if there were no reference books and they did not know how to conduct, they had also no experts to request ideas. The teachers who had experience about action research could not explain clearly about action research. They had to contact the expert researchers from University of Educations.

4. Insufficient supports

For 20 teacher-researchers (63%), there were two kinds of insufficient supports for them. The first was insufficient colleague support. This was because some departments of Education Colleges were not sufficient in teaching staff. The colleague teachers could not help and support

the teacher researcher and they performed other duties of the department. Most of the parts of action research (taking photograph, supervising, typing, etc.) were done by the teacher researcher who took responsibility for action research, not others helped. The second was insufficient financial support. There was no equal financial support way for teacher-researchers to conduct action research among Education Colleges. Financial support ways were different among Education Colleges. Some Education Colleges allocated finance to all departments, from 30000 kyats to 50000 kyats. Some did not allocate like that. Only if the action research draft appeared, the principal or one of the heads paid the cost of draft. The costs while conducting action research like questionnaire, photo copy, teaching aids, were not paid unless the vouchers were presented. In this condition, all teachers in one department shared the cost of action research.

5. Insufficient attitudes

Among 32 teacher-researchers, 19 teacher-researchers (59%) mentioned that conducting action research was different according to Education Colleges. In some Education Colleges, every department took responsibility to conduct action research. In some, only the alternate department was responsible for action research. Whatever it was, most of the teacher researchers did not want to conduct action research. They were afraid of conducting action research. They also had no enough knowledge and experience about action research. They had strong desire to join research training in order to conduct research effectively and systematically.

Discussion, Conclusion and Recommendations

Summary of the Findings

The results of this study led to the significant findings that are summarized below.

When teacher-researchers were asked about their perceived benefits of conduction action research, a number of them stated that conducting action research could improve knowledge about action research, know and practice new teaching methods, understand deeply about the subject matters, improve friends and good relationship, having a habit of reflective practice while a few said others.

- The 30 teacher-researchers (94%) claimed that they searched and studied research books and articles in the library and internet how to conduct action research. This made them improve knowledge level about action research. When competing at national level competition, they had much knowledge about action research and understood clearly the procedures and trend of action research because of the judges' suggestions and comments.

- The 23 teacher-researchers (72%) argued that they knew new teaching methods applying in conducting action research. They understood which teaching methods are convenient and consistent which lessons. They realized that the effectiveness of each teaching methods used in action research. They also applied in practice new teaching methods in teaching. The students also had learnt new teaching methods in practice not in theory.

- For all 32 teacher-researchers (100%), they pointed that they improved a lot of knowledge beyond the subject matter as they read a lot of books related to the content and using internet for further more reading. They could create more successful and effective teaching. For students, the students were more interested in the subject matter. All students were expert and understood deeply and bready about the subject matter.

- The 18 teacher-researchers (56%) expressed that conducting action research made them improve good relationship. The relationship between the teacher researcher and the students was more close, warm and open. Teacher-teacher relationship was more united

and cooperative when conducting action research. In competing at the national level competition, the teacher researchers had a chance to improve a number of friends.

- The 21 teacher-researchers (66%) mentioned that they had a habit of reflective practice by conducting action research. The teachers had reflected themselves what their teaching need after finishing one teaching period of time. Reflection or self-study is a powerful way to know about the self in teaching practice. Moreover, they pointed out that action research was as a way of thinking about a problematic situation that needs to be resolved.

- The 5 teacher-researchers (15%) revealed that they had decided that they must use more activity based-teaching methods than traditional lectured-methods, gained more confidence in redesigning their classroom instruction, and their creative thinking and problem solving skills had improved.

The teacher-researchers from Education Colleges expressed that five challenges were faced when conducting action research; insufficient knowledge, insufficient time, insufficient reference materials and experts, insufficient supports and insufficient attitudes.

- The 22 teacher-researchers (69%) said that most of them did not understand clearly what action research was. They could not do action research systematically because they had never done it before. They had no enough knowledge how to conduct action research and the procedures of action research. They were weak of technological skill such as drawing tables and graphs in computer.

- The 27 teacher-researchers (84%) pointed out that action research needed a lot of time. They had many teaching periods, departmental jobs and other school activities. They had to know the date that they would go to compete only if the action research competition was so close. That was why they had no enough time to conduct action research effectively. On the other hand, the students were very busy with so many activities and they have full periods of time on the whole day. It was one of the difficulties to adjust time between the teacher researchers and the students.

- The 23 teacher-researchers (71%) revealed that there insufficient research books to be referenced in the libraries of Education Colleges. Only a few research journals and previous action research articles were in most of the libraries of Education Colleges. In the same way, as if there were no referenced books and they did not know how to conduct, they had also no experts to request ideas. The teachers who had experiences about action research could not explain clearly about action research. They had to contact the expert researchers from University of Education.

- For 20 teacher-researchers (63%), there were two kinds of insufficient supports for them. The first was insufficient colleague support. This was because some of the departments of education colleges were not sufficient in teaching staffs. Most of the parts of action research were done by the teacher researcher who took responsibility for action research, not others helped. The second was insufficient financial support. Financial support system was different among Education Colleges. Some Education Colleges allocated finance to all departments, from 30000 kyats to 50000 kyats. Some did not allocate like that. Only if the action research draft appeared, the principal or one of the heads paid the only cost of draft.

- The 19 teacher-researchers (59%) mentioned that most of the teacher researchers did not want to conduct action research. They were afraid of conducting action research. They had many stress and pressure, no time to rest, and many duties and activities. They also had no enough knowledge and experience about action research. They had strong desire to join research training in order to conduct research effectively and systematically.

Discussion and Conclusion

This study highlights the benefits and challenges of conducting action research in selected Education Colleges in Upper Myanmar. Analyses of qualitative data collected from the study attempted to answer two research questions. Research question one examined the benefits of conducting action research perceived by teachers themselves in selected Education Colleges. When studying the responses of teachers participated in the interview process, it was found that the teachers from all Education Colleges gained many challenges by conducting action research. These benefits were improving knowledge about action research, knowing and practicing new teaching methods, understanding deeply about the subject matters, improving good relationship and having a habit of reflective practice. This finding can be supported by the research finding of Ferrance (2000, cited in Erda, 2013) which focus to improve the knowledge of action research, form of teacher professional development, focus on new teaching techniques, potential to impact school change, reflection on own practice and improved communication. In addition, one study concluded that action research efforts produced significant gains in professional development of teachers and these gains support the finding of the present study. According to Raudenheimer (2003), these gains included: improved skills and knowledge about action research, amplified motivation to develop new teaching methods, enhanced collaboration and interpersonal relationships with colleagues, and increased teacher reflection.

Research question two explored the challenges of conducting action research faced by teachers in selected Education Colleges. According to the responses of teachers, it was found that the teachers from all Education Colleges had many challenges when conducting action research. They were insufficient knowledge, insufficient time, insufficient reference materials and experts, insufficient supports and insufficient attitudes. This study is in congruence with previous study of Erda (2013) that there are many factors that hinder the teachers in conducting action research at school or classroom level. These challenges were lack of interest in the part of teachers, lack of adequate knowledge and skill, lack of support (time, financial and other resources) and supporting (training support, principals' support, colleagues' support). In addition, the research finding of Rahimi and Bigdeli (2016) supported the current study. According to their research finding, there were four challenges that hinder conducting action research; attitude toward action research, lack of fund and support, lack of cooperation among colleagues and lack of knowledge and confidence in doing action research.

Recommendations for Further Research

The present study explored the benefits and challenges of five Education College-teachers while undertaking an action research study in their respective Education Colleges. Concerning challenges, there are many challenges that the teachers faced while conducting action research. The studies done by Dereje (2011), Dame (2011) and Yohannis (2011) exposed a number of common problems that a teacher has to deal with when conducting action research. The finding of the present study were also similar the challenges that Education-College teachers encountered. Teacher researchers stated that they had no enough knowledge to conduct action research. In this condition, they needed to read and study about action research books and journals. But there were no enough research books and journals in most of the libraries of Education Colleges. That is why, the principal or the officers from Department of Higher Education should plan research trainings and seminars for Education College-teachers to conduct action research effectively and systematically. Reference research books and journals should be provided completely by the responsible persons for Education Colleges. These teachers also needed to join research trainings, seminars and conferences in order to develop more their skills and knowledge to confidently conduct an action research in the schools on their own. In addition, teacher-researchers revealed that there were insufficient financial and colleague supports when they conducted their action

researches and there was no enough time to conduct action research. Insufficient supports and enough time will be one of the reasons why teachers from Education Colleges had no attitudes and interest to conduct action research study. When teachers have the supports they need, they will be able to conduct action research systematically and effectively and produce good action research. Similarly, by giving an enough time for teaching and conducting action research, they will be able to perform their work more effectively and efficiently. By the school principals, they should hold college-level action research competition and select the appropriate persons for the national level in order to be more effective. Whatever it is, teacher-researchers from Education Colleges should overcome these challenges and difficulties with professional attitudes.

Despite the reported challenges faced by a number of teacher-researchers, they still stated the benefits of conducting action research. Most of them admitted that conducting action research could benefit them professionally and personally. These benefits were: improve knowledge about action research, know new teaching methods, understand deeply about the subject matters, improve friends and good relationship and have a habit of reflective practice. These perceived benefits as found in this study were congruent with the findings by Ferrance (2000, cited in Erba, 2013) and Raudenheimer (2003). Indeed, conducting an action research is a great opportunity for teachers to advance in their profession, improve their teaching qualifications and experiences, and adopt pedagogical changes that will have an impact on the teaching-learning process. Teachers who are engaged in action research will be able to share with their colleague teachers some best teaching and learning practices that are essentials for improving student learning and effective teaching-learning process.

Although the present study claims strengths in the presentation of teacher-researchers' challenges and benefits when conducting an action research, there are limitations with regards to participants and population. This study has only 32 teachers as participants in selected Education Colleges in Upper Myanmar. So, further studies are needed to expand this study to improve the quality of teacher education in the country. The data and the findings may not provide a sound representation of all Education College-teachers in Myanmar. Studies of teacher researchers with a different population, with a greater number of teacher-participants, and with different methodologies are recommended and suggested.

Since the researcher has shortage time and insufficient resources, only the benefits and challenges of conducting action research could be studied in this study. Thus, further research concerned with action research such as attitudes towards conducting action research in education colleges, problems teachers face when conducting action research and finding possible solution, action research as professional development, etc., should be studied. Finally, the possibilities for further studies are endless and meaningful. This study shows that there are many challenges as well as many benefits for Education-College teachers when conducting action research.

Acknowledgements

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INVESTIGATING THE PROSPECTIVE TEACHERS' PERCEPTIONS ON MOTIVATIONAL FACTORS INFLUENCING THE CHOICE OF TEACHING AS A CAREER

Ei Khaing Win[1] and Zin Nwe Than [2]

Abstract

The aim of this study is to investigate the prospective teachers' perceptions on their motivational factors influencing the choice of teaching as a career in two Education Colleges in Mandalay Region. The questionnaire survey was developed on the basis of Self-Concept Theory, the Expectancy-Value Theory, the Self-Determination Theory, Maslow's Need Hierarchy Theory and Motivational Factors Influencing Teaching Scale developed by Richardson and Watt (2014). It included 48 items which had three subscales; intrinsic motivation, altruistic motivation and extrinsic motivation. A five-point Likert scale was used in this study. Although a total of 300 prospective teachers from two Education Colleges in Mandalay Region were selected as target population of the study, 295 prospective teachers participated in the study. After collecting the data, descriptive statistics, independent samples *t*-test, one way ANOVA, Post Hoc multiple comparison tests were calculated to analyze the data. The findings showed that the prospective teachers' perceptions on altruistic and intrinsic motivational factors influencing the career choice of teaching were higher than those perceptions on extrinsic motivational factors. The results of this study highlighted that prospective teachers had more intrinsic and altruistic motivation than extrinsic motivation in choosing teaching as a career. It was found that there was no significant difference in perceptions of prospective teachers according to their gender and specialization but significant differences were found in perceptions of prospective teachers according to their grade level and age. Information gained by the responses of two open-ended questions was complementary to the quantitative findings.

Keywords: Career Choice, Intrinsic Motivation, Extrinsic Motivation, Altruistic Motivation

Introduction

Career choice plays a key role for making decisions of a student or a professional. Whether that decision is to choose a specialized subject or a profession in a particular university or college, or join to an organization to get a job, it should be made after thinking carefully because this choice will impact directly on the quality of work life and a person's life-style. Akomolafe (2003) contended that true happiness and satisfaction are linked to proper choice of profession. Moreover, according to Shabbir & Wei (2014), motivation is defined as the reason for why a person makes a decision to do something, how long they are willing to do it and how hard they are going to engage in it. Therefore, it is important to understand and establish the types of motivation when choosing a career.

In addition, pre-service teachers are multi-motivated when they made their choice to join the teaching profession (Sinclair, 2008). However, having the right motivation to choose teaching as a career is important because teaching is a profession that is central to a country's development and well-being. And so it is important to attract pre-service teachers with the "right" motives. If these prospective teachers can be attracted with the right motivation, they will be more engaged and committed to their training and profession (Sinclair, Dowson & Mclnerney, 2006).

Significance of the Study

Teaching profession should recruit and be filled in by highly-motivated and competent candidates. Pre-service teachers' motivation to choose teaching as a career should be addressed as it would have an impact on the quality of education that these future teachers would provide young

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learners under their care. The future roles that they are going to play have a significant impact on the quality of teaching and students' personal and academic achievements particularly in realizing the cognitive, affective and behavioural outcomes (Hattie, 2003, as cited in Chuan, 2013).

Information on prospective teachers' motives is very important for universities of Education and Education Colleges in preparing to obtain the qualified prospective teachers during their education and training, training them with better skill, knowledge, and attitude, and socializing them with the teachers' roles. In addition, this information is also important for the policy makers to change and revise teacher education policy in the future (Mukminin, Rohayati, Putra, Habibi & Aina, 2017) and entry or initial motivation can have an impact on how long pre-service teachers remain in their teacher education courses, the degree of engagement in their courses and consequently the overall teaching profession (Sinclair, 2008). Therefore, this study aimed to provide useful information concerning the motivational factors that influence the prospective teachers' career choice of teaching.

Purpose of the Study

The general objective of the study is to investigate the prospective teachers' perceptions on their motivational factors influencing the choice of teaching as a career.

The specific objectives of the study are:

- to explore the prospective teachers' perceptions on their motivational factors influencing the career choice of teaching,
- to find out a significant difference in the prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their gender,
- to investigate a significant difference in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their grade level,
- to explore a significant difference in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their specialized subjects and
- to find out a significant difference in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their age.

Research Questions

The following research questions guide the direction of the study:

- What are the prospective teachers' perceptions on their motivational factors influencing the career choice of teaching?
- Is there a significant difference in the prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their gender?
- Is there a significant difference in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their grade level?
- Is there a significant difference in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their specialized subjects?
- Is there a significant difference in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their age?

Scope of the Study

The participants of the study were limited to the prospective teachers who were attending the first year and second year courses in two Education Colleges located in Mandalay Region during the 2018-2019 Academic Year.

Definition of Key Terms

The terms used throughout the current study are defined for clarifying and understanding in the following.

▪ *Career Choice:* Career choice is the process of choosing a career path which can involve choice regarding education and training for a given career (Yong, 1995). In this study, career choice is the selection of a profession based on the various factors such as personal interests, parental influence and altruism.

▪ *Motivation*: Motivation is what moves people to do something including beginning a new career (Shabbir & Wei, 2014). In this study, motivation is defined as the attribution that forces a student teacher to join a teaching profession.

(1) *Intrinsic Motivation*: Intrinsic motivation is derived from one's own self when someone is interested or has a strong romantic interest for an activity, they are intrinsically motived to do the activity (Struyven, Jacobs & Dochy, 2013). In this study, intrinsic motivation includes personal interest, admiration and the inspiration to take part in the teaching profession.

(2) *Extrinsic Motivation:* Extrinsic motivation relates to activities undertaken for reasons other than inherent interest in the activity (Ryan & Deci, 2000). In this study, extrinsic motivation is concerned with external factors related to the teaching job such as the influence of others and the professional status of teaching.

(3) *Altruistic Motivation:* Altruistic motivation is the motive showing that one cares about and wishes to help the others without expecting any personal advantages (Yong, 1995). In this study, altruistic motivation involves the view that teaching is a vital job for the betterment of society.

Theoretical Framework of the Study

One of the earliest theories of career choice is Super's self-concept theory (1953) which drew upon the role of individuals' perception of self in choosing a career. According to the self-concept theory, the question "Who I am?" is a key factor that plays a determinative role in individuals' choosing a profession. Furthermore, the concept of theory of self-conception also assumes that a career choice is an attempt of an individual to implement his/ her personality concept.

Moreover, expectancy-value theory is one of the major frameworks for achievement motivation. Within the field of motivation and career choice, the expectancy-value theory proposed that educational, vocational, and other achievement-related choices are directly impacted by one's abilities, beliefs and expectancies for success and the value one attaches to the task (Eccles, Adler, Futterman, Goff, Kaczala, Meece & Midgley, 1983). Factors that comprise the values component include how much a person enjoys the task (intrinsic value), whether it is seen as useful (utility value), and if it is important for achieving a person's own goals (attainment value).

In addition, the current study also draws the theoretical framework from self-determination theory. Motivation has also been conceived as lying on a continuum of self-determination (Ryan & Deci, 2000). Self-determination is achieved when an individual perceives that they are the origin of their behaviour. Motivation can be divided into three categories based on the extent of self-determination: intrinsic motivation, extrinsic motivation and amotivation.

Furthermore, Abraham Maslow's need hierarchy theory is probably one of the best known and most widely used theories for the study of motivation in organizations. The theory of needs states that personal needs, either on conscious or subconscious levels, are main determinants that

influence a career choice (Lunenburg & Ornstein, 2011). Theory of needs assumes that hierarchy of needs shapes personal interests that are one of the main primary motives in choosing a career.

The motivating factors in choosing teaching as a career vary from individual to individual. Some scholars tend to perceive intrinsic and extrinsic motivation on a single continuum where one component may be more prominent (Covington & Mueller, 2001, as cited in Erten, 2014). Another type of motivation, altruistic is either considered only an extension of intrinsic motivation, or in some publications, a category on its own (Canrinus &, Fokkens-Bruinsma, 2011). In the teacher education literature, three types of motivation are stressed in regard to choosing teaching as a career (Bastick, 2000).

- Intrinsic motives: interest, personal satisfaction, and desire and love of profession
- Extrinsic motives: job guarantee, money, holidays, social security, appointment and ease
- Altruistic motives: being in the service of people, society and country
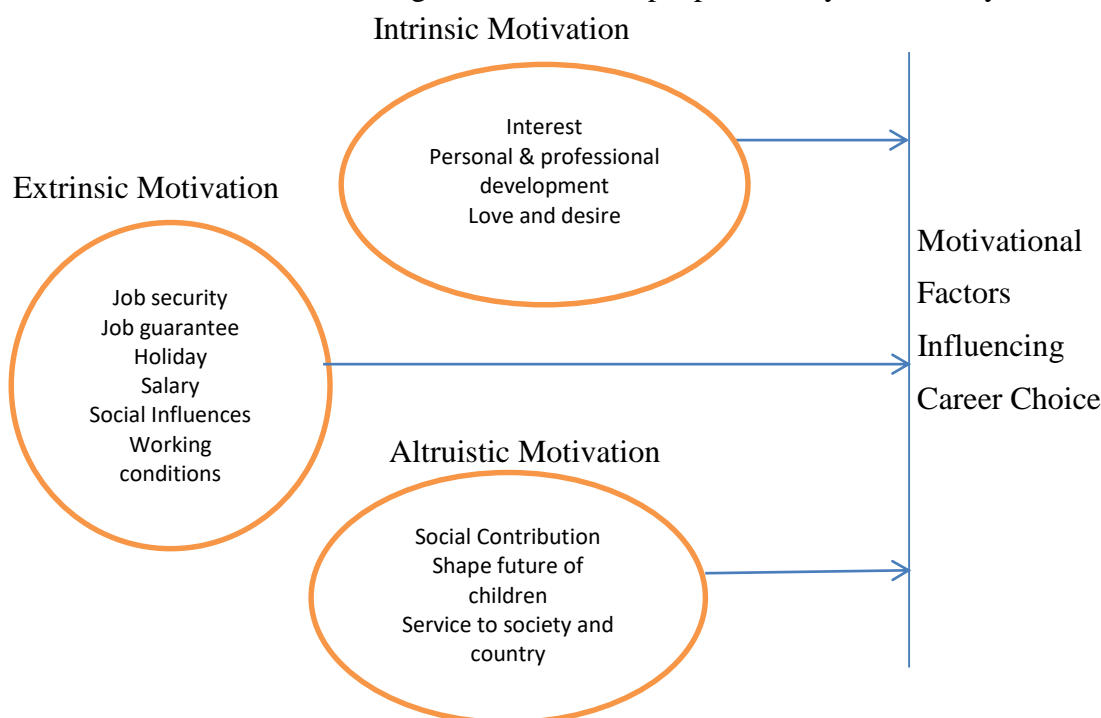
Figure 1   Conceptual Framework of Motivational Factors Influencing the Career Choice of Teaching

Review of Related Literature

Career Choice

Every person needs to understand his/her strengths and interests because it is a fundamental point when deciding on which career path is suitable for him/her. Choosing a career is one of the most important decisions a person makes and most of time moving from one career to another is not always easy for him/her. When people are unsuited for their careers, they usually find themselves in jobs that do not satisfy their value needs. Furthermore, they are usually lacking a certain ability to contribute meaningfully to the society, and they ultimately become liabilities to the nation (Akinjide & Sehinde, 2011).

Therefore, it is necessary to have a certain level of maturity before making the career choice because chosen career will probably have an effect on an individual throughout his/her life. Moreover, the quality of career choice is significant for both the individual himself and society

(Gati, Krausz, & Osipow, 1996). As far as concerned with prospective teachers' career choice, an unwilling choice of field of study may cause even more serious problems for teachers' future work lives. In addition, an unwilling choice of career not only jeopardizes the quality of teacher education but also is reflected in dissatisfaction and early burnout in future career (Kan, 2008, as cited in Topkaya & Uztosun, 2012).

Motivation

The word motivation is derived from the Latin word "movere" (which means "to move"). Motivation is a process that begins with a physiological need that activates a behavior or a drive (Luthans, 1998). It is a multi-faceted construct that consists of beliefs, perceptions, values, interests, and actions. Motivation is also defined as "a set of interrelated beliefs and emotions. These beliefs and emotions drive and influence behavior" (Martin & Dowson, 2009, as cited in Canrinus & Fokkens-Bruinsma, 2011). In the pre-service education field, studying the motivational qualities that pre-service teachers have behind the choice of teaching as a profession may be rewarding as it may enable an understanding of prospective teachers' affective, cognitive, and behavioural properties.

Motivational Factors Influencing the Choice of Teaching as a Career

In the light of the related literature, the motives for selecting teaching as a career are various. Research studies mainly indicate three basic types or categories of motives for selecting teaching as a career. Therefore, prospective teachers' motives to choose teaching as a career are also examined under three categories namely intrinsic motives, extrinsic motives and altruistic motives in the present study.

Intrinsic Motivational Factors

Intrinsic motivation impulse derives from the inner personality structures. Intrinsic motivation plays a key role in many people's decision to pursue teaching (Stern, 1958, as cited in Shea, 2017). Moreover, interest in the subject matter and wish to give on their knowledge are the main intrinsic factors that urge youngsters to choose the teaching career (Hayes, 1990). Individuals who are intrinsically motivated to teach are more likely to choose to take part in teaching-related activities even if no reward is apparent (Chuan, 2013).

Extrinsic Motivational Factors

The extrinsically motivated factors such as the outcomes of a regular salary, coaching, and continuing a family legacy are the individual's primary motives for choosing the profession (Kauffman et al., 2011, as cited in Spittle & Spittle, 2014). Additionally, the extrinsic motivating factors were mostly considered in the quality of life the family can enjoy whether through increase income or better job securities or more suitable working hours that could accommodate child rearing and nurturing (Richardson, Gough & Vitlin, 2001).

Altruistic Motivational Factors

Altruism is perceived as being concerned about other people more than about oneself for the interests of others, or as a behavior that makes a contribution to others. It is commonly accepted that altruism means selfless giving without expectation of reward and without the gratification of one's own desires. In addition, Tomsik (2016) asserted that altruistic motivation is related to the concept of prosociality and it covers doing things intentionally to help another person or group of people. Therefore, a teacher's altruistic motives can be explained by a desire to help students and to make a contribution to the society (Kyriacou & Coulthard, 2000).

Methodology

Research Method

The required data for the study was collected by using descriptive research method.

Participants

The target population of the study was 300 prospective teachers from two Education Colleges in Mandalay Region by using stratified sampling method.

Research Instruments

The questionnaire included demographic data and items for investigating prospective teachers' intrinsic, altruistic and extrinsic motivation of career choice of teaching. There are 48 items which were constructed based on the related theories and Motivational Factors Influencing Teaching Scale developed by Richardson and Watt (2014). The questionnaire was rated on five-point Likert scale "strongly disagree (1)", "disagree (2)", "not sure (3)", "agree (4)", "strongly agree (5)". Two open-ended questions were asked at the end of the questionnaire. The *first question* asked prospective teachers to describe why they choose the teaching career by giving their main reasons. Then the *second question* asked whether they had satisfaction or not in their career choice of teaching and asked them to give their own comments.

Data Collection Procedures

The related literature was analyzed to construct the questionnaire instrument. The advice and guidance were taken from the expert who had special knowledge and experience in the field of the study. Then, pilot study was conducted at Sagaing Education College in Sagaing Region, in the last week of 10th December, 2018. A total of 150 (75=male and 75= female) prospective teachers were assigned as participants. Two days after distributing, the questionnaires were collected. Valid response rate was 100% in the pilot study. In order to measure the reliability of instrument, the Pearson product-moment correlation method (***Average Item Total Correlation***) was used for internal consistency reliability. The average coefficient of correlation for investigating the teachers' perceptions on motivational factors that influence the career choice of teaching was 0.671.

And then, the researcher asked for permissions from the responsible persons for the main study. After getting permissions, the questionnaires were distributed to 300 prospective teachers from two Education Colleges in Mandalay Region to complete the questionnaires on the 3rd January, 2019. After lasting four days, they were collected. The responses from 295 prospective teachers were obtained for the study. The response rate was 98%. Based on the results of responses, the study was conducted for investigating the perceptions of prospective teachers on their motivational factors influencing the career choice of teaching.

Data Analysis

Descriptive statistics, independent sample *t*-test, one way ANOVA, Post Hoc Multiple Comparison Tests (Tukey HSD and Games-Howell) were used in analyzing the data to determine if gender, grade level, specialized subjects and age caused a difference in motivational factors influencing the career choice of teaching. The mean value from 1.00 to 2.33 was identified as "Low Level", the mean value from 2.34 to 3.64 was identified as "Moderate Level" and the mean value from 3.68 to 5.00 was identified as "High Level". Responses from the prospective teachers in two open-ended questions were used in analyzing the data.

Research Findings

The purpose of the study was to investigate the prospective teachers' perceptions on their motivational factors influencing the choice of teaching as a career. The data were analyzed in terms of mean values, standard deviation, independent Sample t-test, ANOVA, Post Hoc Multiple Comparisons (Turkey and Games-Howell). The findings were presented in the following.

Table 1 shows the mean values of the prospective teachers' perceptions on their motivational factors influencing the career choice of teaching.

Table 1 Mean Values of Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching

Dimensions of Motivational Factors	Mean	SD	Remark
Intrinsic Motivational Factors	3.90	.502	High
Altruistic Motivational Factors	4.07	.467	High
Extrinsic Motivational Factors	2.85	.568	Moderate
Motivational Factors	3.36	.741	Moderate

Note: 1.00-2.33 = Low   2.34-3.67= Moderate   3.68-5.00 = High

According to Table 1, the findings showed that the mean values of prospective teachers' perceptions on their intrinsic and altruistic motivational factors influencing the career choice of teaching were high. In addition, the mean value of prospective teachers' perceptions on their extrinsic motivational factors influencing the career choice of teaching was moderate. In other words, prospective teachers' perceptions on their intrinsic and altruistic motivational factors were higher than those perceptions on their extrinsic motivational factors.

Differences in Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching according to Demographic Information

In order to study whether there were significant differences in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching based on demographic information of prospective teachers from two Education Colleges in Mandalay Region, or not, independent samples t-test, one-way ANOVA, and Post Hoc Multiple Comparisons Test (Tukey HSD or Games-Howell) were employed to analyze the data.

Table 2 describes the mean values of prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their gender.

Table 2   Mean Values of Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching according to their Gender

Dimensions of Motivational Factors	Gender		Total (N=295)	Remark
	Male (113)	Female (182)		
Intrinsic Motivational Factors	3.84	3.94	3.90	High
Altruistic Motivational Factors	4.06	4.09	4.07	High
Extrinsic Motivational Factors	2.90	2.82	2.85	Moderate
Motivational Factors	3.46	3.30	3.38	Moderate

Note: 1.00-2.33 = Low   2.34-3.67= Moderate   3.68-5.00 = High

According to Table 2, it was found that the mean values of female prospective teachers' perceptions on their intrinsic and altruistic motivational factors were higher than those of male prospective teachers' perceptions according to their gender. On the other hand, the mean values of male prospective teachers' perceptions on their extrinsic motivational factors were higher than those of female prospective teachers' perceptions.

In order to find out whether there were significant differences in prospective teachers' perceptions on their motivational factors influencing the career choice of teaching between male and female prospective teachers, or not, independent samples *t*-test was calculated. The findings pointed out that there was no significant difference in all dimensions of motivational factors influencing the career choice of teaching according to gender.

Furthermore, the following Table 3 shows the mean values of prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their grade level.

Table 3 Mean Values of Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching according to their Grade Level

Dimensions of Motivational Factors	Grade Level		Total (N=295)	Remark
	First Year (148)	Second Year (147)		
Intrinsic Motivational Factors	3.94	3.86	3.90	High
Altruistic Motivational Factors	4.17	3.18	4.07	High
Extrinsic Motivational Factors	2.69	3.02	2.78	Moderate
Motivational Factors	3.46	3.30	3.38	Moderate

Note: 1.00-2.33 = Low   2.34-3.67= Moderate   3.68-5.00 = High

According to Table 3, it was found that the mean values of first year prospective teachers' perceptions on their intrinsic and altruistic motivational factors influencing the career choice of teaching were higher than those of second year prospective teachers' perceptions. On the other hand, the mean value of second year prospective teachers' perceptions on their extrinsic motivational factors influencing the career choice of teaching was higher than those of first year prospective teachers' perceptions.

In addition, Table 4 describes independent samples *t*-test results for two dimensions on their motivational factors influencing the career choice of teaching perceived by first year and second year prospective teachers.

Table 4 Independent Samples *t*-Test Results for Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching   according to their Grade Level

Dimensions of Motivational Factors	Grade	N	Mean	*t*	Mean Difference	*df*	*p*
Altruistic Motivational Factors	1st yr	148	4.17	3.441	.184	293	**.001**
	2nd yr	147	3.98				
Extrinsic Motivational Factors	1st yr	148	2.69	-5.277	-.334	293	**.000**
	2nd yr	147	3.02				

Note: *p*<0.05

According to Table 4, the findings showed that there were significant differences in two dimensions such as altruistic and extrinsic motivational factors influencing the career choice of teaching according to grade level. However, there was no significant difference in one of the dimensions of motivational factors, intrinsic motivational factors and overall motivational factors.

Again, the following Table 5 indicates the mean values of prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their specialization.

Table 5 Mean Values of Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching according to their Specialization

Dimensions of Motivational Factors	Specialization		Total (N=295)	Remark
	Science (146)	Art (149)		
Intrinsic Motivational Factors	3.91	3.89	3.90	High
Altruistic Motivational Factors	4.08	4.07	4.07	High
Extrinsic Motivational Factors	2.89	2.81	2.85	Moderate
Motivational Factors	3.40	3.31	3.36	Moderate

Note: 1.00-2.33 = Low   2.34-3.67= Moderate   3.68-5.00 = High

The results showed that the mean values of the perceptions of prospective teachers who specialized science subjects were higher than those of the perceptions of prospective teachers who specialized art subjects in all dimensions of motivational factors according to their specialization (See: Table 5).

In order to find out whether there were significant differences in the prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their specialization, or not, independent samples *t*-test was also calculated. The results show that there was no significant difference in all dimensions of motivational factors influencing the career choice of teaching perceived by prospective teachers according to their specialization.

Again, Table 6 shows the mean values of prospective teachers' perceptions on their motivational factors influencing the career choice of teaching according to their age.

According to Table 6, the findings showed that the mean values of prospective teachers' perceptions on their intrinsic and altruistic motivational factors influencing the career choice of teaching were high and those of prospective teachers' perceptions on their extrinsic motivational factors were moderate according to their age.

Table 6 Mean Values of Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching according to their Age

Dimensions of Motivational Factors	Age						Total (N=295)	Remark
	16 (25)	17 (100)	18 (108)	19 (44)	20 (14)	>21 (4)		
Intrinsic	3.64	3.93	3.86	3.98	4.18	3.97	3.90	High
Altruistic	3.89	4.08	4.04	4.14	4.42	4.31	4.07	High
Extrinsic	2.77	2.81	2.91	2.88	2.70	2.88	2.85	Moderate
Motivational Factors	3.04	3.38	3.32	3.57	3.32	3.5	3.36	Moderate

Note: 1.00-2.33 = Low   2.34-3.67= Moderate   3.68-5.00 = High

To find out whether there were significant differences in the perceptions of prospective teachers on their motivational factors influencing the career choice of teaching according to their age, or not, one-way ANOVA test was calculated. The ANOVA results were shown in Table 7.

Table 7 ANOVA Results of Prospective Teachers' Perceptions on Motivational Factors Influencing the Career Choice of Teaching according to their Age

Dimensions of Motivational Factors		Sum of Squares	*df*	Mean Square	*F*	*p*
Intrinsic Motivational Factors	Between Groups	3.318	5	.664	2.708	**.021**
	Within Groups	70.821	289	.245		
	Total	74.140	294			
Altruistic Motivational Factors	Between Groups	3.142	5	.628	2.984	**.012**
	Within Groups	60.857	289	.211		
	Total	63.999	294			

Note: *p*<0.05

The findings showed that there were significant differences in two dimensions such as intrinsic and altruistic motivational factors influencing the career choice of teaching perceived by prospective teachers according to their age (See: Table 7). However, there was no significant difference in one of the dimensions of motivational factors, extrinsic motivational factors and overall motivational factors.

In order to find out which particular groups had the significant differences, Post Hoc Multiple Comparisons Test (Games-Howell) was conducted. The following Table 8 points out the results of multiple comparisons of altruistic motivational factors perceived by prospective teachers according to their age.

According to Table 8, there was a significant difference in the dimension of altruistic motivational factors perceived by prospective teachers who were between 20 years old and other levels of different ages at the *p*<0.05 level. In other words, the perceptions of 20 years old prospective teachers on their altruistic motivational factors influencing the career choice of teaching were higher than those of prospective teachers who were 16, 17 and 18 years old.

Table 8 Results of Multiple Comparisons for Prospective Teachers' Perceptions on Altruistic Motivational Factors according to their Age

Motivational Factors	Age (I)	Age (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Altruistic Motivational Factors	20 years	16 years	.537*	.154	**.015**	.075	.999
		17 years	.345*	.098	**.022**	.038	.652
		18 years	.387*	.096	**.008**	.082	.692

Note: *p*<0.05

Open-ended Responses

The responses to two open-ended questions of 295 prospective teachers from two Education Colleges in Mandalay Region were collected at the end of the questionnaire. The *first question* asked prospective teachers to describe why they chose the teaching career by giving their main reasons. Among prospective teachers, 54 (18.31%) teachers did not answer that question

while 241 (81.69%) teachers responded to the question. According to teachers' responses, most of the prospective teachers, 95 (32.20%) said,

"They had a hobby with teaching children. They love to work with children. They wanted to make their society a better place and more developed than before. They liked sharing their knowledge to others".

Similarly, 65 (22.03%) prospective teachers responded,

"They decided to keep lifelong learning to improve their academic development. Children are cute with their innocent faces and acts. So they enjoy working with children. On the other hand, they decided to choose teaching profession because of their parents' encouragement".

Additionally, 45 (15.25%) prospective teachers answered,

"Teaching profession gave them job security and job guarantee. Moreover, they had long holidays so they had more time to do their family's work. They thought that they could afford their expenses for their education fees in the teacher education training".

Furthermore, 30 (10.17%) prospective teachers said,

"They thought that teaching profession fits with their personality so they chose it. They were inspired by their role models teachers so they admired their teachers and they had a dream to act like them".

Besides, 6 (1.35%) prospective teachers expressed,

"They had failed to join the university they wanted so they chose teaching profession."

The *second question* asked whether they had satisfaction or not in their career choice of teaching and asked them to give their own comments. Among the respondents, 255 (86.44%) answered the question and 40 (13.55%) did not answer the questions. Among respondents, 180 (61.02%) prospective teachers reported,

"They had satisfaction to choose teaching as a career because they could get respect and admiration from their students and society."

Besides, 35 (11.86%) prospective teachers responded,

"They satisfied with choosing teaching profession because it is a noble profession. It played a key role in the development of the nation. They had an opportunity to return the gratitude of their parents by entering the teaching profession. "

Furthermore, 30 (10.16%) prospective teachers answered,

"They had satisfaction to choose teaching profession because they could have self-confidence and the public attitude towards them is positive by working as a teacher."

Moreover, 10 (3.38%) prospective teachers replied,

"They enjoyed choosing teaching as a career because they had a desire to become role model teachers for their students".

Discussion and Conclusion

Research question one investigated the mean values of prospective teachers' perceptions on their motivational factors influencing the career choice of teaching in two Education Colleges in Mandalay Region. It was found that the mean values of prospective teachers' perceptions on their intrinsic and altruistic motivational factors influencing the career choice of teaching were higher than those of prospective teachers' perceptions on their extrinsic motivational factors. As a

result of the findings, it can be concluded that prospective teachers had more intrinsic and altruistic motivational factors than extrinsic motivational factors. This finding of the study is in line with the finding of the study of Watt & Richardson (2007) which revealed that intrinsic and altruistic motivations have a fundamental role in the career choice of prospective teachers.

For **research question two**, the findings showed that the mean values of female prospective teachers' perceptions on their intrinsic and altruistic motivational factors were higher than those of male prospective teachers' perceptions. On the other hand, the mean value of male prospective teachers' perceptions on their extrinsic motivational factors was higher than those of female prospective teachers' perceptions. Therefore, the results can be assumed that female prospective teachers had more intrinsic as well as altruistic motivational factors than male prospective teachers. In other words, male prospective teachers had more extrinsic motivational factors than female prospective teachers. These findings of the study are in line with the findings of studies of Saban (2003) and Johnston, McKeown & McEwen (1999). These studies found that female pre-service teachers chose teaching for more intrinsic and altruistic motives than male pre-service teachers and males placed greater significance on mercenary-based extrinsic motives. However, the findings showed that there was no significant difference in all dimensions of motivational factors influencing the career choice of teaching perceived by male and female prospective teachers according to independent samples *t*-test results.

Research question three examined that the mean values of first year prospective teachers' perceptions on their intrinsic and altruistic motivational factors influencing the career choice of teaching were higher than those of second year prospective teachers' perceptions according to their grade level. On the other hand, the mean values of second year prospective teachers' perceptions on their extrinsic motivational factors influencing the career choice of teaching were higher than those of first year prospective teachers' perceptions. Consequently, the findings can be assumed that first year prospective teachers had more intrinsic as well as altruistic motivational factors than second year prospective teachers. In other words, the results showed that second year prospective teachers had more extrinsic motivational factors than first year prospective teachers. As a result of independent samples *t*-test, there were significant differences in two dimensions such as altruistic and extrinsic motivational factors perceived by prospective teachers according to their grade level. For that reason, it can be analyzed that first year and second year prospective teachers had different altruistic and extrinsic motivational factors influencing the career choice of teaching.

The findings of the **research question four** also showed that the mean values of perceptions of prospective teachers who specialized science subjects were higher than those of perceptions of prospective teachers who specialized art subjects in all dimensions of motivational factors according to their specialization. According to the findings, it can be interpreted that prospective teachers who specialized science subjects had higher intrinsic, altruistic and extrinsic motivational factors than those who specialized art subjects in choosing teaching as a career. As a result of independent samples *t*-test, there was no significant difference in all dimensions of motivational factors influencing the career choice of teaching perceived by prospective teachers according to their specialization.

In the findings of **research question five**, the mean values of prospective teachers' perceptions on their intrinsic and altruistic motivational factors influencing the career choice of teaching were high and those of prospective teachers' perceptions on their extrinsic motivational factors were moderate according to their age. According to ANOVA results, there were significant differences in two dimensions such as intrinsic and altruistic motivational factors influencing the career choice of teaching perceived by prospective teachers according to their age. Moreover, as a result of Multiple Comparisons Test (Game-Howell), there was a significant difference in the dimension of altruistic motivational factors perceived by prospective teachers who were between

20 years old and 16, 17 and 18 years old. This can be concluded that 20 years old prospective teachers had higher altruistic motivational factors than others who were 16, 17 and 18 years old in choosing teaching as a career.

Moreover, respondents from two Education Colleges in Mandalay Region were asked to respond two open-ended questions at the end of the questionnaire. The *first question* asked prospective teachers to describe why they chose the teaching career by giving their main reasons. The *second question* asked whether they had satisfaction or not in their career choice of teaching and asked them to give their own comments. In the responses, most of the prospective teachers have intrinsic and altruistic motivation when they chose teaching career. This finding was related to the quantitative studies.

In conclusion, recruitment of the right attitude and attributes of prospective teachers is important as the roles played by them will not only have a great impact on the profession they are trained in but also as future role models for many generations to come. In addition, authorities of universities and colleges of Education also need to understand the different motivating factors that influence teachers to teach in order for them to provide the necessary support strategies depending on whether motivation of newly trained teachers is largely triggered by intrinsic or extrinsic factors. In addition, proactive measures can be developed by the management of Universities of Education and Education Colleges in order to develop more intrinsic motivational factors than extrinsic factors during the total duration of teacher education programme before joining the teaching workforce. Measures can also be taken when recruiting new prospective teachers to ensure that new recruits are attracted to teaching because they wanted to be teachers (intrinsic factors) and not because of other external influences (extrinsic benefits).

Recommendations for Further Study

This study is conducted only in two Education Colleges in Mandalay Region with a sample of 295 participants. As further research, larger sample and different education colleges and universities are needed in order to sketch broader picture of prospective teachers' motivational factors influencing the career choice of teaching. Although this study investigated the perceptions of first year and second year prospective teachers, longitudinal studies including different educational universities as well as colleges and different grade levels are required in the future in order to understand deeply the process of motivation changes.

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SELF-INITIATED PROFESSIONAL DEVELOPMENT OF TEACHER EDUCATORS

Aung Soe Win[1] and Zin Nwe Than[2]

Abstract

This study focuses on self-initiated professional development of teacher educators from two universities. The purpose of this study was to investigate the perceptions of self-initiated professional development of teacher educators from two universities located in Sagaing Region. A survey instrument, *Self-initiated Professional Development Questionnaire (SPDQ)* developed by the researchers was used to measure self-initiated professional development of teacher educators. It included44 items using five point Likert scale and consisted of four dimensions: ways of learning, opportunities to learn, attitude changes, and challenges. The reliability of *Self-initiated Professional Development Questionnaire*, with Cronbach's alpha coefficient, was 0.864. One hundred and ninety three teacher educators from two universities located in Sagaing Township were selected by using purposive sampling method. Descriptive statistics such as means and standard deviations, independent samples *t*-test, one-way ANOVA and Post Hoc multiple comparison tests (Tukey HSD and Games-Howell) were used to analyze data. The results of the study indicated that collaborative learning was highly practiced by teacher educators than other three dimensions, and extrinsic support of the institution was higher than intrinsic support. In addition, teaching practice and pedagogical knowledge of teacher educators were at the high level of changes after self-initiated professional development activities. Moreover, teacher educators showed that they faced more challenges in the dimension of "autonomy" than in others. In a way, this means that teacher educators often use self-initiated professional development activities to develop their institutions which is essential for reforming the education system and encounter some shortcomings that needed to be fulfilled in their daily life.

Keywords: Professional development of teachers, Self-initiated professional development of teacher, Teacher attitude

Introduction

Living in an environment, where knowledge, technology, concepts, philosophies, almost everything is rapidly changing, teaching becomes an extremely complex and demanding occupation. Keeping pace with the continuous changes and developments is considered to be a necessity for the quality of teaching and education. Therefore, ongoing professional development becomes a vital component in teachers' lives (Karaaslan, 2003). Professional development is an ongoing learning opportunity and is a necessary component of how schools learn and use information. The continuing task for educators is to use data to design and implement instruction that encourages growth from the professional development experiences of teachers. Professional development efforts should be available to all members of the school system (Johnson, 2015). Interestingly, as highlighted by Bredeson (2002), there are a plethora of terms such as in-service, staff development, continuing education, training, and self-improvement that are used interchangeably with the term professional development with little regard for any conceptual and practical differences.

Despite the apparent lack of consensus, most of the literature base reviews described teachers' professional development as an intentional, ongoing and systematic process (Bolam, 2002; Gabriel, Day & Allington, 2011; Guskey, 2000, as cited in Aminudin, 2012) of formal and informal education, training, learning and support activities taking place in either external or work-based settings (Bolam, 2002; Hawley & Valli, 1999, as cited in Aminudin, 2012) and proactively engaged in by qualified, professional teachers, school principals and other school leaders, alone or with others, which have direct or indirect benefit to the individual teacher, the school and also the nation (Bolam, 2002; Day,

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1999, as cited in Aminudin, 2012). It can be made available through external expertise in the form of courses, workshops or formal qualification programmes, through collaboration between schools or teachers across schools (e.g. observational visits to other schools or teacher networks) or within the schools in which teachers work (OECD, 2009).

Purpose of the Study

The general purpose of the study is to investigate the self-initiated professional development of teacher educators in two universities of Sagaing. The specific purposes are:

- to find out the ways of learning practiced by teacher educators,
- to study the perceptions of teacher educators on opportunities to learn supplied by their institution,
- to investigate the changes of teacher educators' attitude after making self-initiated professional development activities,
- to examine the challenges encountered by teacher educators for change and growth, and
- to explore if there are significant differences in perceptions of teacher educators on self-initiated professional development according to their demographic data (gender, age and position).

Research Questions

1. What are the ways of learning practiced by teacher educators?
2. What are the perceptions of teacher educators on opportunities to learn supplied by their institution?
3. What are the changes of teacher educators' attitude after making self-initiated professional development activities?
4. What are the challenges encountered by teacher educators for change and growth?
5. Are there any significant differences in perceptions of teacher educators on self-initiated professional development according to their demographic data (gender, age and position)?

Definitions of Key Terms

The terms used throughout the current study are defined for clarifying and understanding in the following.

- **Professional development of teachers**: A process of continual intellectual, experiential, and attitudinal growth of teachers (Bailey, Kurtis & Nunan, 1998, as cited in Karaaslan, 2003).

- **Self-initiated professional development of teachers**: Teachers' own development of intellect, experience and attitudes, which is initiated by themselves (Karaaslan, 2003).

In this study, self-initiated professional development of teacher educators are measured by four dimensions such as *ways of learning* practiced by teacher educators, *opportunities to learn* supplied by their institution, *attitude changes* of teacher educators after making self-initiated professional development activities, and the *challenges* encountered by teacher educators for change and growth.

- **Teacher attitude**: Teachers' feeling, manner, or behavior toward a situation or a cause (Karaaslan, 2003).

Scope of the Study

The scope of this study is limited to two universities located in Sagaing Township. The findings of the study may not be generalized to any other university than universities located in Sagaing Township.

Conceptual Frameworks

The framework is based on Burrell's and Morgan's (1979, as cited in Dempster, 2001) paradigms of social theory. In applying socio-cultural theory and Vygotsky's thoughts and ideas, Warford (2011, as cited in Postholm, 2012) claims that teachers' learning is situated. The term "professional development" is defined by the National Staff Development Council (NSDC) to mean "a comprehensive, sustained, and intensive approach to improving teachers' and principals' effectiveness in raising student achievement, and may be supported by activities such as courses, workshops, institutes, networks, and conferences" (Wei, Darling- Hammond, Andree, Richardson &Orphanos, 2009, as cited in Yarema, 2015).

Roosevelt (2008, as cited in Shabani, Khatip & Ebadi, 2010) holds that the main goal of education from Vygotskian perspective is to keep learners in their own zone of proximal development (ZPDs) as often as possible by giving them interesting and culturally meaningful learning and problem-solving tasks that are slightly more difficult than what they do alone, such that they will need to work together either with another, more competent peer or with a teacher or adult to finish the task. The idea is that after completing the task jointly, the learner will likely be able to complete the same task individually next time, and through that process, the learner's ZPD for that particular task will have been raised. This process is then repeated at the higher level of task difficulty that the learner's new ZPD requires. In order for life-long learning to occur, adults need to be taught how to learn (Caruth, 2014, as cited in Reichert, 2016). Peterson and Ray (2013, as cited in Reichert, 2016) concluded adults need to learn how to be life-long learners due to the anticipated longer life spans for humans.

Traditional models of professional development experienced in American schools are of short duration and do not provide the time, regular follow-up, and reinforcement opportunities essential to successful professional development. The teachers surveyed by NSCD reported low ratings of the usefulness of most professional development activities, as well as a desire for further professional development in the content they taught, classroom management, teaching special needs students, and other topics. These responses are indicators of the insufficiency of the professional development infrastructure in place in most states and communities (Wei et al., 2009, as cited in Yarema, 2015).

Review of Related Literature

Teachers are important component of education in the realization of educational goals. They are also the most important person in teaching who manages learning experiences and environments. In teaching, teachers use themselves and their knowledge, skills, attitude, and practice and students learning achievement highly depends on teachers' readiness in establishing the activity (Namunga & Otunga, 2012, as cited in Deni Putri Adnyani, 2015). Teachers play an important role in teaching and learning process in order to improve student outcomes and their effects towards students' learning appear to be sustained and accumulative (Darling-Hammond, Wei & Johnson, 2012, as cited in Deni Putri Adnyani, 2015).

Teachers first of all need to observe their performance to reflect upon. Diary writing, peer observation, action research, video or audio taping are some of the techniques that can be used to self-reflect on teaching performance. When a teacher observes his/ her own teaching and reflects upon it, he/ she means to evaluate his/ her performance and notice the strong and weak points in his/ her teaching. This self-evaluation is the only true evaluation (Karaaslan, 2003).

Nikolic (2002) argues that self-evaluation is a powerful means of achieving permanent positive change than any other method of professional growth or supervision because teachers can accomplish most by working on their own. They self-evaluate voluntarily, and this factor ensures they are motivated to experiment and willing to change. Self-evaluation can be achieved by combining self-

reflection with some techniques like using checklists, rating scales, questionnaires, peer observations, audio or video recordings and keeping diaries.

Research Methodology

Research Method

Descriptive research method was used in this study.

Participants

Although there were 233 teacher educators in two universities, only 193 (25 males and 169 females) teacher educators participated as the sample in the study.

Instruments

Only one instrument, *Self-initiated Professional Development Questionnaire (SPDQ)* developed by the researchers, was used to study the self-initiated professional development of teacher educators. It included 44 items and four dimensions. To make the instrument more accurate and to avoid response bias, the items of the questionnaire were mixed. Their level of agreement was on the five-point Likert scale ranging from 1 never to always 5 for the first two dimensions and from 1 strongly disagree to 5 strongly agree for the second two dimensions.

Data Collection Procedure

For the content validity, the questionnaire were evaluated and revised by the experts who were well experienced and mastery in this field. According to their review, comments and suggestions, the instrument was modified again. To test the reliability of the questionnaire items, pilot study was conducted in one Education College. After requesting permission from the responsible persons, questionnaires for teacher educators were distributed to teacher educators in two universities on the 5th and 6th December, 2018 and collected them on 11th and 12th December, 2018. Data obtained from the study were scored.

Research Findings

Table 1 Mean Values and Standard Deviations of Ways of Learning Practiced by Teacher Educators

Ways of Learning	Mean	SD	Remark
Inquiry-based Learning	3.60	.629	Moderate Level
Peer Observation	3.60	.749	Moderate Level
Collaborative Learning	3.90	.708	High Level
In-service Training and Practiced-based Learning	3.30	.869	Moderate Level

Note: 1.00-2.33 =Low Level   2.34-3.67=Moderate Level   3.68-5.00=High Level

According to Table 1, it was found that the levels of "inquiry-based learning", "peer observation", and "in-service training and practiced-based learning" practiced by teacher educators were moderate levels while the level "collaborative learning" perceived by teacher educators was high level.

Table 2   Mean Values and Standard Deviations of Perceptions of Teacher Educators on Opportunities to Learn Supplied by their Institution

Opportunities to Learn	Mean	SD	Remark
Extrinsic Support	3.80	.893	High Level
Intrinsic Support	3.30	.684	Moderate Level

Note: 1.00-2.33 =Low Level   2.34-3.67=Moderate Level   3.68-5.00=High Level

Table 2 shows mean values of perceptions of teacher educators on opportunities to learn supplied by their institution. When studying the mean values of teacher educators' perceptions on "extrinsic" and "intrinsic" support, high level was found in "extrinsic" support but moderate level was found in "intrinsic" support.

According to Table 3, the mean values of teacher educators' perceptions on both "teaching practice" and "pedagogical knowledge" indicated that they had high levels of changes in "teaching practice" and "pedagogical knowledge" after doing self-initiated professional development activities.

Table 3 Mean Values and Standard Deviations of Changes and Hinders of Teacher Educators' Attitude after Making Self-initiated Professional Development Activities

Attitude Changes	Mean	SD	Remark
Teaching Practice	4.10	.374	High Level
Pedagogical Knowledge	4.00	.389	High Level

Note: 1.00-2.33 =Low Level   2.34-3.67=Moderate Level   3.68-5.00=High Level

According to Table 4, moderate levels of challenges and hinders encountered by teacher educators were found in "subject matter", "technology and finance" and "workload" but high level of challenges encountered by teacher educators was found in "autonomy" for change and growth.

Table 4   Mean Values and Standard Deviation of Challenges and Hinders Encountered by Teacher Educators for Change and Growth

Dimension	Mean	SD	Remark
Subject Matter	2.70	.717	Moderate Level
Autonomy	3.80	.749	High Level
Technology and Finance	2.90	.778	Moderate Level
Workload	3.10	.819	Moderate Level

Note: 1.00-2.33 =Low Level   2.34-3.67=Moderate Level   3.68-5.00=High Level

In order to explore if there were significant differences in perceptions of teacher educators on "way of learning" according to their gender, independent samples *t*-test was calculated. "Collaborative learning" was at high level based on the perceptions of male and female teacher educators. However, there was no significant difference inperceptions of teacher educators on "way of learning" according to their gender (See: Table 5).

Table 5   Independent Samples *t*-Test Results for Ways of Learning Perceived by Teacher Educators according to their Gender

Dimension	Gender	N	Mean	*t*	MD	*df*	*p*
Inquiry-based Learning	Male	25	3.59	-.042	-.01	191	.967
	Female	168	3.60				
Peer Observation	Male	25	3.50	-.926	-.15	191	.355
	Female	168	3.65				
Collaborative Learning	Male	25	3.78	-.841	-.13	191	.401
	Female	168	3.91				
In-service Training and Practice-based Learning	Male	25	3.48	1.026	.19	191	.306
	Female	168	3.29				

Note: *p<0.05*

Table 6 Independent Samples *t*-Test Results for Opportunities to Learn Perceived by Teacher Educators according to Gender

Dimensions	Gender	N	Mean	*t*	MD	*df*	*p*
Extrinsic Support	Male	25	3.72	-.708	-.110	191	.483
	Female	168	3.83				
Intrinsic Support	Male	25	3.34	.042	.006	191	.967
	Female	168	3.33				

Note: *p<0.05*

In order to find out whether there were significant differences in the perceptions of teacher educators on "opportunities to learn" according to their gender or not, independent samples *t*-test was calculated. According to Table 6, there was no significant difference in all dimensions of teacher educators' perceptions on "opportunities to learn". The result showed that female teacher educators received more opportunities of "extrinsic support" than male teacher educators whereas male teacher educators got more opportunities of "intrinsic support".

Again, in order to investigate if there were significant differences in the perceptions of teacher educators on "attitude changes" according to gender or not, independent samples *t*-test was used.

Table 7 Independent Samples *t*-Test Results for Attitude Changes Perceived by Teacher Educators according to Gender

Dimensions	Gender	N	Mean	*t*	MD	*df*	*p*
Teaching Practices	Male	25	4.21	1.476	.118	191	.142
	Female	168	4.09				
Pedagogical Knowledge	Male	25	4.15	1.677	.139	191	.095
	Female	168	4.01				

Note: *p<0.05*

According to Table 7, there was no significant difference in all dimensions of teacher educators' perceptions on "attitude changes" between male and female. Moreover, it can be assumed that male teacher educators highly had higher levels of changes in both dimensions of "attitude changes" than female teacher educators.

Again, in order to investigate if there were significant differences in the perceptions of teacher educators on "challenges and hinders" according to gender or not, independent samples *t*-test was used. As shown in Table 8, there was no significant difference in all dimensions of

teacher educators' perceptions on "challenges and hinders" according to their gender. The mean value indicated that male teacher educators faced more challenges in all dimensions of "challenges and hinders" than female teacher educators.

Table 8 Independent Samples *t*-Test Results for Challenges and Hinders Perceived by Teacher Educators according to Gender

Dimensions	Gender	N	Mean	*t*	MD	*df*	*p*
Subject Matter	Male	25	2.81	.525	0.08	191	.600
	Female	168	2.73				
Autonomy	Male	25	3.89	.460	0.07	191	.646
	Female	168	3.82				
Finance and Technology	Male	25	2.95	.191	0.03	191	**.848**
	Female	168	2.92				
Workload	Male	25	3.22	.489	0.08	191	.625
	Female	168	3.13				

Note: $p<0.05$

Table 9 Mean Values and Standard Deviation of Ways of Learning Practiced by Teacher Educators according to their Age

Age	Ways of Learning							
	Inquiry-based Learning		Peer Observation		Collaborative Learning		In-service Training and Practiced-based Learning	
	Mean	(SD)	Mean	(SD)	Mean	(SD)	Mean	(SD)
<25	3.45	0.77	3.64	0.67	3.82	0.87	3.36	0.75
25-29	3.75	0.60	3.70	0.77	3.93	0.76	3.24	0.79
30-34	3.73	0.48	3.50	0.79	3.94	0.65	3.42	0.92
34-39	3.54	0.53	3.43	0.80	3.82	0.80	3.07	1.12
40-44	3.51	0.63	3.60	0.69	3.77	0.55	3.29	0.68
45-49	3.58	0.64	3.57	0.73	3.88	0.67	3.50	0.79
50-54	3.27	0.71	3.52	0.71	3.73	0.69	3.12	1.07
>55	3.68	0.65	3.97	0.77	4.21	0.71	3.60	0.92
Total	**3.59**	**0.63**	**3.63**	**0.75**	**4.21**	**0.71**	**3.31**	**0.87**

According to Table 9, it can be assumed that teacher educators between the age of 25 and 29 had the highest levels in "inquiry-based learning" and "peer observation" than the other age groups. Again, teacher educators above the age of 55 possessed the highest levels in "collaborative leaning" and "in-service training and practiced-based learning" than the other age groups. On the other hand, the performance of teacher educators between the age of 34 and 39 in "peer observation" and "in-service training and practiced-based learning" were the least while the performance of teacher educators between the age of 50 and 54 in "inquiry-based learning" and "collaborative learning" were the least.

In order to find out whether there were significant differences in teacher educators' perceptions of "Ways of Learning" based on their age or not, one-way ANOVA test was calculated. However, there was no significant difference in perceptions of teacher educators on all dimensions of "Ways of Learning".

Table 10 Mean Values and Standard Deviation Teacher Educators' Perceptions on Opportunities to Learn Supplied by their Institution according to their Age

Age	Opportunities to Learn			
	Extrinsic Support		Intrinsic Support	
	Mean	**SD**	**Mean**	**SD**
<25	3.59	1.30	3.34	0.90
25-29	3.99	0.84	3.29	0.68
30-34	3.79	0.91	3.28	0.50
35-39	3.39	1.04	3.06	0.75
40-44	3.63	0.92	3.16	0.68
45-49	3.86	0.90	3.64	0.79
50-54	3.75	0.68	3.37	0.55
>55	4.08	0.79	3.55	0.68
Total	**3.81**	**0.89**	**3.33**	**0.68**

As shown in Table 10, it can be assumed that teacher educators above the age of 55 had more opportunities to learn with respect to "extrinsic support" than the other age group. Moreover, teacher educators between the age 45 and 49 received more opportunities concerning with "intrinsic support" than the other age groups. On the other hand, among the age groups, the opportunities regarding "extrinsic support" and "intrinsic support" acquired by teacher educators between the age of 35 and 39 were the least.

To find out whether there were significant differences in teacher educators' perceptions of "Opportunities to Learn" based on their age or not, one-way ANOVA test was calculated. However, there was no significant difference in perceptions of teacher educators on all dimensions of "Opportunities to Learn" according to their age.

Table 11 Mean Values and Standard Deviation of Attitude Changes Practiced by Teacher Educators according to their Age

Age	Attitude Changes			
	Teaching Practice		Pedagogical Knowledge	
	Mean	**SD**	**Mean**	**SD**
<25	4.06	0.08	4.10	0.22
25-29	4.10	0.40	4.00	0.43
30-34	4.00	0.38	4.00	0.27
35-39	4.01	0.30	4.00	0.39
40-44	4.04	0.32	4.00	0.28
45-49	4.23	0.40	4.07	0.46
50-54	4.16	0.37	4.09	0.42
>55	4.24	0.42	4.23	0.43
Total	**4.11**	**0.37**	**4.03**	**0.39**

According to Table 11, the result indicated that teacher educators above the age of 55 had the higher level of changes in both dimensions of "teaching practices" and "pedagogical knowledge" than the other age groups. On the other hand, among the age groups, the level of changes in "teaching practices" by teacher educators between the age of 30 and 34 was the least while teacher educators in the age groups of 25-29, 30-34 and 35-39 had the lowest level of changes in "pedagogical knowledge".

To find out whether there were significant differences in teacher educators' perceptions of "Attitudes Changes" based on their age or not, one-way ANOVA test was calculated. However, there was no significant difference in perceptions of teacher educators on all dimensions of "Attitudes Changes" according to their age.

Table 12 Mean Values and Standard Deviation of Challenges and Hinders Perceived by Teacher Educators according to their Age

Age	Challenges and Hinders							
	Subject Matter		Autonomy		Technology and Finance		Workload	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD)
<25	2.82	0.82	3.76	0.76	2.91	0.94	3.36	0.40
25-29	2.93	0.69	3.89	0.72	3.07	0.74	3.26	0.76
30-34	2.70	0.51	4.03	0.64	2.86	0.57	3.23	0.68
35-39	3.07	0.69	3.7	0.74	2.86	0.61	3.46	0.66
40-44	2.84	0.66	3.63	0.76	3.17	0.61	3.27	0.71
45-49	2.63	0.62	3.84	0.78	2.86	0.85	2.98	0.81
50-54	2.44	0.69	3.68	0.93	2.79	0.83	2.75	0.94
>55	2.34	0.95	3.96	0.61	2.49	1.08	2.87	1.03
Total	**2.74**	**0.72**	**3.83**	**0.75**	**2.92**	**0.78**	**3.15**	**0.82**

According to Table 12, the result indicated that teacher educators between the age of 35 and 39 encountered more challenges in "subject matter" and "work load" than the other age groups. Again, teacher educators between the age of 30 and 34 faced more challenges in "autonomy" than the other age group and the challenges in "technology and finance" encountered by teacher educators between the age of 40 and 44 were the most. On the other hand, teacher educators above the age of 55 faced less challenges in "subject matter" and "technological finance" than the other age groups. Moreover, the challenges in "autonomy" encountered by teacher educators between the age of 40 and 44 were the least while those in "workload" got by teacher educators between the age of 50 and 54 were the least (See: Table 12).

To find out whether there were significant differences in teacher educators' perceptions of "Challenges and Hinders" based on their age or not, one-way ANOVA test was calculated (See: Table 13).

Table 13 ANOVA Results of Challenges and Hinders Perceived by Teacher Educators according to their Age

Dimensions		Sum of Squares	*df*	Mean Square	*F*	*p*
Subject Matter	Between Groups	9.211	7	1.316	2.719	**.010**
	Within Groups	89.519	185	.484		
	Total	**98.729**	**192**			

Note: *p<0.05*

Although no significant differences were found in three dimensions, *Autonomy, Finance and Technology, and workload,* it can be seen that there is a significant difference in *Subject Matter* according to the level of age. In order to find out which particular groups had the significant differences in *Subject Matter*, Post Hoc Multiple Comparisons Test (Tukey) was conducted (See: Table 13).

Table 14   Results of Multiple Comparisons for "Challenges and Hinders" Performed by Teacher Educators According to their Age

Dimensions of Challenges and Hinders	Age (I)	Age (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Subject Matter	25-29	>55	.584*	.186	**.040**	.0149	1.1527

Note: *p<0.05*

In order to find out which particular groups had the significant differences in *Subject Matter*, Post Hoc Multiple Comparisons Test (Tukey) was conducted. As shown in Table 14, there were significant differences between the age group of 25-29 and the age group of over 55 at the *p<0.05* level. This means that 25 to 29 years old teachers face challenges and hinders of *Subject Matter* than over 55 years old teachers.

According to Table 15, the result showed that professors more practiced "inquiry-based learning", "peer observation", "collaborative learning" and "in-service training and practiced-based learning" than the others. However, "inquiry-based learning", "peer observation" and "collaborative learning" were less practiced by lecturers than the other groups whereas the performance of "in-service training and practiced-based learning" by assistant lecturers are the least (See: Table 15).

Table 15   Mean Values and Standard Deviation of Ways of Learning Practiced by Teacher Educators according to their Position

Position	Ways of Learning							
	Inquiry-based Learning		Peer Observation		Collaborative Learning		In-service Training and Practiced-based Learning	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
T/D	3.64	0.60	3.62	0.79	3.83	0.77	3.19	0.81
AL	3.60	0.61	3.60	0.69	3.90	0.69	3.14	0.88
L	3.38	0.65	3.48	0.72	3.80	0.62	3.40	0.76
AP	3.97	0.40	3.88	0.71	4.04	0.66	3.92	0.70
P	4.00	0.80	4.57	0.61	4.64	0.63	4.36	1.11
Total	3.60	0.63	3.63	0.75	3.90	0.71	3.31	0.87

Note: T/D = Tutor/ Demonstrator   AL= Assistant Lecturer   L= Lecturer
          AP = Associate Professor   P   = Professor

In order to find out whether there were significant differences in the teacher educators' perceptions of "Ways of Learning" according to their position, or not, one-way ANOVA test was calculated.

Table 16   ANOVA Results of Ways of Learning Perceived by Teacher Educators according to their Position

Dimensions of Ways of Learning		Sum of Squares	df	Mean Square	F	p
Inquiry-based Learning	Between Groups	5.290	4	1.322	3.510	**.009**
	Within Groups	70.828	188	.377		
	Total	76.118	192			
Peer Observation	Between Groups	8.203	4	2.051	3.872	**.005**
	Within Groups	99.559	188	.530		
	Total	107.762	192			
Collaborative Learning	Between Groups	4.873	4	1.218	2.507	**.044**
	Within Groups	91.342	188	.486		
	Total	96.215	192			
In-service Training and Practice-based Learning	Between Groups	15.685	4	3.921	5.688	**.000**
	Within Groups	129.600	188	.689		
	Total	145.285	192			

Note: $p < 0.05$

According to Table 16, there was a significant difference in perceptions of teacher educators on all dimensions of "Inquiry-based Learning, Peer Observation, Collaborative Learning and In-service Training and Practice-based Learning" according to their position.

Post Hoc Comparisons Test (Tukey) was calculated to determine the significant source of the differences. According to Table 17, there were significant differences in "inquiry-based learning" between "lecturer" and "associate professor" at $p < 0.05$ level. In peer observation, the significant differences between "professor" and "tutor/demonstrator", "professor" and "assistant lecturer" and, "professor" and lecturer" were found. Moreover, while having the significant differences between "professor" and "tutor/demonstrator" and between "professor" and "lecturer" in "collaborative learning", there were also significant differences between "associate professor" and "tutor/demonstrator and assistant lecturer" in "in-service training and practice-based learning".

Table 17   Results of Multiple Comparisons for "Ways of Learning" Performed by Teachers Educators According to their Position

Dimensions of Ways of Learning	Position (I)	Position (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Inquiry-based Learning	L	AP	-.590*	.145	**.003**	-1.0117	-.1693
Peer Observation	P	T/D	.953*	.252	**.029**	.0986	1.8070
		AL	.974*	.245	**.026**	.1217	1.8271
		L	1.093	.253	**.013**	.2378	1.9476
Collaborative Learning	P	T/D	.812*	.279	**.032**	.0448	1.5799
		L	.845*	.282	**.026**	.0671	1.6228
In-service Training and Practice-based Learning	AP	T/D	.737*	.222	**.025**	.0722	1.4011
		AL	.781*	.222	**.017**	.1158	1.4468

Note: **T**/D = Tutor/ Demonstrator   AL= Assistant Lecturer   L= Lecturer
         AP = Associate Professor   P = Professor

As shown in Table 18, the result indicated that professors received more opportunities concerning with "extrinsic support" and "intrinsic support" than the others. The opportunities with regard to "extrinsic support" obtained by lecturers are the least while assistant lectures had less opportunities regarding "intrinsic support" are the least.

Table 18 Mean Values and Standard Deviation Teacher Educators' Perceptions on Opportunities to Learn Supplied by their Institution according to their Position

Position	Opportunities to Learn			
	Extrinsic Support		**Intrinsic Support**	
	Mean	**SD**	**Mean**	**SD**
T/D	3.82	1.02	3.17	0.71
AL	3.77	0.85	3.32	0.64
L	3.76	0.84	3.38	0.69
AP	4.04	0.69	3.65	0.57
P	4.21	0.86	3.82	0.82
Total	3.81	0.89	3.33	0.68

Note: T/D = Tutor/ Demonstrator   AL= Assistant Lecturer   L= Lecturer
                AP = Associate Professor   P = Professor

In order to find out whether there were significant differences in the teacher educators' perceptions of "Opportunities to Learn" according to their position, or not, one-way ANOVA test was calculated. According to Table 19, there was a significant difference in perceptions of teacher educators on "intrinsic support" according to their position.

Table 19 ANOVA Results of Opportunities to Learn Perceived by Teacher Educators according to their Position

Dimensions		Sum of Squares	*df*	Mean Square	*F*	*p*
Intrinsic Support	Between Groups	4.581	4	1.145	2.526	**.042**
	Within Groups	85.257	188	.453		
	Total	89.838	192			

Note: *p<0.05*

Post Hoc Comparisons Test (Tukey) was calculated to determine the significant source of the differences. According to Table 20, there were significant differences in "intrinsic support" between "Professor" and "Tutor/ Demonstrator" at *p<0.05* level.

Table 20 Results of Multiple Comparisons for "Opportunities to Learn" Performed by Teachers Educators According to their Position

Dimension	Position (I)	Position (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	**Upper Bound**
Intrinsic Support	P	T/D	.939[*]	.325	**.035**	.0437	1.8352

Note: T/D = Tutor/ Demonstrator   P= Professor

As shown in Table 21, after self-initiated professional development activities, professors had higher level of changes in both dimensions of "teaching practices" and "pedagogical knowledge" than the others. However, the level of changes in "teaching practices" and "pedagogical knowledge" by tutors or demonstrators were the least comparing to other groups.

Table 21 Mean Values and Standard Deviation of Attitude Changes Practiced by Teacher Educators according to their Position

Position	Attitude Changes			
	Teaching Practice		Pedagogical Knowledge	
	Mean	SD	Mean	SD
T/D	4.07	0.36	4.00	0.37
AL	4.04	0.36	4.00	0.38
L	4.19	0.35	4.08	0.36
AP	4.23	0.41	4.15	0.40
P	4.28	0.62	4.38	0.60
Total	4.11	0.37	4.03	0.39

Note: T/D = Tutor/ Demonstrator   AL= Assistant Lecturer   L= Lecturer
         AP = Associate Professor   P   = Professor

In order to find out whether there were significant differences in the teacher educators' perceptions of "Attitude Changes" according to their position, or not, one-way ANOVA test was calculated.

Table 22 ANOVA Results of Attitude Changes Perceived by Teacher Educators according to their Position

Dimensions		Sum of Squares	*df*	Mean Square	*F*	*p*
Pedagogical Knowledge	Between Groups	1.517	4	.379	2.580	**.039**
	Within Groups	27.647	188	.147		
	Total	29.164	192			

Note: *p<0.05*

There were significant differences in the dimensions of "pedagogical knowledge" according to teacher educators' position.

Again, Post Hoc Comparisons Test (Tukey) was calculated to determine the significant source of the differences. However, there was no significant source of the difference in "pedagogical knowledge" according to position.

Table 23 Mean Values and Standard Deviation of Challenges and Hinders Practiced by Teacher Educators according to their Position

Position	Challenges and Hinders							
	Subject Matter		Autonomy		Technology and Finance		Workload	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
T/D	2.90	0.74	3.81	0.71	3.03	0.80	3.27	0.80
AL	2.79	0.61	3.72	0.78	2.90	0.60	3.12	0.69
L	2.61	0.74	3.76	0.76	2.90	0.85	3.13	0.92
AP	2.33	0.62	4.33	0.43	2.79	0.89	2.92	0.84
P	2.57	1.16	4.52	0.50	2.62	1.32	2.86	1.34
Total	2.74	0.72	3.83	0.75	2.92	0.78	3.15	0.82

Note: T/D = Tutor/ Demonstrator   AL= Assistant Lecturer L= Lecturer AP = Associate Professor   P   = Professor

According to Table 23, the result indicated that tutor and demonstrator encountered more challenges in "subject matter", "technology and finance" and "work load" than the other groups while professors faced more challenges in "autonomy" than the other groups. On the other hand, the challenges in "subject matter" and "technological finance" faced by professors were the least. Moreover, the challenges in "subject matter" encountered by associate professors were the least, whereas those in "autonomy" got by assistant lecturers were the least.

Table 24 ANOVA Results of Challenges and Hinders Perceived by Teacher Educators according to their Position

Dimensions		Sum of Squares	*df*	Mean Square	*F*	*p*
Autonomy	Between Groups	7.707	4	1.927	3.627	.007
	Within Groups	99.873	188	.531		
	Total	107.580	192			

Note: $p<0.05$

In order to find out whether there were significant differences in the teacher educators' perceptions of "Challenges and Hinders" according to their position, or not, one-way ANOVA test was calculated. The findings in Table 24 showed that there were significant differences in "autonomy" according to teacher educators' position. However, there was no significant difference in other dimensions of "Challenges and Hinders". Post Hoc Comparisons (Tukey) was calculated to determine the significant source of differences in this dimension.

Table 25 Results of Multiple Comparisons for "Challenges and Hinders" Performed by Teacher Educators According to their Position

Dimensions of Challenges and Hinders	Position (I)	Position (J)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Autonomy	AL	AP	-.612*	.221	.048	-1.2204	-.0035
		P	-.802*	.289	.048	-1.5999	-.0050

Note: AL= Assistant Lecturer,   AP = Associate Professor,   P = Professor

As shown in Table 25, there were significant differences in *Autonomy* between Lecturers and Associate Professors, and Professors at $p<0.05$ level (see: Table 25). In other words, teacher educators who are in the position of Associate Professor and Professor had higher Autonomy than Lecturers.

Discussion and Conclusion

The purpose of this study is to investigate the teacher educators' perceptions of self-initiated professional development. Five research questions were used in this study.

Research Question No (1) investigated teachers' perception levels of "Ways of Learning" for self-initiated professional development at two universities in Sagaing Township. Based on the research findings, teachers' perception levels were found at moderate level in three dimensions of "Inquiry-based learning, Peer Observation, and In-service Training and Practice-based Learning" although it was found that the level of "Collaborative Learning" was high. This means that teacher educators mostly practiced "Collaborative Learning" than other dimensions.

Again, **Research Question No (2)** investigated the levels of teacher educators' attitudes of supply for opportunities to learn in both universities. In this study, teachers' sense opportunities to learn consisted of two subscales, extrinsic support and intrinsic support. The research findings indicated that

extrinsic support had higher mean value for supplying opportunities to learn than intrinsic support. This means that teacher educators got higher level of extrinsic support than intrinsic support.

Research Question No (3) explored the "Teaching Practices and Pedagogical Knowledge" that changes after doing self-initiated professional development activities. According to teacher educators' perceptions, there were high level mean values in all subscales, teaching practice and pedagogical knowledge. This means that the teacher educators' attitude and character improved more than before after doing self-initiated professional development activities.

Next, **Research Question No (4)** investigated the challenges teacher educators encountered in doing self-initiated professional development activities. In this situation, the teacher educators' perception levels in three subscales, subject matter, workload, and technology and finance, were at moderate level although the fourth subscale, autonomy, was at the high level. This means that teacher educators did not have complete rights of freedom in trying to improve their profession.

Finally, **Research Question (5)** investigated significant differences in perceptions of teacher educators on self-initiated professional development according to their demographic data (gender, age and position). The findings pointed out that there was no significant differences in perceptions of teacher educators on "ways of learning", "opportunities to learn", "attitude changes" and "challenges and hinders" according to their gender. Next, according to teacher educators' age, there was no significant difference in perceptions of teacher educators on "ways of learning", "opportunities to learn" and "attitude changes". However, there was a significant difference in teacher educators' perceptions on one dimensions of "challenges and hinders", "subject matter". Moreover, according to teacher educators' position, there were significant differences in perceptions of teacher educators on all dimensions of "ways of learning", one dimension of "opportunities to learn", "intrinsic support", one dimension of "attitude changes", "pedagogical knowledge" and one dimension of "challenges and hinders", "autonomy".

In conclusion, teachers' sense of self-initiated professional development activities has such an important effect on the quality of teaching. Thus, schools should create positive school atmosphere to have the opportunity to enhance teachers' profession.

Recommendation for Further Study

The findings of this study have led the researcher to make the following recommendation for further research. Like this research, more research concerned with self-initiated professional development should be further conducted in other universities in Myanmar. Then, a large sample size should be considered so that many different results or reasons could produce to improve self-initiated professional development. Since the researcher has limited time and insufficient resources, only the teacher educators' attitudes could be studied upon self-initiated professional development. Then, a qualitative study would help to bring a deeper understanding of the thoughts, feelings and attitudes of participants about their perceptions of self-initiated professional development activities.

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RELATIONSHIPS AMONG PRINCIPAL'S RESOURCE MANAGEMENT COMPETENCIES, ORGANIZATIONAL CLIMATE AND TEACHERS' JOB PERFORMANCE

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Abstract

This research aims to explore the relationships among principal's resource management competencies, organizational climate and teachers' job performance at Basic Education High Schools in Mandalay. A total of six principals and 307 teachers from six sample high schools participated in this study. Quantitative research method was used in this study. Data were analyzed by the use of descriptive statistics such as means and standard deviations, and Pearson-product moment correlations. According to the findings, it was found that School 2 had "open climate", School 1 and School 3 had "autonomous climate", School 4 and School 6 had "paternal climate", and School 5 had "closed climate" respectively. Moreover, there was a positive and moderate correlation between "overall principal's resource management competencies" and "overall teachers' job performance" in sample high schools. Similarly, when studying the relationship between organizational climate and teachers' job performance, five dimensions such as "aloofness", "production emphasis" , "thrust", "consideration", and "intimacy" were positively and moderately correlated with "overall teachers' job performance". Again, there was a weak and negative correlation between "disengagement" dimension and "overall teachers' job performance" and a weak and positive correlation between "hindrance" dimension and "overall teachers' job performance". However, "esprit" dimension had high and positive correlation with "overall teachers' job performance".

Keywords: principal's resource management competencies, organizational climate, teachers' job performance

Introduction

Nowadays, the education system in Myanmar is moving toward the high quality education. Thus, learners, environments, content, process and outcomes all are needed to be high quality. Undoubtedly, teachers play one of the most important roles in creating and maintaining the high quality education. Thus, teachers' job performance and the factors supporting teachers' job performance have been the targets of considerable research and debate from which more questions have arisen. Among many factors supporting teachers' job performance, the main factors are principal's resource management competencies and their school climate (Raza, 2010).

Resource management competency is the possession of necessary skills to effectively manage school resources for productive improvement (Victor, 2017).The principal who is competency in human resource management can attract and retain enough competent and motivated teachers (Runhaar, 2016). In the view of Dangara (2016), material resource management has a direct impact on the academic success of teachers and students. According to Victor (2017), the principal who has good financial resource management can enhance excellence on job performance of teachers.

Similarly, organizational climate can be seen as characteristics that distinguish the organization from other organizations and that influence the behavior of people in the organizations (Gilmer, 1966:57, as cited in Hoy & Miskel, 2013). The school effectiveness and improvement cannot be achieved and sustained without the presence of a favorable school climate (Raza, 2010). In other words, organizational climate has highly effect on the motivation and behaviour of

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teachers. Thus, organizational climate is conducive to increasing the job performance of teachers (Balkar, 2015).

On the other hand, teachers' job performance is a complex phenomenon and the actual accomplishment of assigned task. Teachers' job performance refers to the extent to which teachers are committed to pedagogical delivery and display of moral uprightness and academic excellence in the teaching profession (Uko, Umosen & Caleb, 2015). It includes such activities as drawing of scheme of work, lesson plan, delivery of lesson, evaluation of students, reporting of students' progress (Maclean, 2018).

To sum up, by keeping in view the importance of principal's resource management competencies, organizational climate and teachers' job performance, this study was designed to investigate the relationships among principal's resource management competencies, organizational climate and teachers' job performance at Basic Education High Schools in Mandalay.

Purposes of the Study

The main purpose of this study is to explore the relationships among principal's resource management competencies, organizational climate and teachers' job performance at Basic Education High Schools in Mandalay. The specific purposes of this study are:

- To find out the perceptions of teachers on principal's resource management competencies of sample Basic Education High Schools in Mandalay,
- To explore the perceptions of teachers on their organizational climate of sample Basic Education High Schools in Mandalay,
- To investigate the perceptions of teachers on teachers' job performance of sample Basic Education High Schools in Mandalay,
- To explore the relationship between principal's resource management competencies and teachers' job performance of sample Basic Education High Schools in Mandalay, and
- To find out the relationship between organizational climate and teacher's job performance of sample Basic Education High Schools in Mandalay.

Research Questions

The following research questions guide the direction of the study.

1. What are the perceptions of teachers on principal's resource management competencies of sample Basic Education High Schools in Mandalay?
2. What are the perceptions of teachers on their organizational climate of sample Basic Education High Schools in Mandalay?
3. What are the perceptions of teachers on teachers' job performance of sample Basic Education High Schools in Mandalay?
4. What is the relationship between principal's resource management competencies and teachers' job performance of sample Basic Education High Schools in Mandalay?
5. What is the relationship between organizational climate and teachers' job performance of sample Basic Education High Schools in Mandalay?

Scope of the Study

1. The scope of this study is limited to Basic Education High Schools (not including Branch High Schools) in Mandalay because of the available time and resources of the researcher.

2. The sample high schools are limited to the schools in which the principals have at least two years of administrative service at the current schools.

3. The findings of this study may not be generalized to any other schools than the high schools in Mandalay.

Operational Definitions of the Study

For the purpose of clarity, this study utilizes following operational definitions.

- **Principal's Resource Management Competencies** refer to management competencies of principal in human resource management, material resource management, and financial resource management.

  (1) Competency in Human Resource Management refers to competency of principals in motivating teachers to contribute to their schools' objectives (Runhaar, 2016).

  (2) Competency in Material Resource Management refers to competency of principals in planning, procuring, storing, utilization and maintenance of school facilities to enhance the quality of teaching and learning process (Victor, 2017).

  (3) Competency in Financial Resource Management refers to competency of principals in planning, organizing and controlling of inflow and outflow of money aimed at achieving organizational success and development (Victor, 2017).

- **Organizational Climate:** Organizational climate results from the reciprocal effects of the principal's leadership behaviour as a leader and teachers' behaviour as a group. There are four dimensions of principal's leadership behaviour such as aloofness, production emphasis, thrust and consideration. Similarly, there are also four dimensions of teachers' behaviour such as disengagement, hindrance, esprit, and intimacy (Silver, 1983).

  (1) Aloofness refers to behaviour by the principal which is characterized as formal and impersonal (Halpin & Croft, 1963).

  (2) Production Emphasis refers to refers to the degree of active supervision the principal typically exercises over staff (Silver, 1983).

  (3) Thrust is the way some principals act as a role model for the type of behavior they expect of their staff (Raza, 2010).

  (4) Consideration is a concern for staff members as individual beings; it is synonymous with kindness and humanitarianism (Silver, 1983).

  (5) Disengagement refers to the teachers' psychological and physical distance from each other and from the school as a whole (Halpin, 1966, as cited in Silver, 1983).

  (6) Hindrance refers to the burdensomeness of clerical tasks and responsibilities unrelated to teaching (Silver, 1983).

  (7) Esprit refers to the morale, spirit and liveliness of the group of teachers (Silver, 1983).

  (8) Intimacy refers to the degree to which teachers share their private lives with each other and exchange confidences (Silver, 1983).

- **Teachers' Job Performance:** Teachers' Job Performance refers to the extent to which teachers are committed to pedagogical delivery and display of moral uprightness and academic excellence in the teaching profession (Uko *et al.*, 2015).

Review of Related Literature

The teacher is the most responsible for helping the students acquire the knowledge, skills and practical orientations essential for self as well as for national development. As the teacher is

the key person for students' achievement, it is necessary to support for the higher teachers' job performance (Raza, 2010).

One of the most important factors that support teachers' job performance is principal's resource management competencies. Management is leading, guiding and directing an organization for the accomplishment of pre-determined objectives (Sahni & Vayunandan, 2012). "A competency is a combination of tacit and explicit knowledge, behavior and skills that gives someone the potential for effectiveness in task performance" (Petersen, 2006). Resource management is the productive use of available resources in an efficient and effective ways in order to lead goals attainment. In this study, three types of resources such as human, financial and material are to be studied.

Human resource management (HRM) is particularly concerned with all the activities that contribute to successfully attracting, developing, motivating and maintaining a high-performing workforce that result in organizational success(Sims, 2002).Material resource management (MRM) refers to the effective and efficient utilization of physical facilities and instructional materials for the improvement of school (Dangara, 2016).Financial resource management (FRM) is the planning, organizing and controlling of inflow and outflow of money aimed at achieving organizational success and development (Victor, 2017).

Then, organizational climate is also an important factor that supports teachers' job performance. Organization can be defined as "a social unit within which people have achieved somewhat stable relations among themselves in order to facilitate obtaining a set of objectives or goals" (Litterer, 1963, as cited in Silver, 1983). "Climate is that the constitution of enduring characteristics of the ecology, milieu, social system, and culture particularly" (TenatoTaguiri, 1968:23, as cited in Hoy & Miskel, 2013). Organizational climate can be defined as "those characteristics that distinguish the organization from other organizations and that influence the behavior of people in the organizations" (Gilmer, 1966:57, as cited in Hoy & Miskel, 2013). There are two types of climates: geographic and social climates. In this study, the social climate of the organization is to be considered.

The social climate is the reciprocal relationships among organization's members. The social climate of schools results from the reciprocal effects of principal's leadership behavior and teachers' behavior as a group. There are four aspects of principal's leadership behaviour such as (a) aloofness, (b) production emphasis, (c) thrust, and (d) consideration and four aspects of teachers' behaviour such as (a) disengagement, (b) hindrance, (c) esprit, and (d) intimacy . These eight aspects are selected as the conceptual foundation for the analysis of organization's climate (Halpin & Croft, 1963, as cited in Silver, 1983). According to Halpin and Croft (1963, as cited in Silver, 1983), there are six types of organizational climate. They are as follows.

(a) Open Climate: Open climate describes an energetic, lively organization which is moving toward its goals and which provides satisfaction for the group members' needs (Halpin & Croft, 1963).

(b) Autonomous Climate: Autonomous climate describes an atmosphere of almost complete freedom for teachers to conduct their work and fulfill their social needs as they wish (Silver, 1983).

(c) Controlled Climate: The controlled climate is characterized best as impersonal and highly task-oriented (Halpin & Croft, 1963). Controlled climate refers to an atmosphere of hard work at the expense of social life, although esprit is quite high.

(d) Familiar Climate: Familiar climate is highly personal, but under controlled. The members of this organization satisfy their social needs, but pay relatively little attention to social control in respect to task accomplishment (Halpin & Croft, 1963).

(e) Paternal Climate: The paternal climate is characterized best as one in which the principal constrains the emergence of leadership acts from the group and attempts to initiate most of these acts himself (Halpin & Croft, 1963).

(f) Closed Climate: The closed climate is characterized by a high degree of apathy on the part of all members of the organization (Halpin & Croft, 1963). The profile of a closed climate school is characterized especially by the low esprit, high disengagement, and low thrust present in the school (Silver, 1983).

Performance is something that the person leaves behind and that exists apart from the purpose (Edis, 1995, as cited in Raza, 2010).Teachers' job performance is a complex phenomenon and the actual accomplishment of assigned task. Teachers' job performance includes such activities as drawing of scheme of work, lesson plan, delivery of lesson, evaluation of students, reporting of students' progress (Maclean, 2018). According to Uko *et al.* (2015), teachers' job performance refers to the extent to which teachers are committed to pedagogical delivery and display of moral uprightness and academic excellence in the teaching profession.

Methodology

The quantitative research method was employed to investigate the relationships among principal's resource management competencies, organizational climate and teachers' job performance. The participants of this study were six principals and 307 teachers at different levels from six sample Basic Education High Schools in Mandalay. Simple random sampling method was used in this study. Two types of questionnaires: "Questionnaire for Principals" and "Questionnaire for Teachers" were used to gather the information. "Questionnaire for Principals" was used to gather the general information of the sample high schools and basic demographic information of principals.

In "Questionnaire for Teachers", three instruments such as "*Principals' Managerial Competencies for Effective Management of School Resources Questionnaire (PMCEMSRQ)*" developed by Victor (2017) to investigate the level of principals' resource management competencies, "*Questionnaire for Teachers about Organizational Climate*" developed by Raza (2010) to explore level and types of school organizational climate and "*Questionnaire for Teachers about Teacher Performance*" developed by Raza (2010) to measure the level of teachers' job performance, were employed to collect teachers' responses. The high reliability scores of 0.95 for "*Principals' Managerial Competencies for Effective Management of School Resources Questionnaire*", the reliability scores of 0.84 for "*Questionnaire for Teachers about Organizational Climate*", and the high reliability scores of 0.96 for "*Questionnaire for Teachers about Teacher Performance*" were obtained respectively.

The pilot study was conducted in two sample Basic Education High Schools in Mandalay. The participants were two principals and 102 teachers. "Questionnaire for Principals" and "Questionnaire for Teachers" were distributed to those schools on 19 November, 2019 and collected after 7 days. When collected data was calculated in terms of the reliability, the researcher reviewed and revised the items included in the questionnaire for teachers. There was no item with correlation coefficient less than 0.3. After taking permission from the responsible person, two types of questionnaires were distributed to six Basic Education High Schools in Mandalay from December 9, 2019 to December 16, 2019 and collected them after a week. Collected data were listed by each school and data obtained from the study were scored.

Descriptive statistics such as means and standard deviations were calculated by using SPSS to explore principal's resource management competencies, organizational climate and teachers' job performance. In order to classify the types of school climate, scores of all items were be calculated separately for each of the respondents of a high school and added up. In calculating

those data, the researcher used formula in order to standardize the scores. Moreover, Pearson product moment correlation was utilized to investigate perceptions of teachers on principal's resource management competencies and organizational climate in relation to teachers' job performance.

Research Findings

According to Table 1, the mean scores for the two dimensions of principal's resource management competencies such as "human resource management" and "financial resource management" of the School 6 indicated that principal from School 6 had moderate levels of "human resource management" and "financial resource management" but, the mean scores for "material resource management" was at high level. However, the mean score for "overall resource management competencies" of School 6 was at high level.

Table 1   Mean Values of Principal's Resource Management Competencies Perceived by Teachers in All Sample High Schools

School	Resource Management Competencies			Overall Resource Management Competencies
	Human Resource Management	Material Resource Management	Financial Resource Management	
School 1	4.13	4.08	4.01	4.07
School 2	4.22	4.21	4.23	4.22
School 3	3.94	3.88	3.91	3.91
School 4	4.05	4.08	4.08	4.07
School 5	3.89	3.94	3.81	3.88
School 6	3.65	3.89	3.67	3.74
All Schools	**3.96**	**3.99**	**3.92**	**3.96**

Note: 1.00-2.33=low level,   2.34-3.67=moderate level,   3.68-5.00=high level

On the other hand, the mean values for three dimensions such as "human resource management", material resource management", "financial resource management" and "overall resource management competencies" of School 1, 2, 3, 4, and 5 indicated that principals from those schools had high levels of resource management competencies. When studying the dimensions of principal's resource management competencies in all sample high schools, all dimensions such as "human resource management", material resource management", "financial resource management" and "overall resource management competencies" were at high levels.

Table 2   Mean Values of Dimensions of Organizational Climate Perceived by Teachers in All Sample High Schools

Dimensions of Organizational Climate	All Schools						All Schools
	School 1	School 2	School 3	School 4	School 5	School 6	
Aloofness	3.58	3.61	3.59	3.40	3.54	3.38	**3.51**
Production Emphasis	3.85	4.15	3.90	3.99	3.87	3.88	**3.93**
Thrust	4.13	4.25	3.89	4.10	3.90	3.77	**3.97**
Consideration	3.86	4.12	3.82	3.91	3.68	3.52	**3.79**
Disengagement	2.50	2.68	2.90	2.72	3.06	3.11	**2.87**
Hindrance	3.13	3.04	3.08	3.29	3.34	3.17	**3.20**
Esprit	4.08	4.25	4.15	4.02	4.02	3.98	**4.07**
Intimacy	3.78	3.81	4.06	3.83	3.94	3.76	**3.90**

Note: 1.00-2.33=low level,   2.34-3.67=moderate level,   3.68-5.00=high level

According to Table 2, moderate levels were found in three dimensions of organizational climate, "aloofness", "disengagement", and "hindrance". However, high levels were found in "production emphasis", "thrust", and "esprit" and "intimacy" dimensions for all sample high schools. Concerning the "consideration" dimension, all sample schools, except School 6, had high levels of "consideration" based on the perceptions of teachers. Moderate level of "consideration" was found in School 6. All in all, the mean scores of three dimensions such as "aloofness", "disengagement" and "hindrance" were at moderate levels while the mean scores of five dimensions such as "production emphasis", "thrust", "consideration", "esprit" and "intimacy" were at high levels in all sample high schools.

In order to determine the types of organizational climate, the scores of eight dimensions were converted into standardized scores with a mean of 50 and a standard deviation of 10 by using the following formulas:

SdS for Al= $10 \times (Al-14.04)/1.826+50$, SdS for PE= $10 \times (PE-19.63)/2.163+50$,

SdS for Thr= $10 \times (Thr-15.89)/2.230+50$, SdS for Con= $10 \times (Con-11.37)/1.859+50$,

SdS for Dis= $10 \times (Dis-8.62)/2.195+50$, SdS for Hin= $10 \times (Hin-12.80)/2.387+50$,

SdS for Esp= $10 \times (Esp-16.27)/1.622+50$, SdS for Int= $10 \times (Int-11.68)/1.495+50$.

Note: **Al** = Aloofness, **Esp** = Esprit, **Hin** = Hindrance,

Thr = Thrust, **PE** = Production Emphais, **Int** = Intimacy

Dis = Disengagement, **Con** = Consideration,

Table 3 Prototypic Climate of Organizational Climate

Dimensions of Organizational Climate	O	A	C*	F	P	C
Aloofness	42	61	55	44	38	55
Production Emphasis	43	43	63	37	55	54
Thrust	61	53	51	52	51	41
Consideration	55	50	45	59	55	44
Disengagement	43	40	38	60	65	62
Hindrance	43	41	57	42	46	53
Esprit	63	55	54	50	45	38
Intimacy	50	62	40	58	46	54

O = Open Climate   A = Autonomous Climate   C* = Controlled Climate
F = Familiar Climate   P = Paternal Climate   C = Closed Climate
Source: Halpin (1966). *Theory and Research in Administration.*

In classifying the types of organizational climate, the prototypic climate developed by Halpin (1966) was utilized (See: Table 3). The types of organizational climate was determined by computing the absolute difference between the scores on each subtest and sum these differences for each of the six prototypic profiles. After a profile similarity had been calculated for each prototypic profile, the prototype with the smallest sum indicated the organizational climate of those selected variables. The results of the analyses were shown in Table 4, 5, 6, 7, 8, 9 and 10.

Table 4   Analysis of Absolute Difference of School Organizational Climate from Prototypic Climate in School 1 (N= 30)

Dimensions of Organizational Climate	Standardized Scores	Absolute Difference from Subtests of Prototypic Climate					
		O	**A**	**C***	**F**	**P**	**C**
Aloofness	51.61	9.61	9.39	3.39	7.61	13.61	3.39
Production Emphasis	48.17	5.17	5.17	14.83	11.17	6.83	5.83
Thrust	52.88	8.12	0.12	1.88	0.88	1.88	11.88
Consideration	51.06	3.94	1.06	6.06	7.94	3.94	7.06
Disengagement	44.90	1.90	4.90	6.90	15.10	20.10	17.1
Hindrance	48.74	5.74	7.74	8.26	6.74	2.74	4.26
Esprit	50.18	12.82	4.82	3.82	0.18	5.18	12.18
Intimacy	47.68	2.32	14.32	7.68	10.32	1.68	6.32
Total		**49.62**	**47.52**	**52.82**	**59.94**	**55.96**	**68.02**

Table 5   Analysis of Absolute Difference of School Organizational Climate from Prototypic Climate in School 2 (N= 25)

Dimensions of Organizational Climate	Standardized Scores	Absolute Difference from Subtests of Prototypic Climate					
		O	**A**	**C***	**F**	**P**	**C**
Aloofness	52.19	10.19	8.81	2.81	8.19	14.19	2.81
Production Emphasis	55.22	12.22	12.22	7.78	18.22	0.22	1.22
Thrust	54.98	6.02	1.98	3.98	2.98	3.98	13.98
Consideration	55.33	0.33	5.33	10.33	3.67	0.33	11.33
Disengagement	47.36	4.36	7.36	9.36	12.64	17.64	14.64
Hindrance	47.32	4.32	6.32	9.68	5.32	1.32	5.68
Esprit	54.5	8.5	0.5	0.5	4.5	9.5	16.5
Intimacy	48.39	1.61	13.61	8.39	9.61	2.39	5.61
Total		**47.55**	**56.13**	**52.83**	**65.13**	**49.57**	**71.77**

Table 6   Analysis of Absolute Difference of School Organizational Climate from Prototypic Climate in School 3 (N= 70)

Dimensions of Organizational Climate	Standardized Scores	Absolute Difference from Subtests of Prototypic Climate					
		O	**A**	**C***	**F**	**P**	**C**
Aloofness	51.74	9.74	9.26	3.26	7.74	13.74	3.26
Production Emphasis	49.33	6.33	6.33	13.67	12.33	5.67	4.67
Thrust	48.51	12.49	4.49	2.49	3.49	2.49	7.51
Consideration	50.47	4.53	0.47	5.47	8.53	4.53	6.47
Disengagement	50.36	7.36	10.36	12.36	9.64	14.64	11.64
Hindrance	48.03	5.03	7.03	8.97	6.03	2.03	4.97
Esprit	51.95	11.05	3.05	2.05	1.95	6.95	13.95
Intimacy	53.38	3.38	8.62	13.38	4.62	7.38	0.62
Total		**59.91**	**49.61**	**61.65**	**54.33**	**57.43**	**53.09**

Table 7   Analysis of Absolute Difference of School Organizational Climate from Prototypic Climate in School 4 (N= 65)

Dimensions of Organizational Climate	Standardized Scores	Absolute Difference from Subtests of Prototypic Climate					
		O	A	C*	F	P	C
Aloofness	47.51	5.51	13.49	7.49	3.51	9.51	7.49
Production Emphasis	51.57	8.57	8.57	11.43	14.57	3.43	2.43
Thrust	52.36	8.64	0.64	1.36	0.36	1.36	11.36
Consideration	51.98	3.02	1.98	6.98	7.02	3.02	7.98
Disengagement	47.95	4.95	7.95	9.95	12.05	17.05	14.05
Hindrance	51.48	8.48	10.48	5.52	9.48	5.48	1.52
Esprit	48.71	14.29	6.29	5.29	1.29	3.71	10.71
Intimacy	48.74	1.26	13.26	8.74	9.26	2.74	5.26
Total		54.72	62.66	56.76	57.54	**46.3**	60.8

In Table 4, 5, 6, 7, 8 and 9, the smallest total absolute differences could be seen. They indicated that School 1 and 3 had "Autonomous Climate", School 2 had "Open Climate", School 4 and 6 had "Paternal Climate", and School 5 had "Closed Climate" according to the perceptions of teachers from those schools.

Table 8 Analysis of Absolute Difference of School Organizational Climate from Prototypic Climate in School   5 (N= 76)

Subtests of Organizational Climate	Standardized Scores	Absolute Difference from Subtests of Prototypic Climate					
		O	A	C*	F	P	C
Aloofness	50.57	8.57	10.43	4.43	6.57	12.57	4.43
Production Emphasis	48.79	5.79	5.79	14.21	11.79	6.21	5.21
Thrust	48.61	12.39	4.39	2.39	3.39	2.39	7.61
Consideration	48.15	6.85	1.85	3.15	10.85	6.85	4.15
Disengagement	52.51	9.51	12.51	14.51	7.49	12.49	9.49
Hindrance	52.27	9.27	11.27	4.73	10.27	6.27	0.73
Esprit	48.90	14.10	6.10	5.10	1.10	3.90	10.90
Intimacy	51.00	1.00	11.00	11.00	7.00	5.00	3.00
Total		67.48	63.34	59.52	58.46	55.68	**45.52**

Table 9 Analysis of Absolute Difference of School Organizational Climate from Prototypic Climate of Teachers from School   6 (N= 41)

Subtests of Organizational Climate	Standardized Scores	Absolute Difference from Subtests of Prototypic Climate					
		O	A	C*	F	P	C
Aloofness	47.24	5.24	13.76	7.76	3.24	9.24	7.76
Production Emphasis	49.00	6.00	6.00	14.00	12.00	6.00	5.00
Thrust	46.34	14.66	6.66	4.66	5.66	4.66	5.34
Consideration	45.65	9.35	4.35	0.65	13.35	9.35	1.65
Disengagement	53.18	10.18	13.18	15.18	6.82	11.82	8.82
Hindrance	49.41	6.41	8.41	7.59	7.41	3.41	3.59
Esprit	47.88	15.12	7.12	6.12	2.12	2.88	9.88
Intimacy	47.25	2.75	14.75	7.25	10.75	1.25	6.75
Total		69.71	74.23	63.21	61.35	**48.61**	48.79

According to Table 10, the mean scores of teachers' job performance perceived by teachers themselves were at high levels in all sample high schools. Similarly, the mean score of "overall teachers' job performance" was also at high level. This indicated that job performance of teachers from sample Basic Education High Schools in Mandalay was at high level.

Table 10 Mean Values and Standard Deviations of Teachers' Job Performance Perceived by Teachers in All Selected Basic Education High Schools

School	Teachers' Job Performance			
	Minimum	**Maximum**	**Mean**	**SD**
School 1	4	5	4.06	(.273)
School 2	4	5	4.08	(.229)
School 3	4	5	4.16	(.375)
School 4	3	5	4.05	(.354)
School 5	3	5	4.04	(.298)
School 6	3	5	4.00	(.374)
All Schools	**3**	**5**	**4.07**	**(.335)**

Note: 1.00-2.33=low level,   2.34-3.67=moderate level,   3.68-5.00=high level

Based on the findings, shown in Table 11, all dimensions of principal's resource management competencies such as "human resource management" (r= 0.640, p<0.01), "material resource management" (r= 0.502, p<0.01) and "financial resource management" (r=0.502, p<0.01) were moderately and positively correlated with the "teachers' job performance". Similarly, the "overall principal's resource management competencies" (r=0.595, p<0.01) was moderately and positively correlated with the "teachers' job performance".

Table 11 Correlation between Principal's Resource Management Competencies and Teachers' Job Performance in All Sample Basic Education High Schools

Variables	1	2	3	4	5
1. Human Resource Management	1				
2. Material Resource Management	.819**	1			
3. Financial Resource Management	.805**	.728**	1		
4. Overall Principal's Resource Management Competencies	.949**	.910**	.916**	1	
5. Teachers' Job Performance	**.640****	**.502****	**.502****	**.595****	**1**

Moreover, Table 12 displays the correlation between organizational climate and teachers' job performance perceived by teachers in all sample Basic Education High Schools. The first four dimensions (aloofness, production emphasis, thrust, and consideration) are concerned with principal's leadership behaviour and last four dimensions (disengagement, hindrance, esprit and intimacy) are concerned with teachers' behaviour.

Table 12 Correlation between Organizational Climate and Teachers' Job Performance Perceived by Teachers in All Selected Basic Education High Schools

	1	2	3	4	5	6	7	8	9
1.Aloofness	1								
2.Production Emphasis	.448**	1							
3.Thrust	.426**	.678**	1						
4.Consideration	.375**	.727**	.826**	1					
5.Disengagement	.237**	-.081	-.245**	.237**	1				
6.Hindrance	.404**	.136*	.077	.039	.442**	1			
7.Esprit	.296**	.555**	.600**	.567**	-.190**	.071	1		
8.Intimacy	.215**	.472**	.430**	.527**	-.103**	.122*	.618**	1	
9. Teachers' Job Performance	**.396****	**.612****	**.644****	**.615****	**-.128***	**.094**	**.754****	**.551****	1

Note: ** Correlation is significant at the 0.01 level (2-tailed).
         * Correlation is significant at the 0.05 level (2-tailed)

According to Table 12, first four dimensions such as "aloofness" (r= 0.396, $p<0.01$), "production emphasis" (r= 0.612, $p<0.01$), "thrust" (r= 0.644, $p<0.01$) and "consideration" (r=0.615, $p<0.01$) were found to indicate positive and moderate correlation with "teachers' job performance". Moreover, in the last four dimensions, it could be found that "disengagement" (r= -0.128, $p<0.05$) was weak negative correlation with "teachers' job performance". In addition, there was a weak positive correlation between "hindrance" and "teachers 'job performance" (r=0.094). Furthermore, "esprit" (r=0.754, $p<0.01$) also exhibited the high level of positive correlation with "teachers' job performance". Again, "intimacy" (r= 0.551, $p<0.01$) was a positive and moderate correlation with "teachers' job performance".

Discussion and Conclusion

Summary of the Findings

From the results of the study, the following findings were made:

(a) The mean values for three dimensions of principal's resource management competencies such as "human resource management", "material resource management" and "financial resource management" were between 3.68 and 5.00.Moreover, the mean value for "overall principal's resource management competencies" was 3.96. Thus, the principals from sample high schools had high levels of resource management competencies.

(b) When examining organizational climate, the mean values for "aloofness", "disengagement" and "hindrance" were at average levels while the mean scores of five dimensions such as "production emphasis", "thrust", "consideration", "esprit" and "intimacy" were at high levels. According to the perceptions of teachers, School 2 had open climate, School 1 and School 3 had autonomous climates, School 4 and School 6 had paternal climates and School 5 had closed climate.

(c) Again, when assessing teachers' job performance, the mean value for "overall teachers' job performance" was 4.07. This indicated that teachers from sample Basic Education High Schools in Mandalay had high level of "job performance".

(d) There was a statistically significant and positive relationship between principal's resource management competencies and teachers' job performance (r=0.595, *p*<0.01) at sample Basic Education High Schools in Mandalay.

(e) When studying the relationship between organizational climate and teachers' job performance, five dimensions of organizational climate such as aloofness" (r= 0.396, *p*<0.01), "production emphasis" (r= 0.612, *p*<0.01), "thrust" (r= 0.644, *p*<0.01), "consideration" (r=0.615, *p*<0.01) and "intimacy" (r= 0.551, *p*<0.01) were positively and moderately correlated with teachers' job performance. Again, it was found that dimension of organizational climate, "disengagement", (r= -0.128, *p*<0.05) was weak and negative correlation with "teachers' job performance". In addition, there was a weak and positive correlation between dimension of organizational climate, "hindrance", and "teachers' job performance" (r=0.094). Moreover, dimension of organizational climate, "esprit", (r=0.754, *p*<0.01) was highly and positively correlated with "teachers' job performance".

Discussion and Conclusion

According to quantitative findings, principals from sample Basic Education High Schools in Mandalay had high levels in all dimensions of principal's "resource management competencies" and "overall resource management competencies". This indicated that principals from Basic Education High Schools in Mandalay had "resource management competencies" such as "human resource management", "material resource management" and "financial resource management". In other words, high school principals had managerial competencies for effective human resource management through delegation of tasks to teachers, ensuring teachers' and students' discipline, and supervising teachers and students in order to provide professional guidance. Again, they also had the competencies for material resource management through ensuring regular school cleanup, maintaining instructional materials, inculcating maintenance culture in school. Moreover, they also had managerial competencies in effective financial resource management for school improvement.

This finding was similar to the finding of Victor (2017) in which secondary school principals in Anambra State had high levels of managerial competencies in human resource management and financial resource management. But secondary school principals in Anambra State did not have managerial competencies for effective material resource management in Victor's study although principals from Basic Education High Schools in Mandalay had high levels of material resource management.

In exploring the perceptions of teachers on their organizational climate from sample Basic Education High Schools in Mandalay, moderate levels were found in three dimensions; "aloofness", "disengagement" and "hindrance", and high levels were found in five dimensions; "production emphasis", "thrust", "consideration", "esprit" and "intimacy". According to the perceptions of teachers, School 2 had "open climate", School 1 and School 3 had "autonomous climate", School 4 and School 6 had "paternal climate", and School 5 had "closed climate" respectively. This finding was not similar to the finding of Raza (2010) in which the public and private colleges of Punjab were intended to be "open". He found that there were low aloofness, low production emphasis, high thrust, high consideration, low disengagement, low hindrance, high esprit and high intimacy in the public and private colleges of Punjab.

According to the ratings of teachers, teachers from sample Basic Education High Schools in Mandalay had high levels of "job performance". This finding was congruence with previous studies of Balkar (2015) in which teachers from Turkey had high levels of job performance. He found that teachers from Turkey well prepared and taught their students. They were able to manage their classrooms well. He also found that they had high esprit. Therefore, it could be interpreted that teachers from Basic Education High Schools in Mandalay had high level of "job performance". In other words, they well prepared and had command over their subjects, organized their lessons

in a logical manners, were able to give clear instructions for students, had good classroom management skills, and well encouraged their students in class.

Based on the research findings, there was a significant and positive relationship between teachers' perceptions of principal's resource management competencies and teachers' job performance (r=0.595, *p*<0.01) at sample Basic Education High Schools in Mandalay. It could be interpreted that the principal who had high managerial competencies in managing school resources was able to improve the teachers' job performance. This study was congruence with previous studies of Uko *et al*. (2015) in which there was a strong and positive correlation between principal's resource management competencies and teachers' job performance.

When analyzing whether there was any relationship between organizational climate and teachers' job performance, out of eight dimensions of organizational climate, five dimensions such as aloofness" (r= 0.396, *p*<0.01), "production emphasis" (r= 0.612, *p*<0.01), "thrust" (r= 0.644, *p*<0.01), "consideration" (r=0.615, *p*<0.01) and "intimacy" (r= 0.551, *p*<0.01) were positively and moderately correlated with teachers' job performance. It can be interpreted that the principal who treats teachers friendly, is highly directive and task-oriented, act as a role model for teachers, and is kind his/her staff can promote his/her teachers' job performance. In addition, when the teachers have high intimacy, they will also have high job performance.

Again, it was found that there was a weak and negative correlation (r= -0.128, *p*<0.05) between "disengagement" and "teachers' job performance". It could be interpreted that when the teachers had high level of disengagement, their job performance would gradually decrease. In addition, there was a weak and positive correlation between "hindrance" and "teachers' job performance" (r=0.094). It could be interpreted that when the teachers had "hindrance", they had the tendency to increase job performance. Moreover, "esprit" (r=0.754, *p*<0.01) also exhibited the high level of positive correlation with "teachers' job performance". It could be interpreted that when the teachers had high esprit, their job performance would be high. This study was similar to the findings of Raza (2010). He found that organizational climate was strongly and positively correlated with teachers' job performance.

Because of those findings, principals from Basic Education High Schools in Mandalay should maintain and try to develop their competencies in order to face the new challenges of developing world. Moreover, they should try to reduce "aloofness" and "production emphasis" and also need to reduce "hindrance" for teachers. The teachers should also try to reduce "disengagement" among them. In addition, teachers should maintain their good performance and try to make lifelong learning.

According to this study, the principals must try to have managerial competencies in effective management of school resources in order to promote teachers' job performance. Additionally, they must create their schools to be a positive school climate which motivates teachers' job performance.

Recommendations for Further Research

Based on the research findings, the recommendations are as follows:

(a) This research was limited to high schools in Mandalay. Therefore, similar research should be conducted in primary schools, middle schools, high schools located in other States or Regions.

(b) Again, this study was mainly based on teachers' perceptions of principal's resource management competencies, organizational climate and teachers' job performance. Therefore, further studies should be conducted by adding students' ratings, principals' self-ratings and superiors' ratings.

(c) Empirical examination of the relationship between principal's resource management competencies and other constructs such as student's academic achievement, teachers' job satisfaction, and organizational performance should also be studied.

(d) This study was conducted for a short period. Therefore, the period for the intervention and the content to be learnt should be extended.

(e) Moreover, a larger population should be used as it can ensure for a better generalization of the data. Expanding the sample population could provide a greater insight into the perceptions of these three variables.

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RELATIONSHIPS AMONG INSTITUTIONAL INTEGRITY, PRINCIPAL OPENNESS AND TEACHER OPENNESS TO TEACHER LOYALTY TO THE SCHOOL SYSTEM, THE PRINCIPAL AND COLLEAGUES

Lum Hkung[1] and Zin Nwe Than[2]

Abstract

The purpose of this study was to investigate the relationships among teachers' perceptions of institutional integrity, principal openness, teacher openness, teacher loyalty to the school system, the principal and colleagues at selected Basic Education High Schools in Lashio Township. The study was guided by three research questions. The study used quantitative research design. The research participants purposively selected based on research were 271 teachers and 5 principals from 5 selected Basic Education High Schools in Lashio Township. The data of the study were collected through *"The School Climate and Health Questionnaire (SCHQ)"* developed by Reiss and Hoy (1998, as cited in Walker, 2003) and *"The Rutgers School Loyalty Questionnaire (RSLQ)"* developed by Reiss and Hoy (1998, as cited in Walker, 2003). Pearson product-moment correlation was used for the analysis of the three research questions. Regarding to the results from the data analysis, it was found that there was no significance relationship between "institutional integrity" and "teacher loyalty to the school system". "Principal openness" was found a significance positive relationship with "teacher loyalty to the principal" and it also found that there was a significance positive relationship between "teacher openness" and "teacher loyalty to colleagues". The findings of this study have implications to the role of principal in leadership behaviour and teacher collegiality. Based on the findings, this study also provides recommendations for practices and further research.

Keywords: institutional integrity, principal openness, teacher openness, teacher loyalty to the school system, teacher loyalty to the principal, teacher loyalty to colleagues

Introduction

Education is one of the cores for nation's development and prosperity. For the quality education, school should be more effective centers not only of teaching-learning, but of emotional and social integration and of inculcation of a new value system. School effectiveness is concerned with the structures and culture of an institution and expressing the manners in which plans, policies and practices help in improving the overall objectives of the school and teacher effectiveness (Hargreaves, 2001, as cited in Dahiru, Basri, Aji & Asimiran, 2018). There is a variety of ways to conceptualize the nature of the school organization. The fundamental starting point is the concept of social system of action (Parson, 1951). All social systems have some activities and functions that are accomplished in a fairly stable fashion (Hoy & Miskel, 2013). The structure of the school is through role allocation and performance that the system is accomplished and maintained (Reddy & Sailakshmi, 2018). Therefore, there are social positions of the student, members of the teaching and non-teaching staff in the school (Sharman, 2017). As a social system, the school is characterized by an interdependence of parts, a complex network of social relationship and its own unique culture (Hoy & Miskel, 2013). On the other hand, the school is one of the formal agencies for formal socialization. Therefore, the school is a community where people in the school interact with their environment doing common goals (Maxwell, Reynolds, Lee, Subasic & Bromhead, 2017). Additionally, socialization with environment can fulfill the school's needs and overcome disruptive forces from outside as it uses its power to accomplish its mission (Bustari, 2017).

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Besides, the principal is also essential to create an effective school. Moreover, the internal components of social system are consistent with each other in a dynamic process to produce an effective school (Dahiru *et al*., 2018). Furthermore, teacher loyalty in the school organization is the only factor that behind the success of the school organization (Khan. M, Jan, Khan. I, Khan. S & Saif, 2015).

Purpose of the Study

The purpose of this study is to investigate the relationships among teachers' perceptions of institutional integrity, principal openness, teacher openness, teacher loyalty to the school system, the principal and colleagues at selected Basic Education High Schools in Lashio Township.

Research Questions

The following research questions guide the direction of the study.

1. Is there a statistically significant relationship between institutional integrity and teacher loyalty to the school system at selected Basic Education High Schools in Lashio Township?

2. Is there a statistically significant relationship between principal openness and teacher loyalty to the principal at selected Basic Education High Schools in Lashio Township?

3. Is there a statistically significant relationship between teacher openness and teacher loyalty to colleagues at selected Basic Education High Schools in Lashio Township?

Scope of the Study

The scope of this study is limited to Basic Education High Schools (not including Branch High Schools) in Lashio Township because of the available time and resources of the researcher. The sample schools are limited to the schools in which the principals have at least two year of administrative service at the current schools and the teachers have at least two complete years at the current schools. This study is also limited to Basic Education High Schools in Lashio Township because the findings of this study may not be generalized to any other school than high schools in Lashio Township.

Operational Definitions of the Key Terms

The operational definitions of the key terms for this study are described as follows;

Institutional Integrity refers to the school system's ability to adapt to its environment and cope in ways of that maintain the soundness of its educational programs. Schools in systems with integrity are protected from unreasonable community and parental demands (Hoy & Miskel, 2013).

Principal Openness refers to the degree to which the principal listens to and is open to teacher suggestions, gives genuine and frequent praise, and respects the professional competence of the faculty (Hoy & Miskel, 2013). Principal Openness is composed of three principal behaviours such as supportive principal behaviour, directive principal behviour and restrictive principal behaviour.

(i) **Supportive Principal Behaviour** is defined as behaviour of a principal that includes frequent praise of teachers. Criticism is constructive. Supportive principals respect the professional competence of their staffs and exhibit both a personal and professional interest in each teacher (Hoy & Miskel, 2013).

(ii) Directive Principal Behaviour is defined as behaviour that requires rigid, close supervision. The principal maintains close and constant control over all teachers and school activities, down to the smallest details. (Hoy & Miskel, 2013).

(iii)Restrictive principal behaviour is defined as behaviour that results in teachers being burdened with paperwork, committee requirements, routine duties, and other demands. It hinders rather than facilitates teacher work (Hoy & Miskel, 2013).

Teacher Openness refers to the degree to which teacher behaviour supports open and professional interactions. Teachers know each other well and are personal friends. They cooperate and are committed to their students (Hoy & Miskel, 2013). Teacher openness is composed of three teacher behaviours such as collegial teacher behaviour, intimate teacher behaviour and disengaged teacher behaviour.

(i) Collegial Teacher Behavior is defined as behaviour which facilitates a pervasive professional relationship between teachers. Teachers are proud of their schools and take pleasure in working with their colleagues (Hoy, Tarter & Kottkamp. 1991).

(ii) Intimate Teacher Behavior is defined as behaviour in which strong social relationships are developed among the faculty (Hoy & Miskel, 2013).

(iii)Disengaged Teacher Behavior refers to a lack of meaning and focus to professional activities. (Hoy *et al*., 1991).

Teacher Loyalty to the School System is a strong belief in and acceptance of the system's goals and values, a willingness to exert substantial effort on behalf of the system, and a strong desire to maintain teacher in the school system (Parson, 1967, as cited in Walker, 2003).

Teacher Loyalty to the Principal is a strong belief in and acceptance of the principal's goals and values, the willing compliance to perform duties for the principal that are not required by the formal organization, and a strong desire to maintain a professional relationship with the principal (Parsons, 1967, as cited in Walker, 2003).

Teacher Loyalty to Colleagues is the sharing of norms and values with the school staff, a willingness to exert effort beyond that normally expected in order to help colleagues achieve an organizational goal, and a strong desire to maintain a professional relationship with the faculty (Parsons, 1967, as cited in Walker, 2003).

Review of Related Literature

Institutional Integrity

Institutional integrity of a school can mobilize its resources and efforts to achieve its goals. It is important for schools to have legitimacy and backing in the community (Hoy & Miskel, 2013). It is also a community where people in the school interact with their environment doing common goals (Maxwell *et al*., 2017). The school with high institutional integrity can manage public resources efficiently and to adequate public participation in school activities. Moreover, when the institutional integrity of the school is high, people will carry out their duties and continues with their growth and development (Noori & Sabokro, 2016).Therefore, the principal and teachers need supports to perform their respective functions in a harmonious fashion without undue pressure and interference from individuals and groups outside the school (Hoy & Miskel, 2013).

Principal Openness

The principal occupies an important position in the school building. In order to survive and grow, the principal establishes important relationships with the teachers (Drake, 1992, as

cited in Edgerson, 2006). Principal openness deals with the patterns of relationships that exist between principal and teachers in the school. Principal openness is one in which both the principal and teachers are genuine in their behavior. The principal leads by trust, providing the proper blend of structure and direction as well as support and consideration (Hoy, 1990). Therefore, the impression of the principal's benevolence, honesty, openness, competence, and consistency all contribute potently to the trust that the faculty place in the principal (Handford & Leithwood, 2013, as cited in Tschannen-Moran & Garies, 2015). Hoy, Tarter and Kottkamp (1991) defined the concepts of principal openness. They defined principal openness in terms of three behaviors: supportive, directive and restrictive behavior.

Supportive Principal Behaviour: Principal's supportive behaviour consists of being friendly and approachable as a leader and includes attending to the well-being and human needs of teachers. In addition, such principal treat teachers as equal and give them respect for their status (Northouse, 2016). Moreover, the principal supports teachers and particularly careful so as not to allow the daily tasks to interfere with the responsibilities of teachers (Rapti, 2013). According to Hoy and Hannum (1997), the principal's supportive actions were a key to effective learning.

Directive Principal Behaviour: Directive principal behavior is characterized by authoritarian and legitimate power that uses high levels of strict direction, command and close supervision to provide psychological structure and task clarity (Northouse, 2016). Therefore, principal's directive behavior is non-supportive, inflexible, hindering, and controlling and a teacher that is divisive, intolerant, apathetic, and uncommitted (Hoy & Miskel, 2013).

Restrictive Principal Behaviour: A restrictive principal does not communicate openly with staff members but rather dictates what he or she wants done and maintains control over all aspects of the school organization (Hoy *et al.*, 1991). Restrictive principal behavior reflects a lack of understanding at the school and focusing on professional activities. The teachers only fill in time (Altinkurt, 2014). Finally, teachers working for principals who exhibit restrictive behavior do not have enough time to do meaningful work (Hoy & Miskel, 2013).

Teacher Openness

Teacher openness is considered as the mental and emotional attitude of teachers towards their tasks that has a direct effect on the enthusiasm, confidence, loyalty and interest displayed in performing their job. Teacher openness assists in establishing the character of a school and it is one of the factors that determine whether a school functions at its best or not (Ellenberg, 1972, as cited in Eboka, 2017). According to Lumsden (1998, as cited in Eboka, 2017) the absent of teacher openness can lead to a decrease in teacher productivity, loss of concern for students, alienation from colleagues, depression, and increased rate of sickness resulting in absenteeism on some workdays, general fatigue and burnout. Therefore, these roles undoubtedly have a profound influence in the attainment of school goals and objectives (Olujuwon & Perumal, 2015). Hoy *et al.* (1991) defined teacher openness as having three levels of behaviour: collegial, intimate and disengaged.

Collegial Teacher Behaviour

Teachers' satisfaction with their social and professional needs such as help, support, work with each other are important aspects of collegial teacher behavior (Halpin & Croft, 1963). According to Jarzabkowski (2002, as cited in Shah, 2012), collegiality encompasses both professional and social/emotional interaction in the workplace while collaboration mostly relates to the professional sphere of relationships. Collegial teacher behavior creates a feeling that it was important to know their colleagues on a level deeper than 'teachers': to know them as

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'individuals'. It also plays a significant role in improving teaching and instructional practices and fostering innovation (Brownell et al., 2006; Zhao *et al*., 2002, as cited in Shah, 2012).

Intimate Teacher Behaviour

Intimate teacher behaviour involves "seeing" and being "seen" by having an empathic perception and a depth of understanding of the other (Kark, 2012). . In other words, their closest friends are among their colleagues (Selmat, Samsu & Kamalu, 2013). There is also a mutual validation of self-worth and collaboration among colleagues (Kark, 2012). Moreover, friendly social interaction may improve the emotional health of the colleagues, thus reducing emotional stress and burnout (Wainaina, Kipchumba & kombo, 2014).

Disengaged Teacher Behaviour

Disengagement may be particularly difficult to negotiate in relationships in which continued, frequent contact is mandatory (Sias & Perry, 2004). Disengaged teachers are not enthusiastic; they do not want to expend extra effort and support team work (Heikkeri, 2010). Disengaged teachers are disconnected from their jobs, tend to be significantly less efficient and less loyal to their school, principal, and colleagues; they are less satisfied with their personal lives, experience more stress and insecurity about their job than their colleagues (Gallup 2001, as cited in Heikkeri, 2010).

Teacher Loyalty to the School System

Teacher loyalty is teachers felt good and satisfied with the working environment and the work itself, thereby heightening their allegiance to the organization, and bringing forth their positive commitment towards the organization (Lee. Y, Lee. I & Lin, 2015).Teacher loyalty to the school system also brings faithfulness between individual teacher and the school. Teachers may consider themselves loyal to the school if they show up for work, complete required job assignments and do not take advantage of gaps in the school's monitoring of their performance (Khan *et al*., 2015). Teacher loyalty to the school is characterized as a strong desire to maintain membership of the school, and plays a positive role in retention of members in the school (Maric, Ferjan, Dimovski & Cerne, 2011).

Teacher Loyalty to the Principal

Teacher loyalty to the principal in the school has been linked to the concept of authority (Weber, 1964, as cited in Walker, 2003). Hoy and Miskel (2013) identified two other types of authority: formal and informal. Moreover, Hoy and Rees (1975) connected the concept of loyalty and these two types of authority by saying that highly influential principals would command more loyalty from teachers than less influential principals (Walker, 2003). Moreover, teachers in the school may have a cognitive orientation to their principal in terms of holding firmly to a set of beliefs that embody an unquestioning faith, trust, and loyal to the principal. Therefore, it can be concluded that principal with high emotional detachment would have significantly greater teacher loyalty than principal with low emotional detachment, and hierarchically independent principal would have significantly greater teacher loyalty than hierarchically dependent principals (Hoy & Rees, 1975).

Teacher Loyalty to Colleagues

Studies of loyalty to colleagues are founded in studies of groups in the workplace (Walker, 2003). Teacher loyalty among colleagues is based upon mutual commitments to maintain interpersonal harmony, to merit trust and to persist in allegiance between partners even in the presence of alternatives (Khan *et al*., 2015). Moreover, teacher loyalty among colleagues

contributes greatly to teacher performance (Preko & Adjetey, 2013). As a result, teachers become aware of their own strengths and weaknesses and deploy the necessary facilities to increase their effective performance (Saljooghi & Salehi, 2016). Therefore, loyalty of individual teacher represents a great advantage to the school whereas loyalty is the element that determines stability among colleagues (Hoy & Miskel, 2013).

Parsons (1967, as cited in Walker, 2003) emphasized that in order for an organization to survive, grow and achieve its goals, each level of the organization must generate employee loyalty. Therefore, it is important that schools must have loyal employees at each level of the organization for the success of the school (Walker, 2003).

Methodology

Population and Sample

The target population of this study was all principals and teachers (primary, junior and senior teachers) from all Basic Education High Schools (not including Branch High Schools) in Lashio Township. Purposive sampling is used in this study. Participants were selected by using the criterion that the principals who had at least two years of longevity and teachers who had been at least two complete years in the current school. Participants in this study were 5 principals and 271 teachers representing the 5 selected Basic Education High Schools in Lashio Township. The principal sample consisted of 1 male principal and 4 female principals. As for teachers, 3 (1.11%) of the participants were male teachers and 268 (98.89%) are female teachers. Among them, 90 (33.21%) were senior teachers, 138 (50.92%) were junior teacher and 43 (15.87) were primary teachers respectively.

Research Instrument

Questionnaires were used for the collection of data to answer the research questions. For this purpose, "Questionnaire for principals" was used to collect the general information of selected schools and basic demographic information of principal and "Questionnaire for teachers" was used to explore the basic demographic information of teachers and their perceptions of institutional integrity, principal openness, teacher openness, teacher loyalty to the school system, the principal and colleagues. "Questionnaire for Teachers" included two parts. *"The School Climate and Health Questionnaire (SCHQ)"* and *"The Rutgers School Loyalty Questionnaire (RSLQ)"*.

"SCHQ" developed by Reiss and Hoy (1998, as cited in Walker, 2003) consists of 5-point Likert scale including "(1) never occurs", "(2) rarely occurs", (3) sometimes occurs", "(4) often occurs" and "(5) very frequently occurs". This questionnaire consists of 48 items defining three variable: institutional integrity, principal openness and teacher openness. *"RSLQ"* developed by Reiss and Hoy (1998, as cited in Walker, 2003) was also used to measure teacher loyalty to the school system, the principal and colleagues. The RSLQ has three factors: teacher loyalty to the school system, teacher loyalty to the principal and teacher loyalty to colleagues. This questionnaire consists of 29 items and used 5-point Likert scale including"(1) strongly disagree", "(2) disagree", "(3) undecided", "(4) agree", and "(5) strongly agree".

Before field testing the instruments with a sample of teachers, the researcher created the teacher questionnaire based on "*SCHQ*" and "*RSLQ*" and then edited by the supervisor. Then, the instruments were reviewed by a panel of experts. The review panel scrutinized the instruments for format, dimension presentation, item clarity, instruction coherency, and grammar and syntax usages. The preliminary instruments were field tested by 2 principals (2 female principals) and 89 teachers (6 male teachers and 83 female teachers) representing 2 Basic Education High

Schools. The Pearson product-moment correlation method (Average Item Total Correlation) was used for the internal consistency reliability.

Data Collection Procedure

      After taking permission from the responsible person, two types of questionnaires were distributed to 5 Basic Education High Schools in Lashio Township from December 9, 2019 to December 13, 2019 and collected them after lasting 10 days. Data collected were listed by each school and data obtained from the study were scored.

Data Analysis

      Descriptive statistics were calculated by using SPSS to explore institutional integrity, principal openness, teacher openness, teacher loyalty to the school system, the principal and colleagues of selected high schools. The responses to each variable and dimension were calculated using mean and standard deviation scores. Moreover, procedures for scoring and analyzing data obtained on principal openness and teacher openness of the study were followed explicitly as instructed by Hoy *et al*., (1991). Finally, Pearson product-moment correlation was utilized to investigate teachers' perceptions of institutional integrity, principal openness and teacher openness in relation to teacher loyalty.

Findings

      According to Table 1, mean values of institutional integrity perceived by teachers from all selected high schools were at high levels. Similarly, the mean value for "overall institutional integrity" was at high level in all selected high schools.

Table 1 Mean Values and Standard Deviations of Institutional Integrity Perceived by Teachers in Selected Basic Education High Schools

Schools	Mean	Standard Deviation
School A	4.42	(.376)
School B	4.36	(.395)
School C	3.93	(.637)
School D	4.27	(.609)
School E	4.49	(.250)
All Schools	**4.27**	**(.525)**

Note: 1.00-2.33 = low level,   2.34-3.67 = moderate level,   3.68-5.00 = high level

      Procedures for scoring and analyzing data obtained on principal openness and teacher openness of the study were followed explicitly as instructed by Hoy, Tarter and Kottkamp (1991). First convert mean value of each dimension to standardized scores with a mean of 500 and a standard deviation of 100, using the following formulae:

      SdS for S= 100x(S-36.05)/6.302 + 500

      SdS for D= 100x(D-35.19)/5.476 + 500

      SdS for R= 100x(R-16.24)/3.197 + 500

      The SdS scores were then used to calculate principal openness. The principal openness were computed using the following formula:

$$\text{Principal Openness} = \frac{(\text{SdS for S}) + (1000 - \text{SdS for D}) + (1000 - \text{SdS for R})}{3}$$

Table 2 depicts mean values and standard deviations of principal openness perceived by teachers in all selected Basic Education High Schools. According to Table 2, "supportive behaviour" of School A's principal was the highest and School E's principal was the lowest. The mean value for the "overall supportive behaviour" was at average level in all selected high schools. Similarly, "directive behaviour" of School B's principal was the highest and School C's principal was the lowest. The mean value for "overall directive behaviour" was at average level in all selected high schools. Again, "restrictive behaviour" of School B's was the highest and School C's principal was the lowest. The mean value for "overall restrictive behaviour" was at average level in all selected high schools. When analyzing the mean value for "principal openness", School C's principal was the highest and School B's principal was the lowest. Moreover, the mean value for "overall principal openness" indicated that principals from selected Basic Education High Schools had moderate level of principal openness.

Table 2 Mean Values and Standard Deviations of Principal Openness Perceived by Teachers in Selected Basic Education High Schools

School	Dimensions of Principal Openness			Principal Openness
	Supportive Behaviour	Directive Behaviour	Restrictive Behaviour	
School A	556.39 (87.467)	519.20 (85.675)	491.41 (92.635)	515.26 (34.240)
School B	484.49 (95.5310	551.58 (72.473)	523.32 (90.639)	469.86 (46.659)
School C	493.12 108.100	434.14 (128.659)	467.99 (116.766)	530.33 (45.004)
School D	487.95 (91.546)	490.22 (79.849)	508.99 (88.850)	496.25 (36.919)
School E	460.90 (93.638)	494.01 (68.628)	510.83 (105.252)	485.35 (47.737)
All Schools	**499.97** (100)	**500.03** (99.998)	**500.00** (99.996)	**499.98** (47.537)

Note: below 400=very low,   400-449=low,
      450-474=below average   475-489=slightly below average,
      490-510= average,   511-524= slightly above average,
      525-549= above average,   550-600= high,
      above 600= very high

Again, mean values of teacher openness were calculated and then converted into standardized scores by using the following formulae:

SdS for C= 100x(C-33.85)/4.431 + 500

SdS for Int= 100x (Int- 29.11)/4.267 + 500

SdS for Dis= 100x (Dis- 6.60)/ 2.347 + 500

These SdS scores were then used to compute teacher openness by using the formula given by Hoy et al.(1991).

$$\text{Teacher Openness} = \frac{((\text{SdS for C})+(\text{SdS for Int})+(1000-\text{SdS for Dis}))}{3}$$

Table 3 depicts mean values and standard deviations of teacher openness perceived by teachers in all selected Basic Education High Schools. According to Table 3, "collegial behaviour" of teachers from School A was the highest and School E was the lowest. The mean

value for "overall collegial behaviour" was at average level in all selected high schools. Similarly, "intimate behaviour" of teachers from School A was the highest and School E was the lowest. The mean value for "overall intimate behaviour" was at average level in selected high schools. In the same taken, "disengaged behaviour" of teachers from School C was the highest and School A was the lowest. The mean value for "overall disengaged behaviour" was at average level in all selected high schools. When examining the mean value for "teacher openness", teachers from School A was the highest and School C was the lowest. Moreover, the mean value for "overall teacher openness" indicated that teachers from selected Basic Education High Schools had moderate level of teacher openness.

Table 3   Mean Values and Standard Deviation of Teacher Openness Perceived by Teachers in Selected Basic Education High Schools

School	Dimensions of Teacher Openness			Teacher Openness
	Collegial Behaviour	Intimate Behaviour	Disengaged Behaviour	
School A	530.23 (83.427)	540.25 (82.495)	450.19 (81.826)	540.10 (60.650)
School B	496.19 (95.553)	473.31 (110.653)	484.32 (82.394)	495.06 (80.302)
School C	478.18 (110.256)	490.39 (100.203)	542.61 (111.825)	475.32 (79.301)
School D	519.39 (94.427)	519.58 (94.005)	529.44 (103.289)	503.18 (74.486)
School E	456.69 (107.885)	465.10 (85.517)	492.07 (89.314)	476.57 (73.467)
All Schools	**499.97** (99.997)	**499.93** (99.999)	**499.91** (99.996)	**500.00** (77.409)

Note: below 400=very low,   400-449=low,
      450-474=below average   475-489=slightly below average,
      490-510= average,   511-524= slightly above average,
      525-549= above average,   550-600= high,
      above 600= very high

Referring to Table 4, the mean values for teacher loyalty to the school system in School E was at moderate level while the remaining selected high schools were at high levels. Similarly, the mean value for "overall teacher loyalty to the school system" indicated that teachers from selected Basic Education High Schools in Lashio Township had high level of loyalty to the school system.

Table 4   Mean Values and Standard Deviations of Teacher Loyalty to the School System Perceived by Teachers in Selected Basic Education High Schools

Schools	Mean	Standard Deviation
School A	4.25	.593
School B	3.74	.531
School C	3.83	.590
School D	4.13	.435
School E	3.53	.533
All Schools	**3.93**	**.590**

Note: 1.00-2.33 = low level,   2.34-3.67 = moderate level,   3.68-5.00 = high level

According to Table 5, the mean values for teacher loyalty to the principal in all selected high schools indicated that teachers from all selected high school had high levels of teacher loyalty to their principals. Similarly, the mean value for "overall teacher loyalty to the principal" showed that teachers from selected high schools had high level of teacher loyalty to the principal.

Table 5 Mean Values and Standard Deviations for Teacher Loyalty to the Principal Perceived by Teachers in Selected Basic Education High Schools

Schools	Mean	Standard Deviation
School A	4.22	.369
School B	3.73	.373
School C	4.03	.393
School D	3.98	.395
School E	3.87	.286
All Schools	**3.97**	**.409**

Note: 1.00-2.33 = low level,   2.34-3.67 = moderate level,   3.68-5.00 = high level

Moreover, Table 6 depicts mean values and standard deviations of teacher loyalty to colleagues in all selected Basic Education High Schools in Lashio Township. Data obtained from Table 6, the mean values for "teacher loyalty to colleagues" were at high levels in all selected high schools. Similarly, the mean value for "overall teacher loyalty to colleagues" indicated that teachers from selected high schools had high level of teacher loyalty to colleagues.

Table 6   Mean Values and Standard Deviations for Teacher Loyalty to Colleagues Perceived by Teachers in Selected Basic Education High Schools

Schools	Mean	Standard Deviation
School A	4.20	.425
School B	3.91	.486
School C	3.81	.461
School D	4.05	.375
School E	3.95	.339
All Schools	**3.99**	**.451**

Note: 1.00-2.33 = low level,   2.34-3.67 = moderate level,   3.68-5.00 = high level

Based on the perceptions of teachers displayed in Table 7, teachers from all selected high schools indicated that their schools had high levels of "institutional integrity", "teacher loyalty to the school system", "teacher loyalty to the principal" and "teacher loyalty to colleagues". Again, they perceived that they had average levels of "principal openness" and "teacher openness".

Table 7   Mean Values of All Variables Perceived by Teachers in Selected Basic Education High Schools

Schools	School A	School B	School C	School D	School E	All Schools
Institutional Integrity	4.42	4.36	3.93	4.27	4.49	**4.27**
Principal Openness	515.26	469.86	530.33	496.25	485.35	**499.98**
Teacher Openness	540.10	495.06	475.32	503.18	476.57	**500.00**
Teacher Loyalty to the School System	4.25	3.74	3.83	4.13	3.53	**3.93**
Teacher Loyalty to the principal	4.22	3.73	4.03	3.98	3.87	**3.97**
Teacher Loyalty to Colleagues	4.20	3.91	3.81	4.05	3.95	**3.99**

Pearson product-moment correlation between teachers' perceptions of institutional integrity and teacher loyalty to the school system was done and presented in Table 8. Based on the findings, there was no significant correlation between "institutional integrity" and "teacher loyalty to the school system" in all selected Basic Education High Schools in Lashio Township.

Table 8 Correlation between Teachers' Perceptions of Institutional Integrity and Teacher Loyalty to the School System

	1	2
1. **Institutional Integrity**	1	
2. **Teacher Loyalty to the School System**	.085	1

Similarly, the correlation between teachers' perceptions of principal openness and teacher loyalty to the principal in all selected Basic Education High Schools are shown in Table 9. The result of the findings indicated that "principal openness" was positively and significantly correlated with "teacher loyalty to the principal" (r=.281**, p<0.01).

Table 9 Correlation between Teachers' Perceptions of Principal Openness and Teacher Loyalty to the Principal

	1	2
1. **Principal Openness**	1	
2. **Teacher Loyalty to the Principal**	.281**	1

Note: ** Correlation is significant at the 0.01 level (2-tailed).

In the same taken, the correlation between teachers' perceptions of teacher openness and teacher loyalty to colleagues in selected Basic Education High Schools is presented in Table 10. Based on the information given in Table 10, the correlation coefficient (r=.628**, p<0.01) was indicated that there was a positive and significant correlation between "teacher openness" and "teacher loyalty to colleagues" in selected Basic Education High Schools in Lashio Township.

Table 10   Correlation between Teachers' Perceptions of Principal Openness and Teacher Loyalty to the Principal

	1	2
1. **Teacher Openness**	1	
2. **Teacher Loyalty to Colleagues**	.628**	1

Note: **Correlation is significant at the 0.01 level (2-tailed).

Discussion and Conclusion

This study highlights to investigate the relationships among institutional integrity, principal openness, teacher openness, teacher loyalty to the school system, the principal and colleagues at Basic Education High Schools in Lashio Township. Based on the research findings, there was no significant correlation between institutional integrity and teacher loyalty to the school system (r=.085). It can be interpreted that whether the school is able to cope successfully with destructive external forces or not, teachers from selected Basic Education High Schools in Lashio Township were willing to exert substantial effort on behalf of the school system and a strong desire to maintain employment in the school system. The finding of this study is consistent with the study conducted by Walker (2003) which found that there was no significant relationship between institutional integrity and teacher loyalty to the school system. Thus, the researcher would like to give a piece of advice that high level of institutional integrity will not increase teacher loyalty to the school system.

Moreover, when investigating the relationship between principal openness and teacher loyalty to the principal, it was found that "principal openness" was significantly and positively correlated with "teacher loyalty the principal" (r=.281, p<0.01). Therefore it can be interpreted that the principal who listens to and is open to teacher suggestions, gives genuine and frequent praise, and respects the professional competence of teachers will likely to be more effect on teacher loyalty to the principal. This finding is consistent to the findings of Reiss (1994, as cited in Walker, 2003), and Hoy and Rees (1975) which stated that the greater the degree of openness in principal, the greater was the teacher loyalty to the principal. Therefore, the researcher wants to suggest the principals from Basic Education High Schools in Lashio Township that the manner in which the principals carried out their duties such as "supportive", "directive" and "restrictive" behaviours affected teacher loyalty to the principal and this in turn as well as how they related to the authority. In addition, the findings revealed that the openness behaviour employed by the principals has implications for teacher loyalty to the principal.

Similarly, when analyzing the correlation between "teacher openness" and "teacher loyalty to colleagues", a positive and moderate correlation was found between teacher openness and teacher loyalty to colleagues (r=.628, p<0.01). It can be interpreted that teachers who are open in behaviour will maintain a professional relationship with colleagues and influence teacher loyalty to colleagues. This finding is congruence with Angle and Perry (1981, as cited in Walker, 2003) which stated that the greater the degree of openness of teachers, the greater was the teacher loyalty to colleagues. Therefore, the researcher would like to suggest teachers from selected Basic Education High Schools in Lashio Township to reflect on their instructional strategies, share expertise and regularly collaborate in order to improve teacher loyalty to colleagues.

Based on the research findings, the researcher also wants to give suggestions to principals and teachers from Basic Education High Schools in Lashio Township. With regard to institutional integrity of the school, principals and teachers from Basic Education High Schools in Lashio Township should try to maintain their integrity with the community to perform their respective functions in a harmonious fashion without undue pressure and interference from individuals and groups outside the school. Regarding principal openness, the principals should create positive climate in the school. They also should encourage life-long learning and should be open to allowing teachers who want to learn and improve, the opportunities to do so. Moreover, they also should practice more supportive behaviour and less directive and restrictive behaviours. Again, with regard to teacher openness, teachers should establish an environment that encourages and promotes collaborative relationships. Additionally, they also should try to establish collegiality and intimacy and minimize disengagement between colleagues in order to establish more teacher openness. In addition, with regard to teacher loyalty to three levels of organization, it was found that teachers' perceptions were high levels in teacher loyalty to the school system, teacher loyalty to the principal and teacher loyalty to colleagues. Therefore, the researcher wants to suggest that they should maintain a strong belief and faithfulness between teacher and the school. They also should accept the principals' goals and values. Additionally, they also should exert effort to help colleagues and maintain a professional relationship with colleagues.

In conclusion, this study leaves an important message to those who would like to improve teacher loyalty in the educational organization. In an educational context, both principals and teachers aware that schools with integrity are protected from unreasonable community and parental demands and also provide school products. Furthermore, they also should know that they need open and genuine in their behaviours. The principals should appropriately develop their behaviour according to the given situation of task and followers. Moreover, the principals need to know why and how their behaviour can bring into teacher loyalty. Similarly, teachers should use open behaviour to improve teacher relationship in the work place. Additionally, they should know that what make teacher loyalty related to the school system, the principal and

colleagues. The principals and teachers should know that teacher loyalty to the school system depend on the relationship in the school system. All in all, it can be generalized that the more principals practice openness behaviour highly, the more teacher loyalty to the principal. Similarly, the more openness behaviour of teacher is increased, the more teacher loyalty to colleagues will also be increased. In conclusion, other researches should be conducted on effectiveness in education organizational settings in order to improve the educational quality. As today, improvements are based on the recommendations of the study so that they will uncover other factors that the primary researchers did not find out. As a result, the possibilities for further studies are endless and meaningful.

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RELATIONSHIPS AMONG PRINCIPALS' ETHICAL LEADERSHIP, ORGANIZATIONAL JUSTICE AND TEACHERS' ORGANIZATIONAL CYNICISM

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Abstract

The purpose of this study is to examine the relationship among principals' ethical leadership, organizational justice and teachers' organizational cynicism at selected high schools in Indaw Township. In this study, a mixed methods approach was used. Quantitative data were collected through three instruments; (i) *"Ethical Leadership Scale (ELS)"* developed by Yilmaz (2006, as cited in Karaköse, 2007) to find out teachers' perception of principals' ethical leadership, (ii) *"Organizational Justice Scale,"* developed by Niehoff and Moorman (1993, as cited in Polat 2007) and adapted by Polat (2007) to measure teachers' perception of principals' organizational justice and (iii) *"Organizational Cynicism Scale"* developed by Brandes, Dharwadkar and Dean (2000, as cited in Gerald, 2002) to explore teachers' organizational cynicism. The sample involved 233 teachers from seven selected high schools identified through a purposive sampling process. In order to gather qualitative data, structured interviews were conducted with 24 teachers from four selected high schools. The findings of this study revealed that teachers' perception of principals' "ethical leadership" was positively and highly correlated to teachers' perception of principals' "organizational justice" (r=0.934, p<0.01) while it was negatively and highly correlated to teachers' "organizational cynicism" (r=-0.669, p<0.01). Similarly, there was also a negatively and highly correlation between teachers' perception of principals' "organizational justice" and their "organizational cynicism" (r=-0.658, p<0.01). The qualitative data provided by interviews with teachers were consistent with the findings of quantitative findings. In line with the results, the more principals perform ethical leadership practices in schools, the more their organizational justice increases, and the fewer teachers' organizational cynicism decreases. Therefore, principals should manage and lead the schools ethically. Moreover, a replication of this study should be conducted in other townships.

Keywords: Ethical Leadership, Organizational Justice, Organizational Cynicism

Introduction

With the vision of creating an education system that will generate a learning society capable of facing the challenges of the Knowledge Age, the newly democratic government of Myanmar has also made the education system as national priority. One of the important factors affecting the success of educational institution today is the skills and abilities that the managers have (Demirçelik & Korkmaz, 2017). Since schools are structurally open systems, ethics in school administration is far more important (Özan, Özdemir, & Yirci, 2017).

Research on ethical leadership lagged behind other subjects for most of the past half century (Cuilla, 1998, as cited in Yukl, Mahsud, Hassan & Prussia, 2013), but in the past decade, interest in studying the antecedents, outcomes, and processes of ethical leadership has been growing steadily. In the 1970s and 1980s, interest in the moral dimensions of educational administration grew out (Langlois, Lapointe, Valois, & Leeuw, 2014). Aydın (2001, as cited in Uğurlu & Sincar, 2012) evaluated principals' ethical behaviors under the headings of ethical principles such as observance, justice, responsibility, honesty, democracy, respect. Similarly, Karaköse (2007), Katranci, Sungu and Saglam (2015) and Özan et al. (2017) studied school principals' ethical leadership behaviors from teachers' point of view. In addition, when the field literature is studied, some relations are observed between the ethical leadership behaviors and the organizational justice.

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Most studies recently conducted on the construct organizational justice indicate that it has an impact on organizational outcomes such as employee motivation, commitment, satisfaction, talent attraction and retention, employee and organizational performance leadership, diversity management and ethical behavior (Cropanzano, Bowen, & Gilliland, 2007, as cited in Ledimo, 2015). Therefore, educational institutions are concerned with applying organizational justice in order to achieve important administrative gains, such as strengthening the professionalism of teachers (Dipaola& Guy 2009, as cited in Aldaihani & Alansari, 2016).

Again, organizational cynicism researches started to improve at the end of 1980 and the beginning of 1990 (James, 2005, as cited in Mete, 2013). Cynicism is a notable concept in recent years in the literature of educational administration. Investigating the concept of cynicism that reflects negative attitudes and working to solve it, is important for the organizations (Demirçelik & Korkmaz, 2017). Levent and Keser (2016) examined the organizational cynicism among teachers at schools by using mixed methods approach. In addition, Polat (2013), Polatcan and Titrek (2013) and Yükse and Şahin (2017) have studied teachers' organizational cynicism relation to other variables.

Bağrıyanık and Can (2017) examined the relationship among three variables under the heading of "The relation between teachers' perception of ethical leadership, organizational justice and organizational cynicism". The current study tried to replicate the original study of Bağrıyanık and Can (2017). However, this study is not carried out identically with the original study. In original study, only quantitative method was used but the current study was conducted by using quantitative and qualitative methods. The use of both quantitative and qualitative methods, in combination, provides a better understanding of the research problem and question than either method by itself (Creswell, 2012). Thus, the present study will provide rich information related to ethical leadership, organizational justice and organizational cynicism. In addition, the results from this study may be important in creating effective education system in Myanmar. It mainly intends to investigate the relation between high school teachers' perception of ethical leadership, organizational justice and organizational cynicism.

Purpose of the Study

The main purpose of this study is to examine the relationships among high school teachers' perception of principals' ethical leadership, organizational justice and their organizational cynicism at Basic Education High Schools in Indaw Township.

Research Questions

1. What are the levels of principals' ethical leadership, organizational justice and teachers' organizational cynicism perceived by high school teachers?
2. Are there any significant relationships between high school teachers' perception of principals' ethical leadership, organizational justice and their organizational cynicism?
3. Are there any predicting relations between high school teachers' perception of principals' ethical leadership, organizational justice and their organizational cynicism?

Limitations of the Study

1. The scope of this study is limited to Basic Education High Schools in Indaw Township because this study was based on the available time and resources of the researcher.
2. The sample schools were those schools in which the principals had at least one year of administrative service at the current schools.
3. The findings may not be generalized to any other schools except the high schools in Indaw Township.

Definitions of Key Terms

In order to provide an understanding of the concepts and terms related to this study, the following definitions are provided.

- Ethical Leadership: Ethical leadership is "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making" (Brown, Treviño, & Harrison, 2005: 120).
- Organizational Justice: Organizational justice is defined as an individual's perceptions of fairness within an organization (Greenberg, 1990, as cited in Thorn, 2010).
- Organizational Cynicism: Organizational cynicism can be defined as employees' hopelessness, disappointment and negative attitude about organization (Andersson, 1996, as cited in Bağrıyanık & Can, 2017).

Operational Definitions

In order to foster a clear understanding of how specific terms were interpreted in this particular study, the following operational definitions are provided.

- **Ethical leadership** refers to communicative ethic, climatic ethic, decisional ethic and behavioral ethic of a principal.
- **Oganizational justice** refers to distributive justice, procedural justice and interactional justice of a principal.
- **O**rganizational cynicism refers to cognitive cynicism, affective cynicism and behavioral cynicism of teachers about school.

Conceptual Framework of this Study

The conceptual framework of this study is summarized as follows.
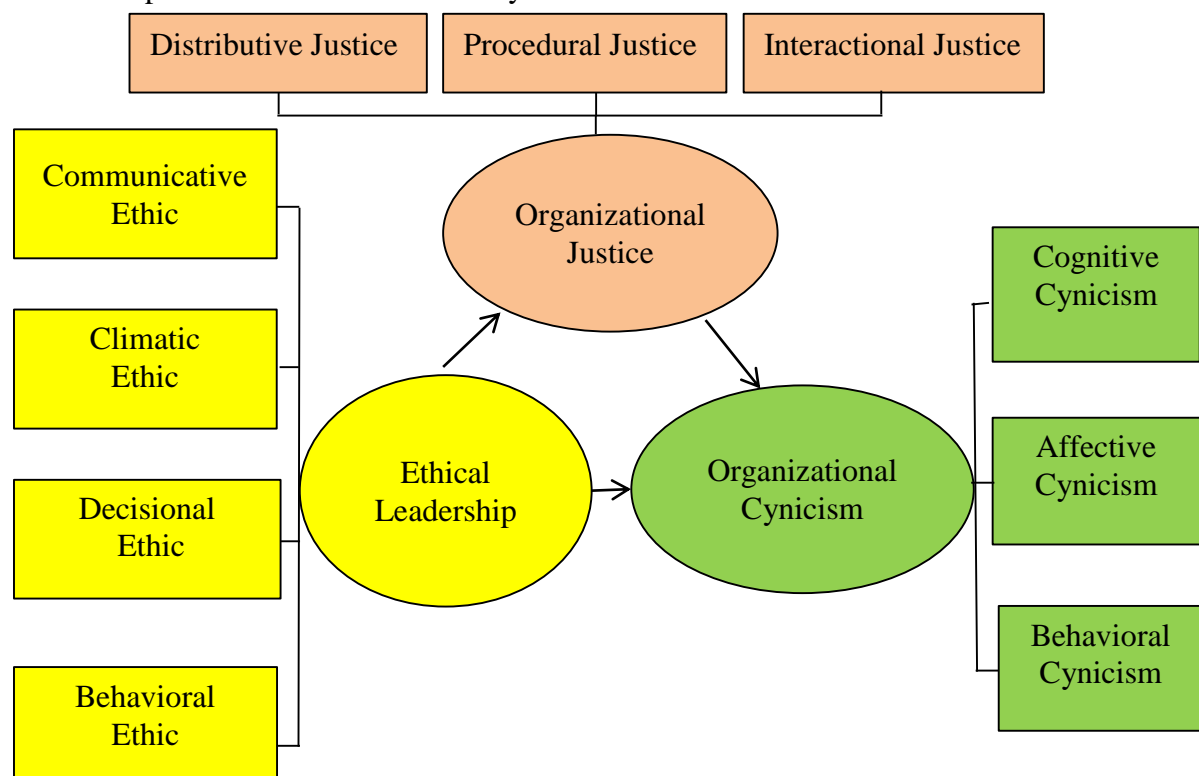
Source: Bağrıyanık, H., & Can, N. (2017). *The relation between high school teachers'perceptionof ethical leadership, organizational justice and organizational cynicism*

Review of Related Literature

Ethical Leadership

- Ethical leadership also is associated with positive influence on employee motivation and work capability which directly affect job performance. The work capability of employees is effectively enriched through subordinates' experience with ethical leadership in a social exchange. The ability of ethical leadership to motivate employee through appreciation care, and support in good quality leader member relationship can improve employee performance (Musyimi, 2016).

- "Ethical Leadership Scale" was designed by Yılmaz (2006, as cited in as cited in Karaköse, 2007) as a four dimensions such as communicative ethic, climatic ethic, decisional ethic and behavioral ethic.

- **Communicative ethic** is about creating a good communication between administrator and employees and providing job satisfaction (Yılmaz, 2006, as cited in Mete, 2013). **Climatic ethic** consists of behaviors like that manager promotes subs, giving concrete goals, making rule of the intuition in a proper way (Bağrıyanık & Can, 2017). **Decisional ethic** examines behaviors in terms of making morally correct decisions, to be able to differentiate what is correct and what is wrong, and being ethical in making decision (Turhan, 2007, as cited in Bağrıyanık & Can, 2017). **Behavioral ethic** expresses administrator's fair and honest behaviors, seeing every one equal in the organization and equal treatments. The administrators exhibit such behavioral ethical behaviours; love trueness, goodness, freedom, tolerance, mercy and altruism (Kidder, 1995; Beckner, 2005, as cited in Mete, 2013).

Organizational Justice

- Organizational justice is an integral part of any successful organization and the outcomes that result from ideal justice practices are very beneficial to organizations (Cropanzano et al., 2007, as cited in Kedenburg, 2014).

- In this study, to investigate high school teachers' perception of principals' organizational justice, "Organizational Justice Scale" developed by Niehoff and Moorman (1993, as cited in Polat 2007) and adapted by Polat (2007) was utilized. This scale involved distributive justice, procedural justice and interactional justice.

- **Distributive justice** is related to personal gain from allocation of resources in an organization (Colquitt et al., 2005, as cited in Jeon, 2009). **Procedural justice** concerns perceived fairness of the procedures used in the decision making process (Folger & Greenberg, 1985, as cited in Herr, 2015). **Interactional justice** is associated with an individual's perceptions of fairness regarding the interactions with a decision-maker who is responsible for the process of the outcomes allocation (Bies & Moag, 1986, as cited in Oh, 2013).

Organizational Cynicism

- Organizational cynicism has been associated with such negative consequences as apathy, resignation, alienation, hopelessness, distrust of others, suspicion, contempt, disillusionment, and scorn in addition to decreased performance, interpersonal disputes, absenteeism, job turnover, and burnout (Andersson, 1996; Andersson & Bateman, 1997; Dean et al., 1998, as cited in Polat, 2013).

- Organizational cynicism is also described as person's negative attitudes consist of cognitive, affective and behavioural dimensions to his/her organization (Dean, Brandes & Dharwadkar, 1998, as cited in Mete, 2013).

- The **cognitive cynicism** emphasizes the belief that organization and the individuals employed in the organization lack honesty (Polat, 2013). **Affective cynicism** contains some powerful emotional reactions like disrespect, anger, boredom and shame (Abraham, 2000, as cited in Konakli et al., 2013). In **behavioral cynicism** dimension, these cynical people use humor and sarcastic humor to express their cynical attitudes.

Methodology

Research Method

Quantitative and qualitative research methods were used to collect the required data in this study.

Participants

In this study, 233 teachers representing seven high schools (including branch high schools) in Indaw Township participated in quantitative study and 24 teachers (primary, junior and senior teachers) from four selected high schools participated in qualitative study.

Instruments

In this study, quantitative data were collected through three instruments. *"Ethical Leadership Scale (ELS)"* developed by Yilmaz (2006, as cited in Karaköse, 2007) was used to find out high school teachers' perception of principals' ethical leadership. This scale included 44 items and measured four dimensions such as communicative ethic, climatic ethic, decisional ethic and behavioral ethic. *"Organizational Justice Scale"* developed by Niehoff and Moorman (1993, as cited in Polat 2007) and adapted by Polat (2007) was utilized to explore high school teachers' perception of principals' organizational justice. This scale included 19 items and measured three dimensions, namely, distributive justice, procedural justice and interactional justice.

In order to examine high school teachers' perception of organizational cynicism, *"Organizational Cynicism Scale"* developed by Brandes, Dharwadkar, and Dean (2000, as cited in Gerald, 2002) was used. This scale included 13 items and measured three dimensions such as cognitive cynicism, affective cynicism and behavioral cynicism.Additionally, *"Interview Questions for Teachers"* were used to collect qualitative data. It included 10 items.

Data Collection Procedure

Before field testing the instruments with a sample of teachers, the instruments used in this study were reviewed by a panel of experts. The review panel scrutinized the instruments for format, dimension presentation, item clarity, instruction coherency, and grammar and syntax usages.In this study, the Pearson product-moment correlation method (*Average Item Total Correlation*) was used for internal consistency reliability. According to the data, the coefficient of correlation for *"Ethical Leadership Scale (ELS)"* was ranged from 0.95 to 0.98 and the average was 0.97. Similarly, the coefficient of correlation for *"Organizational Justice Scale"* was ranged from 0.94 to 0.97 and the average was 0.96. Lastly, the coefficient of correlation for *"Organizational Cynicism Scale"* was ranged from 0.75 to 0.92 and the average was 0.84.

In order to collect quantitative data, questionnaires were distributed to seven Basic Education High Schools in Indaw Township from 8th November, 2018 to 16th November, 2018

and collected them after lasting 10 days. After analyzing quantitative data, selected principals and high school teachers were interviewed from 30th November, 2018 to 5th December, 2018.

Data Analysis

The Statistical Package of the Social Sciences (SPSS) was utilized to statically analyze the quantitative data collected from selected high schools. Descriptive statistics such as means and standard deviations were computed to determine perception level of high school teachers on principals' ethical leadership, organizational justice and their organizational cynicism. According to KabakciYurdakul (2012, as cited in Efilti & Coklar, 2016) the mean value from 1.00 to 2.33 was defined as "low level", the mean value from 2.34 to 3.67 was defined as "moderate level", and the mean value from 3.68 to 5.00 was defined as "high level".

Furthermore, in order to determine if any correlational relationships existed among three variables, Pearson product-moment correlation coefficients were also utilized. Moreover, multiple regressions were also calculated to determine whether there were any predicting relations between high school teachers' perception of principals' ethical leadership, organizational justice and their organizational cynicism. Besides, quantitative analysis, data collected from qualitative analysis such as interviews were categorized and analyzed to fulfil the quantitative findings on principals' ethical leadership, organizational justice and teachers' organizational cynicism.

Findings

Quantitative Findings

(i) Ethical Leadership

Mean values of principals' ethical leadership perceived by teachers in selected high schools are described in Table 1.

Table 1   Mean Values of Principals' Ethical Leadership Perceived by Teachers in Selected High Schools

Dimensions	High Schools							Composite Mean (N=233)
	S1	**S2**	**S3**	**S4**	**S5**	**S6**	**S7**	
Communicative Ethic	2.33	3.03	2.88	3.79	3.88	3.51	4.19	**3.65**
Climatic Ethic	2.64	3.37	3.23	4.05	4.16	3.73	4.07	**3.85**
Decisional Ethic	2.88	3.56	3.41	4.13	4.21	3.89	4.23	**3.97**
Behavioral Ethic	2.59	3.13	3.08	3.98	4.17	3.65	4.13	**3.81**
Overall Ethical Leadership	2.57	3.24	3.12	3.96	4.08	3.67	4.15	**3.80**

1.00-2.33 = low level,   2.34-3.67 = moderate level,   3.68-5.00 = high level

According to the statistical information in Table 1, "communicative ethic" was at low level and the remaining dimensions of ethical leadership were at moderate levels in S1. Again, the principals from S2 and S3 practiced moderate level of ethical leadership because mean values for all dimensions of principals' ethical leadership were between 2.34 and 3.67 respectively. In addition, the levels of principals' ethical leadership for S4, S5 and S7 were high because mean values of all dimensions of ethical leadership indicated that there were high levels of performance in those schools. When analyzing the ethical leadership practice of principal from S6, moderate practices were found in "communicative ethic" and "behavioral ethic" and high practices were found in "climatic ethic" and "decisional ethic".

When studying the overall principals' ethical leadership at selected high schools in Indaw Township, high levels of ethical leadership practices were found in School 4, 5, and 7 but moderate levels of ethical leadership practices were found in School 1, 2, 3, and 6.

Similarly, when studying the dimensions of principals' ethical leadership at selected high schools in Indaw Township, high levels of ethical leadership practices were found in three dimensions; "climatic ethic", "decisional ethic" and "behavioral ethic" and moderate level of ethical leadership practices was found in only one dimension, "communicative ethic". However, the mean value for "overall ethical leadership" of selected principals indicated that high level of ethical leadership was found in those schools.

(ii) Organizational Justice

Table 2 presents mean values of principals' organizational justice perceived by high school teachers of selected high schools.

Table 2 Mean Values of Principals' Organizational Justice Perceived by High School Teachers in Selected High Schools

Dimensions	High Schools							Composite Mean (N=233)
	S1	S2	S3	S4	S5	S6	S7	
Distributive Justice	2.62	3.44	3.10	3.85	4.01	3.55	4.16	**3.76**
Procedural Justice	2.39	3.10	3.07	3.86	3.96	3.62	4.10	**3.70**
Interactional Justice	2.18	2.75	2.88	3.62	3.87	3.32	4.04	**3.54**
Overall Organizational Justice	2.42	3.13	3.04	3.81	3.96	3.53	4.11	**3.69**

1.00-2.33 = low level,   2.34-3.67 = moderate level,   3.68-5.00 = high level

When analyzing the results of Table 2, it was seen that "distributive justice" dimension and "procedural justice" dimension perceived by teachers from S1 were at moderate levels and the remaining "interactional justice" dimension was at low level. Additionally, the performance levels for organizational justice of principals from S2, S3 and S6 were at moderate levels. On the other hand, two dimensions of principals' organizational justice such as "distributive justice" and "procedural justice" fell in the high band and the remaining one dimension, "interactional justice", fell in the moderate band in S4. Furthermore, the mean values of all dimensions of principals' organizational justice perceived by high school teachers from S5 and S7 were at high levels.

When studying the overall principals' organizational justice at selected high schools in Indaw Township, high levels of organizational justice practices were found in School 4, 5, and 7 but moderate levels of organizational justice practices were found in School 1, 2, 3, and 6.

Similarly, when studying the dimensions of principals' organizational justice at selected high schools in Indaw Township, high levels of perception were found in principals' "distributive justice" and "procedural justice" dimensions and moderate level of perception was found in principals' "interactional justice" in selected high schools of Indaw Township. Nevertheless, the mean value of the "overall organizational justice" was 3.69 and it showed that the principals from selected high schools in Indaw Township had high level of organizational justice.

(iii) Organizational Cynicism

Table 3 provides mean values of organizational cynicism perceived by teachers themselves in selected high schools. As shown in Table 3, teachers from S1, S2 and S3 rated that they had moderate levels of perception on all dimensions of organizational cynicism. On the

other hand, teachers from S4, S5 and S7 rated that they had low levels of perception on all dimensions of organizational cynicism. Again, teachers from S6 rated that they had moderate levels of perception on two dimensions, "cognitive cynicism" and "behavioral cynicism", but they had low level of perception on the remaining dimension, "affective cynicism".

Table 3 Mean Values of Organizational Cynicism Perceived by Teachers themselves in Selected High Schools

Dimensions	High Schools							Composite Mean (N=233)
	S1	**S2**	**S3**	**S4**	**S5**	**S6**	**S7**	
Cognitive Cynicism	3.49	2.92	2.83	1.97	1.70	2.53	2.06	2.20
Affective Cynicism	3.23	2.78	2.79	1.60	1.73	2.32	1.88	2.07
Behavioral Cynicism	2.95	2.47	2.93	2.03	2.33	2.77	2.28	2.42
Overall Organizational Cynicism	**3.24**	**2.74**	**2.85**	**1.89**	**1.90**	**2.54**	**2.07**	**2.23**

1.00-2.33 = low level,   2.34-3.67 = moderate level,   3.68-5.00 = high level

When analyzing the overall teachers' organizational cynicism in selected high schools, moderate levels of organizational cynicism were found in S1, S2, S3 and S6 and low levels of organizational cynicism were found in S4, S5, and S7.

In conclusion, teachers from all selected high schools perceived that they had low levels in two dimensions of organizational cynicism, namely, "cognitive cynicism" and "affective cynicism" while they had moderate level in only one dimension of organizational cynicism, "behavioral cynicism". However, the mean value for "overall organizational cynicism" of teachers from selected high schools in Indaw Township indicated that they had low level of organizational cynicism.

(iv) Relationship among Principals' Ethical Leadership, Organizational Justice and Teachers' Organizational Cynicism

The correlations between high school teachers' perception of principals' ethical leadership, organizational justice andtheir organizational cynicism in selected high schools can be seen in Table 4.

Table 4 Correlations between High School Teachers' Perception of Principals' Ethical Leadership, Organizational Justice and their Organizational Cynicism in Selected High Schools

Variables	1	2	3
1. Ethical Leadership	1		
2. Organizational Justice	**.934****	1	
3. Organizational Cynicism	-.669**	-.658**	1

**Correlation is significant at the 0.01 level (2- tailed).

According to the Table 4, there was a high, positive and significant relationship between principals' "ethical leadership" and "organizational justice" (r=0.934, p<0.01). However,high school teachers' perception of principals' "ethical leadership" was negatively and highly correlated with teachers' "organizational cynicism" (r=-0.669, p<0.01). Similarly, there was a negatively and highly correlation between high school teachers' perception of principals' "organizational justice" and their "organizational cynicism"(r=-0.658, p<0.01) at selected high schools in Indaw Township.

(v) Multiple Regressions of Variables

A multiple regression was run to determine whether or not there were any predicting relations between high school teachers' perception of principals' ethical leadership, organizational justice and their organizational cynicism.

Table 5 Multiple Regression Analysis for Dimensions of Ethical Leadership Predicting Organizational Justice

Independent Variable's Dimensions	Dependent Variable	B	β	Std Error	p	Adjusted R^2
Communicative Ethic	**Organizational Justice**	.530	.582	.058	**.000***	**.877**
Climatic Ethic		.212	.197	.068	**.002**	
Decisional Ethic		.077	.064	.075	.307	
Behavioral Ethic		.123	.123	.084	.144	

Note: ** *p<.01, ***p<.001*

According to the findings shown in Table 5, there were prediction relations between two dimensions of principals' ethical leadership, "communicative ethic" (β=.582, $p<.001$) and "climatic ethic" (β=.197, $p<.01$), and principals' "organizational justice". Based on the results, the adjusted R^2 was .877 indicating 87.7 % of the variance of principals' organizational justice can be explained by the model.

Table 6 Multiple Regression Analysis for Dimensions of Principals' Ethical Leadership Predicting High School Teachers' Organizational Cynicism

Independent Variable's Dimensions	Dependent Variable	B	β	Std Error	p	Adjusted R^2
Communicative Ethic	**Organizational Cynicism**	-.076	-.085	.255	.532	**.445**
Climatic Ethic		-.108	-.102	.121	.446	
Decisional Ethic		-.125	-.106	.142	.424	
Behavioral Ethic		-.390	-.399	.156	**.026***	

Note: * *p < .05*

Table 6 shows multiple regression analysis for dimensions of principals' ethical leadership predicting high school teachers' organizational cynicism. The analysis results shown in Table 6 indicated that "behavioral ethic" ($\beta = -.399$, $p<.05$) significantly and negatively predicted teachers' "organizational cynicism" when all dimensions of principals' ethical leadership were included. The adjusted R^2 was 0.445 which indicated 44.5% of the variance in high school teachers' "organizational cynicism" was explained by the model.

Table 7 Multiple Regression Analysis for Dimensions of Principals' Organizational Justice Predicting High School Teachers' Organizational Cynicism

Independent Variable's Dimensions	Dependent Variable	B	β	Std Error	p	Adjusted R^2
Distributive Justice	**Organizational Cynicism**	-.314	-.320	.101	**.002**	**.428**
Procedural Justice		-.258	-.227	.112	**.023***	
Interactional Justice		-.083	.093	.105	.429	

Note: **p < .05*, ** *p < .01*

As shown in Table 7, two dimensions of principals' organizational justice, "distributive justice" (β =-.320, $p<.01$) and "procedural justice" (β=-.227, $p<.05$), significantly and negatively predicted high school teachers' "organizational cynicism" when all dimensions of principals' organizational justice were included. The adjusted R^2 was 0.428 indicating 42.8% of the variance of high school teachers' organizational cynicism was explained by the model.

Qualitative Findings

In order to gather qualitative data, 24 teachers at all levels (primary, junior and senior teachers) from four high schools were randomly selected and their responses were shown as below.

The **first** interview question asked teachers to describe how their principals communicated and behaved towards teachers.

- Fifteen (62.50%) teachers described that

  "Their principals communicated friendly and behaved fairly towards them."

- In addition, four (16.67%) teachers stated that

  "Their principals act and tell teachers as leader when school tasks are carried out."

- On the other hand, four (16.67%) teachers responded that

  "Their principals treat them differently from another in an unfair way."

- The only one (4.16%) female teacher concluded that

  "Teachers are sometimes well treated by her principal."

The **second** interview question asked teachers to express whether or not their principals provided some help for them when they encountered difficulties in their classes and if their principals helped them, they were requested to describe an example.

- Twenty-one (87.50%) teachers reported that

  "Their principals provide them with some helps in financial, personal and teaching difficulties."

- On the other hand, three (12.50%) teachers reported that

  "Their principals do not help difficulties of teachers."

The **third** question asked teachers whether or not their principals accepted the opinions or advice of teachers when carrying out school tasks. If the principals accepted their opinions and advice, they are requested to mention an example.

- Twenty (83.33%) teachers indicated that

  "Their principals listen and accept reasonable opinions or advice of teachers."

- Two (8.33%) teachers answered that

  "Their principals sometimes accept their opinions or advice."

- Moreover, two (8.33%) teachers indicated that

  "Their principals do not accept their opinions or advice."

The **fourth** interview question asked teachers to state one of their principals' characteristics that they like the best.

- Twenty-three (95.83%) teachers gave different answers about principals' good characteristics such as

"*Listening and considering of teachers' opinions, having incisiveness, fairness, openness and compassion, being accountable for their decisions, keeping the promises, obeying the rules and disciplines, being punctual and working hard*".

- However, only one (4.17%) teacher responded that

  "She does not like any characteristics of her principal."

The **fifth** interview question asked teachers to explain how their principals solved a serious problem when it occurred in their schools.

- Eighteen (75%) teachers explained that

  "When a serious problem occurs in their schools, the principals solve it with class teachers, subject deans, members of disciplinary committee and if necessary, parents, members of Parent-Teacher Association and administrators."

- Furthermore, five (20.83%) teachers explained that

  "Firstly, their principals seek the roots of a problem and then explain the bad effects of the problem calmly."

- In addition, another one (4.17%) teacher answered that

  "When a serious problem occurs in her school, the principal not only asks teachers' advice but also gets experts' advice to solve that problem."

The **sixth** interview question asked teachers to describe how their principals delegated teaching subjects to teachers.

- Fourteen (58.33%) teachers expressed that

  "Their principals delegate teaching subjects to teachers according to their specialized subjects and draw the time table fairly."

- Ten (41.67%) teachers stated that

  "Their principals allow teachers to delegate teaching subjects by themselves."

The **seventh** interview question asked teachers to express how their principals managed the schools in accordance with school rules and regulations.

- Twenty-three (95.83%) teachers answered that

  "Their principals manage the school in accordance with school rules and regulations."

- On the other hand, only one (4.17%) teacher answered that

  "The principal does not manage the school in accordance with rules and regulations."

The **eighth** question asked teachers whether or not their principals informed teachers when they made important decisions about schools, and teachers are requested to give an example.

- Twenty-one (87.50%) teachers mentioned that

  "Their principals inform them about important decisions of school such as spending money on school activities, setting school rules, examining students' learning, explaining the instructions of Township Education Officer to teachers."

- On the other hand, three (12.50%) teachers answered that

  "Their principals do not inform them about important decisions of schools."

The **ninth** interview question asked teachers to mention their opinions and suggestions about the practices of their schools.

- Thirteen (54.17%) teachers indicated that

  "Their schools' practices are better than before."

- In addition, seven (29.17%) teachers commented that
  "Their principals are trying hard to improve their schools."
- Two (8.33%) teachers reported that
  "The practices of their school are weak."
- Two (8.33%) teachers did not express their opinions about the practices of the school, but they expressed their suggestions that
  "Enough teachers should be appointed in their schools and school library should be built."
- Moreover, other teachers suggested their principals to build a stand for motorcycles, to buy sports equipment for indoor sports and to build new classrooms.

The **last** interview question asked teachers to describe how they thought about the practices of their schools.

- Twenty (83.33%) teachers indicated that
  "They were very satisfied with the practices of their schools."
- On the other hand, four (16.67%) teachers answered that
  "They are sometimes satisfied with the practices of their schools."

Discussion and Conclusion

Research question one examined the high school teachers' perceived levels of principals' ethical leadership, organizational justice and their organizational cynicism at selected high schools in Indaw Township. According to the results, the principals from S1, S2, S3 and S6 moderately performed ethical leadership and organizational justice in their schools. Therefore, the principals from S1, S2, S3 and S6 should revise their leadership style and need to practice ethical leadership and organizational justice in their schools. In other words, the principals should more focus on their behaviors such as accepting own failures, not being selfish, being fair, being constructive in discussions, being patient, fair, respectful, sincere and modest. Accordingly, the principals should pay more attention to behave teachers gently, respectfully, proudly and care their personal needs. When studying high school teachers' organizational cynicism level, teachers from those high schools perceived that they had moderate level of organizational cynicism. Both principals and teachers from those high schools should perform to reduce organizational cynicism. Especially, teachers should control their "behavioral cynicism" because their negative behaviors towards schools can lead low performance and affect academic achievement.

Research question two explored the relationships between high school teachers' perception of principals' ethical leadership, organizational justice and their organizational cynicism. It was found that positive and high relationship between high school teachers' perception of principals' ethical leadership and organizational justice. This finding was similar to findings of Gökhan, Metin and Şahin (2012) and Bağrıyanık and Can (2017). In line with that result, the higher principals' ethical leadership level increases, the higher their organizational justice level will increase or vice versa.

On the contrary, there was a negative and high relationship between high school teachers' ethical leadership perception and their organizational cynicism. This finding was consistent with the findings of Mete (2013) and Bağrıyanık and Can (2017). It can be stated that when principals' ethical leadership is increased, high school teachers' organizational cynicism will be decreased. Therefore, when principals manage and lead the schools in accordance with ethical leadership, consequently, teachers' organizational cynicism attitudes towards schools will be reduced.

Likewise, high school teachers' perception of principals' organizational justice negatively and highly correlated to their organizational cynicism. This result was parallel to the findings by Alkış and Kılınç (2016), Bağrıyanık and Can (2017) and Girgin and Gümüşeli (2018). In line with this result, the more principals show organizational justice in schools, the fewer teachers have organizational cynicism towards their schools. Thus, when principals delegate instructional tasks and school tasks fairly, make necessary and enough explanations about decisions of the schools, treat teachers fairly and respectively, teachers' possible negative attitude and behaviors towards the schoolswill be decreased.

Research question three examined whether there were any predicting relations between high school teachers' perception of principals' ethical leadership, organizational justice and their organizational cynicism or not. Based on the findings, it can be interpreted that 87.7% of principals' "organizational justice" depended on their "ethical leadership". Moreover, it was observed that two sub-dimensions of principals' ethical leadership, "communicative ethic" and "climatic ethic",could significantly and positively predict principals' "organizational justice".

On the other hand, independent variable, principals' "ethical leadership", predicted 44.5% of the variance in dependent variable, high school teachers' "organizational cynicism. As for comparison of this finding with other studies, Bağrıyanık and Can (2017), in their study, stated that 30% of the variance of the organizational cynicism's general average can be explained by teachers' ethical leadership perception while Mete (2013) found that 78 % academics' cynicism attitudes depend on administrators' ethical leadership behaviors. In line with the result in this study, it can be said that principals' "ethical leadership" in schools influenced teachers' "organizational cynicism" related to schools almost by half. In addition, one sub-dimension of principals' "ethical leadership", "behavioral ethic", could significantly and negatively predict teachers' organizational cynicism".

Again, according to the results of the regression analysis, principals' "organizational justice" explained 42.8% of the variance of high school teachers' "organizational cynicism". It was also found that "distributive justice" and "procedural justice" significantly and negatively predicted high school teachers' "organizational cynicism" when all dimensions of principals' organizational justice were included.

Based on the interview responses of principals and teachers, it can be concluded that the principals in Indaw Township practised ethical leadership and had organizational justice. In addition, their organizational cynicism level was low because they answered that they felt very satisfied with the practices of their schools according to teachers' interview responses.

Moreover, because there was a high and negative relationship between principals' "organizational justice" and high school teachers' "organizational cynicism", principals should have "organizational justice" in order to protect schools from cynical thought and effects of cynicism attitudes.

Acknowledgements

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THE EFFECTS OF PRINCIPALS' TRANSFORMATIONAL LEADERSHIP ON TEACHERS' COMMITMENT TO CHANGE IN THE CURRICULUM REFORM

Aye Chan Myae[1] and Zin Nwe Than[2]

Abstract

The purpose of the study is to explore the effects of principals' transformational leadership on teachers' commitment to change in the curriculum reform at Basic Education Primary Schools in Sinkaing Township. Both quantitative and qualitative research methods were executed to gather the data. The sample for quantitative study consisted of 213 teachers from 60 Basic Education Primary Schools in Sinkaing Township. The teachers completed two survey instruments: "*Transformational School Leadership Questionnaire*" developed by Leithwood (2012, as cited in Liu, 2013) and "*Organizational Change Process Survey*" developed by Leithwood, Dart, Jantzi, and Steinbach (1993, as cited in Liu, 2013). Furthermore, the qualitative data were gathered by interviewing 10 principals and 30 teachers from 10 selected primary schools. The findings showed that all teachers perceived that their principals highly performed all dimensions of transformational leadership in their schools. Moreover, they performed their work with a high level of commitment in the curriculum reform. Results of correlation testing indicated that principals' transformational leadership was significantly and highly related with teachers' commitment (r=.800, p<0.01). Besides, the result of multiple regressions showed that one dimension of *"Setting Direction"* was a positive predictor for changing the teachers' commitment. According to linear regression, the adjusted R squared value (R^2 = .638, p<.001) indicated that 64% of the variance in teachers' commitment can be predicted from principals' transformational leadership. In conclusion, the more principals practiced the transformational leadership at schools, the more teachers performed their tasks with higher commitment (Liu, 2013). Furthermore, principals' transformational leadership can be effective when the principals guided a clear direction and created a good cooperation among teachers, students, and all stakeholders (Rutledge, 2010).

Keywords: Curriculum Reform, Transformational Leadership, Teacher Commitment

Introduction

With the vision of creating an education system that will generate a learning society capable of facing the challenges of the Knowledge Age, the government of Myanmar has made many efforts to strengthen the education system and has also made education reform as a national priority (Soe, Swe, Aye, & Mon, 2017). To fully realize the benefits of a quality national education system, a new National Education Strategic Plan (NESP), a comprehensive and evidence-based roadmap intended to reform the entire education sector, is implemented during the period of 2016-2021 (MOE-CESR, 2016). Reform is a complex concept. As an educational aspiration, its goal is to realize deep, systemic, and sustained restructuring of schooling (Provenzo & Renaud, 2009).

In the basic education sub-sector, principals will play a key role in the implementation of the curriculum and government policies, organization and supervision of teachers, general administration, as well as adoption of new interactive pedagogy and application of a new assessment system (Liu, 2013). In addition, principal needs to be highly involved in encouraging, directing, observing teaching- learning, and motivating teachers' commitment to change in their schools (Hallinger, 2005, as cited in Kolu, 2015).

At a time when education is in constant flux, teachers are expected to incorporate reforms on a number of levels into their daily practice. Moreover, teachers must be willing to experience

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steep learning curves and invest personal time and energy to translate the ongoing reforms successfully into effective practice (Crosswell & Elliott, 2006). Therefore, most researchers argued that increasing the commitment of teachers is an important step in the process of curriculum reform (Vasudevan, 2013).

Therefore, the transformational leadership practices enacted by principals in the schools are important factors to motivate teachers' commitment to change in the curriculum reform process. By keeping in view the importance of principals' transformational leadership and teachers' commitment, the present study will be investigated the effects of principals' transformational leadership on teachers' commitment to change in the curriculum reform by studying the perceptions of teachers from all Basic Education Primary Schools in Sinkaing Township. The information gathered from this study can be helpful to teachers to understand their principals' transformational leadership practices and to improve their commitment in the curriculum reform. Moreover, this information can be useful in helping principals to develop their transformational leadership practices needed to be enacted in the curriculum reform.

Purpose of the Study

The main purpose of this study was to investigate the effects of principals' transformational leadership on teachers' commitment to change in the curriculum reform at Basic Education Primary Schools in Sinkaing Township.

Research Questions

1. What are the teachers' perceptions of principals' transformational leadership in the curriculum reform?
2. Are there any significant differences in perceptions of teachers on principals' transformational leadership in the curriculum reform based on their demographic information (gender, age, position, academic qualification and teaching service)?
3. What are the teachers' perceptions of their commitment in the curriculum reform?
4. Are there any significant differences in perceptions of teachers on their commitment in the curriculum reform based on their demographic information (gender, age, position, academic qualification and teaching service)?
5. Is there any relationship between principals' transformational leadership and teachers' commitment in the curriculum reform?
6. Which dimensions of principals' transformational leadership significantly predict teachers' commitment in the curriculum reform?

Scope of the Study

1. The scope of this study was limited to Basic Education Primary Schools in Sinkaing Township because of available time and resources of the researcher.
2. The findings of this study could not be generalized to any group of other Township except the Basic Education Primary Schools in Sinkaing Township.

Definitions of Key Terms

The terms used throughout this study are identified below to have clarity and understanding.

- **Curriculum Reform:** Curriculum reform is defined as bringing changes to the subject content, teaching method and assessment of curriculum (Simmons, 2009).

- **Transformational Leadership:** Transformational leadership is defined as the leadership that enhances the individual and collective problem-solving capacities of organizational members; such capacities are exercised in the identification of goals to be achieved and practices to be used in their achievement (Begley and Cousins, 1994, as cited in Liu, 2013).

- **Teacher Commitment:** Teacher commitment defined as teacher behavior that is directed toward helping students develop both intellectually and socially where teachers will work hard to ensure student success in school (Hoy & Sabo, 1998, as cited in Liu, 2013).

Operational Definitions of the Study

This study utilizes the following operational definitions.

- **Curriculum Reform:** Curriculum reform in the study refers to curriculum change started in Kindergarten, Grade-1, and Grade-2 according to National Education Strategic Plan 2016-2021.

- **Transformational Leadership:** Transformational leadership used in this study is Leithwood's model of transformational leadership which is based on the empirical studies and theories of Bass and Burns. In this study, transformational leadership refers to four practices of transformational leadership such as setting direction, developing people, redesigning the organization, and managing the instructional program (Leithwood, 1999, as cited in Liu, 2013).

- **Teacher commitment:** Teacher commitment in this study consists of two parts such as organizational characteristics and teachers' commitment to change.

(1) Organizational Characteristics: In this study, organizational characteristics refer to four types of school characteristics such as school culture, strategies for change, school structure, and school environment.

(2) Teachers' Commitment to Change: Teachers' commitment to change refers to four dimensions of teachers' personal factors such as personal goals, capacity beliefs, context beliefs, and emotional arousal (Liu, 2013).

Conceptual Framework of the Study

The conceptual framework guiding this study is summarized in following figure.
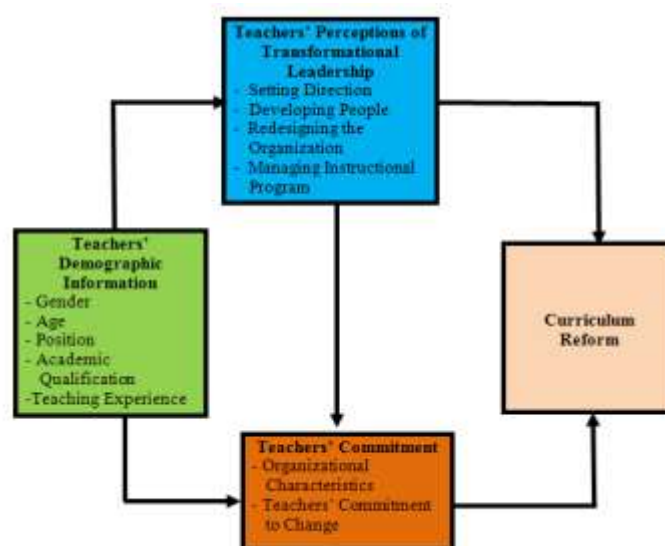
Figure 1 Conceptual Framework of the Study

Review of Related Literature

Curriculum Reform

- Curriculum is the sum total experiences which children undergo at school whereas the syllabus is a brief list of topics for each subject. Curriculum reform is defined as bringing changes to the subject content, teaching method and assessment of curriculum (Simmons, 2009).

- Curriculum reform in the study refers to curriculum change started in Kindergarten, Grade-1, and Grade-2 according to National Education Strategic Plan 2016-2021.

Transformational Leadership

- Transformational leadership is defined as a leadership approach that causes change in individuals and social systems (Avolio, 2004, as cited in Feizi, Ebrahimi, & Beheshti, 2014).

- Transformational leadership used in this study is Leithwood's model of transformational leadership which is based on the empirical studies and theories of Bass and Burns. In this study, transformational leadership refers to four practices of transformational leadership such as setting direction, developing people, redesigning the organization, and managing the instructional program.

- **Setting Direction** means building a school vision, establishing school goals, and creating high performance expectations. **Developing People** means providing individualized support; creating intellectual stimulation; and modeling best practices. **Redesigning the Organization** refers to developing a collaborative school culture, creating structures to foster participation in school decisions. **Managing Instructional Program** means establishing effective staffing practices, providing instructional support, monitoring school activities (Yu, Leithwood & Jantzi, 2002).

Teachers' Commitment

- Teacher commitment is closely connected to teachers' work performance and their ability to innovate and to integrate new ideas into their own practice, absenteeism, staff turnover, as well as having an important influence on students' achievement in, and attitudes toward school (Firestone & Graham, 1996, as cited in Crosswell & Elliott, 2006).

- Teacher commitment is studied in terms of Leithwood's (1999, as cited in Liu, 2013) dimensions. In this study, teacher commitment consists of two parts such as organizational characteristics and teachers' commitment to change.

Organizational Characteristics

- In this study, organizational characteristics or the mediating elements refer to four types of school characteristics such as school culture, strategies for change, school structure, and school environment.

- **School Culture** includes the shared norms, values, beliefs, and assumptions that shape members' decisions and practices. **Strategies** for change include the uses made of school goals, encouragement for teachers to develop improvement plans and to engage in professional development activities. **School structure** includes opportunities for teachers to participate in decision making about both classroom and school-wide issues. **School environment** encompasses teachers' perceptions that the school's efforts to manage the change process allow them to focus on a small number of priorities to implement change (Hallinger & Heck, 1998, as cited in Yu et al., 2002).

Teachers' Commitment to Change

- **Teachers' commitment to change** refers to four dimensions of teachers' personal factors such as personal goals, capacity beliefs, context beliefs, and emotional arousal.

- **Personal goals** refer to desired future states that have been internalized by an individual. **Capacity beliefs** mean psychological states such as self-efficacy, self-confidence, academic self-concept, and aspects of self-esteem. **Context beliefs** refer to beliefs about whether the school administration or the central office will actually provide the money or other resources that teachers require to successfully implementing a change. **Emotional arousal** processes have the functions to create a state of action readiness and to serve to maintain patterns of action (Leithwood, 1999, as cited in Liu, 2013).

Methodology

Research Method

Quantitative and qualitative research methods were used to collect the required data in this study.

Participants

All teachers from 60 Basic Education Primary Schools in Sinkaing Township participated in this study. In addition, interview was also conducted with 10 principals and 30 teachers from 10 selected primary schools in order to obtain detailed information about principals' and teachers' perspectives on principals' transformational leadership and teachers' commitment to change in the curriculum reform.

Instruments

In order to collect and analyze quantitative data, two surveys were used to obtain the data needed from the samples. In order to explore the teachers' perceptions of their principals' transformational leadership, "*Transformational School Leadership Questionnaire*" developed by Leithwood (2012, as cited in Liu, 2013) was used. Moreover, *"Organizational Change Process Survey"* developed by Leithwood, Dart, Jantzi, & Steinbach (1993, as cited in Liu, 2013) was used to measure the perceptions of teachers about their commitment to change in the curriculum reform. In addition, interview questions for principals and interview questions for teachers were created by the researcher to obtain detailed information about the principals' transformational leadership and teachers' commitment to change in the curriculum reform.

Data Collection Procedures

Before field testing the instruments with a sample of teachers, the instruments used in this study were reviewed by a panel of experts who have special knowledge and close relationship with this area, from Department of Educational Theory. Next, a sample of 21 Basic Education Primary Schools in Sinkaing Township was randomly chosen as sample schools for the pilot testing. The preliminary instruments were field tested by 82 teachers (6 male teachers and 76 female teachers) representing 21 schools. Questionnaires were distributed to those schools on September 10th, 2018 and collected after 5 days. All of the teachers responded to those questionnaires. After collecting the data, the researcher reviewed and revised the items which were less than correlation coefficient 0.3.

In order to measure the reliability of instruments, the Pearson product-moment correlation method (**Average Item Total Correlation**) was used for internal consistency reliability. In this study, the reliability of "*Transformational School Leadership Questionnaire*" developed by Leithwood (2012, as cited in Liu, 2013) ranged from .958 to .990 and the average of this

instrument was .974."*Organizational Change Process Survey*" developed by Leithwood, Dart, Jantzi, & Steinbach (1993, as cited in Liu, 2013) consists of two parts: the reliability of organizational characteristics questions ranged from .844 to .915 and the average of this instrument was .879 and the reliability of teachers' commitment to change questions ranged from .817 to .903 and the average was .860.

After taking permission from the responsible persons, questionnaires were distributed to teachers from 60 Basic Education Primary Schools in Sinkaing Township on October 15th, 16th, 17th and 18th, 2018and collected after lasting one week. Based on the responses of teachers, the study was conducted in order to explore the effects of principals' transformational leadership on teachers' commitment to change in the curriculum reform.

In addition, the researcher conducted the interviews with 10 principals and 30 teachers from 10 Basic Education Primary Schools in Sinkaing Township on December 3rd, 4th, 5th, 6th and 7th, 2018. Based on the results of responses, this study was conducted in order to investigate the effects of principals' transformational leadership on teachers' commitment to change in the curriculum reform.

Data Analysis

Using SPSS, descriptive statistics such as means, and standard deviations for each variable were calculated concerning principals' transformational leadership and teachers' commitment to change in the curriculum reform. In order to determine the levels of teachers' perceptions on principals' transformational leadership and teachers' commitment, the levels of mean values were identified as the mean values from 1.00 to 2.33 was "Low Level", the mean values from 2.34 to 3.67 as "Moderate Level" and the mean values from 3.68 to 5.00 as "High Level".

Analysis of variance (ANOVA), independent samples *t*-test and Post Hoc multiple comparisons test were also used to determine whether or not there were significant differences in the perceptions of principals' transformational leadership and teachers' commitment to change in the curriculum reform according to the demographic information of teachers. In addition, Pearson product-moment correlation coefficient was utilized to explore the relationship among principals' transformational leadership and teachers' commitment. Moreover, regression tests were also used to predict the detailed correlation between the criterion variable and one or more predictor variables.

Responses to open-ended questions were categorized and analyzed to complement findings on differences in teachers' perceptions of principals' transformational leadership and their commitment to change in the curriculum reform. Furthermore, responses from principals' and teachers' interviews were categorized and analyzed to obtain and complement findings about the principal's transformational leadership and teachers' commitment to change in the curriculum reform.

Findings

Quantitative Analysis

(i) Transformational Leadership

In order to explore the teachers' perceptions of their principals' transformational leadership, "*Transformational School Leadership Questionnaire*" developed by Leithwood (2012, as cited in Liu, 2013) was used. There are four dimensions in this instrument: *"Setting Direction", "Developing People", "Redesigning the Organization", and "Managing Instructional Program"*. Table 1 shows the mean values of principals' transformational leadership perceived by teachers at Basic Education Primary Schools in Sinkaing Township.

Table 1 Mean Values of Principals' Transformational Leadership Perceived by Teachers

Dimensions of Transformational Leadership	Mean	SD	Remark
Setting Direction	4.25	.402	High Level
Developing People	4.15	.431	High Level
Redesigning the Organization	4.20	.435	High Level
Managing Instructional Program	4.20	.435	High Level
Overall Transformational Leadership	**4.20**	**.413**	**High Level**

1.00-2.33 = Low   2.34-3.67= Moderate   3.68-5.00 = High

According to Table 1, the mean values for perceptions of teachers on all dimensions of principals' transformational leadership and overall transformational leadership were above 4.00. Therefore, the level of principals' transformational leadership in Basic Education Primary Schools in Sinkaing Township was at high level.

(ii) Teachers' Commitment

"*Organizational Change Process Survey*" developed by Leithwood, Dart, Jantzi, & Steinbach (1993, as cited in Liu, 2013) was used to measure the perceptions of teachers on their commitment to change in the curriculum reform. This survey consists of two parts such as organizational characteristics and teachers' commitment to change. Table 2 shows the mean values of teachers' commitment perceived by teachers themselves.

Table 2 Mean Values of Teachers' Commitment Perceived by Teachers Themselves

	Mean	SD	Remark
Organizational Characteristics	4.17	.398	High Level
Teachers' Commitment to Change	4.15	.364	High Level
Teachers' Commitment	**4.16**	**.374**	**High Level**

1.00-2.33 = Low   2.34-3.67= Moderate   3.68-5.00 = High

Based on the teachers' perceptions shown in Table 2, it was found that the average mean value of teachers 'perceptions of their commitment in the curriculum reform was at high level. In other words, teachers from Basic Education Primary Schools in Sinkaing Township performed their work with a high level of commitment in the curriculum reform.

(iii) Relationship between Principals' Transformational Leadership and Teachers' Commitment in the Curriculum Reform

The Pearson-product moment correlation coefficient was utilized to investigate the relationship between principals' transformational leadership and teachers' commitment in the curriculum reform perceived by teachers at all Basic Education Primary Schools in Sinkaing Township. Table 3 shows the correlations between principals' transformational leadership and teachers' commitment in the curriculum reform perceived by teachers.

Table 3 Correlations between Principals' Transformational Leadership and Teachers' Commitment in the Curriculum Reform Perceived by Teachers

	1	2	3	4
Transformational Leadership	1			
Organizational Characteristics	.770**	1		
Teachers' Commitment to Change	.802**	.927**	1	
Teachers' Commitment in the Curriculum Reform	**.800****	.983**	.980**	1

Note: **$p<0.01$

According to Table 3, it was also found that two domains of teachers' commitment such as "Organizational Characteristics" (*r*=.770, *p*<0.01) and "Teachers' Commitment to Change" (*r*=.802, *p*<0.01) were significantly and highly correlated with "Transformational Leadership". Accordingly, principals' "Transformational Leadership" was a significant and positive relationship with "Teachers' Commitment in the Curriculum Reform" (*r*=.800, *p*<0.01). In summary, the more principals practice the transformational leadership at their schools, the more teachers perform their tasks with high commitment.

(iv) Regression Analysis of Variables

.   In this study, multiple regressions were calculated to explore which dimensions of principals' transformational leadership significantly predict teachers' commitment. Table 4 shows results of multiple regression analysis for principals' transformational leadership on teachers' commitment.

Table 4 Results of Multiple Regressions Analysis for Principals' Transformational Leadership on Teachers' Commitment

Dependent Variables	Predictors	B	Std. Error	β	t	F	R²
Teachers' Commitment	(Constant)	.980	.165		5.928***	**97.716*****	.646
	Setting Direction	**.537**	**.134**	**.577**	**4.001*****		
	Developing People	.139	.119	.160	1.172		
	Redesigning the Organization	-.018	.150	-.021	-.119		
	Managing Instructional Program	.095	.100	.110	.951		

Note: ***p<0.001

When studying the results in Table 4, "Setting Direction" (*t*=4.001, *p*<.001) was positive predictor for changing the teachers' commitment in the curriculum reform. The Beta value of "Setting Direction" was .577 and it showed positive effect on teachers' commitment. But the other dimensions such as "Developing People", "Redesigning the Organization" and "Managing Instructional Program" were not predicted to the teachers' commitment to change in the curriculum reform. Thus, it can be concluded that it is necessary to have more transformational leadership practices on developing people, redesigning the organization and managing instructional program in Basic Education Primary Schools in Sinkaing Township to successfully motivate the teachers' commitment to change when implementing the new curriculum.

Moreover, simple linear regressions were also done to examine whether there were any predicting relations between teachers' perceptions of principals' transformational leadership and their commitment in the curriculum reform. Table 5 shows the results of linear regression analysis for principals' transformational leadership on teachers' commitment.

Table 5 Results of Linear Regression Analysis for Principals' Transformational Leadership on Teachers' Commitment

Dependent Variables	Predictor	B	Std. Error	β	t	F	R²
Teachers' Commitment	(Constant)	1.121	.158		7.100***		.638
	Transformational Leadership	.725	.037	.800	**19.363*****	**374.92*****	

Note: ***p<0.001

According to Table 5, the results of the linear regression demonstrated that there was a statistically significant relationship between the independent variable, principals' transformational leadership, and the dependent variable, teachers' commitment, $F(1,211)=374.92$, $p<.001$. The t (19.363, $p<.001$) value indicated that principals' transformational leadership was significantly contributing to predict teachers' commitment. Moreover, the R^2 value 0.638 indicated that 64% of the variance in teachers' commitment was explained by the principals' transformational leadership as perceived by teachers. In other words, the influence of principals' transformational leadership 64% of the variance in teachers' commitment was ($R^2= 0.638$, $p<.001$).

Qualitative Analysis

(i) Responses of Principals' Interview

In order to obtain detailed information about the principals' transformational leadership and teachers' commitment to change in the curriculum reform, the researcher conducted interviews with principals and teachers from 10 selected Basic Education Primary Schools in Sinkaing Township. Five interview questions were used for principals in the qualitative study.

The ***first question*** asked the principals to describe how they manage their teachers to be successful in teaching-learning process in implementing the new curriculum activities in their schools. Most of the principals said,

("*They direct the teachers to learn thoroughly the teacher's manual prescribed by the new curriculum training course, and teach the students. If teachers have some requirements, they fulfill them as much as they can.*")

As the ***second question***, the researcher asked the principals to express their views on the benefits which the students can get when implementing the new curricular activities. According to principals' responses, most of the principals reported as follow:

("*The students begin to take an interest in their environment, have the beauty of nature, have more self-confident cooperate with others, and finally they are active learners in the teaching-learning process.*")

The ***third question*** asked the principals to state whether they get any help or support from the members of school community and parents when implementing the new curriculum activities or not. If they get some support, principals were requested to describe them. Most of the principals reported,

(*"The members of school community and parents provide school with teaching aids, materials and playthings required for the students, involving the playground, and constructing the school compound needed for the students.*")

As the ***fourth question***, the principals were asked to describe any difficulty that they encountered when implementing the new curriculum activities. Based on the responses of the principals, most of the principals answered that

("*They do not have any difficulty when implementing the new curriculum.*")

Furthermore, some principals said that

("*They do not have enough teaching aids or materials in their schools.*")

The ***last question*** asked principals to describe their opinions concerning the implementation of new curriculum activities. According to the principals' responses, most of the principals answered,

("*The new curricular programs are appropriate and useful for students. By doing so, they will become all rounds development learners. Therefore, the principal, teachers, students, parents, and other stakeholders need to cooperate with each other for the successful implementation of the new curriculum.*")

(ii) Responses of Teachers' Interview

Similarly, 10 interview questions were used for teachers to examine the principals' transformational leadership practices and teachers' commitment to change in the curriculum reform at selected Basic Education Primary Schools in Sinkaing Township.

The ***first question*** asked teachers to describe how their principals direct them to be successful in implementing the new curriculum activities. According to teachers' responses, most of the teachers answered,

("*Their principals direct them to teach the lessons systematically using new lesson plans and teaching strategies set by the new curricular program, and advise them to learn and study the teacher's manual concerning the new curriculum thoroughly.*")

The ***second question*** asked teachers to state how their principals help or support to improve their professional development. Based on the teachers' responses, most of the teachers responded that

("*Their principals advise them to read the educational journals, papers and books, in leisure time, and buy necessary books for the teachers, and carry out school meeting and discussion groups concerning the new curricular activities.*")

The ***third question*** asked teachers to describe how their principals motivate the members of school committees and associations to participate in implementing the new curriculum activities. According to the responses of the teachers, most of the teachers responded,

("*Their principals organize the school committees, board of trustee and parents-teachers associations and carry out regular meeting with them, and explain and discuss with the associations concerning the new curricular activities performed by the school, and encourage them to help the school activities when necessary.*")

The ***fourth question*** asked teachers to state how their principals cooperate with them in making decisions concerning the implementation of new curriculum activities in their schools and describe one example if their principals cooperate with them in a making decision. According to teachers' responses, the principals cooperated with the teachers in the decision-making process concerning the implementation of new curriculum activities. As for one example, most of the teachers responded as follows:

("*They lead and perform school activities, discussion groups and competitions concerning the new curricular programs in their schools.*")

The ***fifth question*** asked teachers to express how they solve their difficulties which are occurred in implementing the new curriculum activities. According to teachers' responses, most of the teachers said that

("*They frequently carry out sharing the experience with the colleagues, and discuss the difficulties they encountered in the classroom.*")

The ***sixth question*** asked teachers to state the advantages which students can get due to implementation of new curriculum activities. Most of the teachers responded the question as follows:

("*The students become active learners in the teaching-learning process.*")

Additionally, some teachers said that

("*The students improve creativity, innovation, imagination, decision-making skills, knowledge and ability more.*")

The ***seventh question*** was about the teaching methods which teachers employ in implementing the new curriculum activities. Most of the teachers responded as follows:

The teaching methods used by teachers in the teaching-learning process are:

- *Peer-group teaching method,*

- *Discovery method,*
- *Pair-group method,*
- *Field trip method,*
- *Brain storming method,*
- *Inductive method*
- *Deductive method,*
- *Co-operative learning method, and*
- *Story-telling method.*

Among them, peer-group teaching method and discovery method were frequently used by most of the teachers.

As the ***eighth question***, teachers are asked to describe any benefit that they get for implementing the new curriculum activities in their schools and if they have some benefits for implementing the new curriculum activities, most of the teachers answered,

("*They get new experiences, know new knowledge and new vocabulary, and become skillful at cooperating with others by attending seminars and workshops concerning the new curriculum.*")

The ***ninth question*** asked teachers to express the differences between the previous curriculum and the new one. Most of the teachers responded,

("*The new curricular programs do not have the examination system but observe daily activities of the students, and then assess and record the performance or achievement of the students.*")

The ***last question*** asked teachers to state the difficulties encountering in implementing the new curriculum activities. Concerning the responses of teachers, most of the teachers said,

("*They do not have any difficulty when implementing the new curricular programs.*")

Likewise, some teachers told that

("*They do not have enough teaching aids or materials to teach the students in their schools.*")

Based on the qualitative analysis, the principals well managed the teaching-learning process of their schools, directed teachers to implement the school' activities by using new strategies prescribed by new curriculum training course and provided necessary assistance to teachers and fulfilled them as much as they can. Teachers also performed their instructional work with high commitment in their schools.

Conclusion and Discussion

In order to investigate the effects of principals' transformational leadership on teachers' commitment to change in the curriculum reform at Basic Education Primary Schools in Sinkaing Township, both quantitative and qualitative research methods were utilized in this study. ***Research question one*** explored teachers' perceptions of their principals' transformational leadership in the curriculum reform measured by "*Transformational School Leadership Questionnaire*" developed by Leithwood (2012, as cited in Liu, 2013). This questionnaire consisted of 46 items with four dimensions such as setting direction, developing people, redesigning the organization, and managing instructional program. When examining the teachers' perceptions of their principals' transformational leadership in the curriculum reform, it was found that all teachers perceived that they had high level of perceptions on all dimensions of principals' transformational leadership and overall transformational leadership.

In other words, principals from Basic Education Primary Schools in Sinkaing Township tried to build a school vision and create high performance expectations for their schools. Similarly, they provided individualized support and modeled best practices and organizational values. Moreover, they also developed a collaborative school culture and fostered productive community relationships. Likewise, they also organized staffing the program and monitored

school activity. Therefore, principals from Basic Education Primary Schools in Sinkaing Township highly performed transformational leadership concerning the curriculum reform based on the perceptions of teachers.

Research question two determined whether or not there were significant differences in the teachers' perceptions of principals' transformational leadership in the curriculum reform based on their demographic information. Based on the research findings, it was found that there were no significant differences in the perceptions of teachers on their principals' transformational leadership according to gender, age and academic qualification of teachers. In other words, both male and female teachers who had different age groups as well as different degree or diploma holders from Basic Education Primary Schools in Sinkaing Township perceived that their principals performed suitable and useful transformational leadership to motivate their commitment in the curriculum reform.

However, there were significant differences in principals' transformational leadership among positions of teachers. Out of four dimensions of principals' transformational leadership, only one dimension, "Redesigning the Organization", F (2,210) =3.563, p<0.05, and "Overall Transformational Leadership", F (2,210) =3.167, p<0.05 according to the positions of teachers. In addition, there were significant differences in perceptions of teachers on "Setting Direction", F (6,206) = 2.312, p<0.05 according to their teaching service.

Research question three examined teachers' perceptions of their commitment in the curriculum reform. Teachers' commitment includes two parts such as organizational characteristics and teachers' commitment to change. The organizational characteristics questions have four dimensions such as "Culture", "Strategy", "Structure", and "Environment". Moreover, teachers' commitment to change questions have four dimensions such as "Personal Goals", "Capacity Beliefs", "Context Beliefs", and "Emotional Arousal". When studying the mean values for teachers' perceptions of organizational characteristics in the curriculum reform, it was found that the levels for overall characteristics of organization including "Culture", "Strategy", "Structure" and "Environment" were high. In other words, teachers from Basic Education Primary Schools in Sinkaing Township shared norms, values, beliefs, and assumptions that shape their decisions and practices in their schools. In addition, their schools encourage for them to develop improvement plans and to engage in professional development. Moreover, their schools provide the opportunities for them to participate in decision making about both classroom and school-wide issues. Furthermore, their schools effort to manage the change process allows them to focus on a small number of priorities about which there is wide consensus.

When studying the mean values for teachers' perceptions of their commitment in the curriculum reform, it was found that the levels for all dimensions of teachers' commitment to change such as "Personal Goals", "Capacity Beliefs", "Context Beliefs" and "Emotional Arousal" also high. In other words, teachers from Basic Education Primary Schools in Sinkaing Township had desired future states that are very important in the change process and have been internalized by teachers. Moreover, they had capabilities of psychological states such as self-efficacy, self-confidence, and aspects of self-esteem. Likewise, they had beliefs in which school or central office authorities will prepare allocation for their professional development. Furthermore, they persisted in attempting to accomplish long-range goals, to create a condition of action enthusiasm.

Research question four analyzed whether or not there were significant differences in teachers' perceptions of their commitment in the curriculum reform based on their demographic information. It was found that there were no significant differences in the perceptions of teachers on organizational characteristics and their commitment according to their gender and academic qualification. In other words, both male and female teachers who had different degree or diploma

holders from Basic Education Primary Schools in Sinkaing Township perceived that their schools characteristics were good and they performed their instructional work with high commitment.

However, the significant differences were found in perceptions of teachers on organizational characteristics among age differences of teachers. Out of four dimensions of organizational characteristics and four dimensions of teachers' commitment to change, one dimension, "Structure", $F(7,205)=2.165$, $p<0.05$ and one dimension, "Context Beliefs", $F(7,205)=2.448$, $p<0.05$ according to the age differences of teachers. Moreover, there were also significant differences in one dimension of organizational characteristics, "Environment", $F(2,210)=4.756$, $p<0.05$ and "Overall Organizational Characteristics", $F(2,210)=3.383$, $p<0.05$ as well as one dimension of teachers' commitment to change, "Context Beliefs", $F(2,210)=4.358)$, $p<0.05$ according to the position of teachers.

Furthermore, the significant differences were found that in perceptions of teachers on all dimensions of organizational characteristics such as "Culture", $F(6,206)=3.060$, $p<0.01$, "Strategy", $F(6,206)=2.303$, $p<0.05$, "Structure", $F(6,206)=2.317$, $p<0.05$, "Environment", $F(6,206)=3.782$, $p<0.01$, "Overall Organizational Characteristics", $F(6,206)=3.063$, $p<0.01$, and one dimension of teachers' commitment to change, "Capacity Beliefs", $F(6,206)=2.210$, $p<0.05$ according to teaching service of teachers.

Research question five investigated whether or not there were any relationship between principals' transformational leadership and teachers' commitment in the curriculum reform. Based on the research findings, principals' "Transformational Leadership" was a significant and positive relationship with "Teachers' Commitment" in the curriculum reform ($r=.800$, $p<0.01$). This study was in congruence with previous study of Liu (2013) which suggested that "Transformational Leadership" was positive relationship with "Teachers' Commitment" and the effects of transformational leadership was moderate on teachers' commitment to change in the curriculum reform.

Moreover, this study can be replicated many of the features of studies carried out in Canada by Leithwood and his colleagues which have found significant effects of transformational leadership on teachers' commitment to change (Leithwood, Menzies, & Jantzi, 1994, as cited in Yu et al., 2002). It can be interpreted that teachers performed their instructional work with high commitment when their principals made many efforts towards setting direction, developing people, redesigning the organization, and managing instructional program in their schools. In other words, the more principals practice the transformational leadership at schools, the more teachers perform their tasks with higher commitment.

Research question six explored which dimensions of principals' transformational leadership significantly predict teachers' commitment. When studying the multiple regression analysis, "Setting Direction" ($\beta=.577$, $t=4.001$, $p<.001$) was positive predictor for changing the teachers' commitment in the curriculum reform. Moreover, simple linear regressions were also done to predict the detailed correlation between the criterion variable, "Teachers' Commitment" and the predictor variable, principals' "Transformational Leadership". The results of the linear regression demonstrated that there was a significant relation between the independent variable, principals' "Transformational Leadership", and the dependent variable, "Teachers' Commitment", $F(1,211)=374.92$, $p<.001$. The R^2 value 0.638 indicated that 64% of the variance in teachers' commitment was influenced by the principals' transformational leadership as perceived by teachers. In other words, the influence of principals' transformational leadership 64% of the variance in teachers' commitment was ($R^2 = 0.638$, $p<.001$).

In the previous China study of Liu (2013), the four dimensions of transformational leadership together explained 39.3% of the variance of teachers' commitment to change ($F=47.064$, $p< 0.05$), which means that transformational leadership moderately affect teachers' commitment to change and motivate teachers to be part of the change process. In this study, it

was found that transformational leadership significantly and highly affect teachers' commitment to change in the curriculum reform.

Based on the qualitative research findings, teachers with different demographic backgrounds have different perceptions for principals' transformational leadership practices and their school characteristics. Therefore, principals should notice that the differences among teacher groups are the precondition to implement curriculum reform process effectively. Moreover, understanding the adjustable organizational factors in-depth and controlling these factors effectively would be conducive to successful school leadership and change process. Therefore, principals should combine and apply different practices of transformational leadership such as setting direction, developing people, redesigning the organization, and managing instructional program in their schools. This would effectively motivate teachers to be part of the curriculum reform process according to the empirical data described in the study.

Acknowledgements

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RELATIONSHIP BETWEEN AUTONOMY, JOB SATISFACTION, AND BURNOUT OF UNIVERSITY TEACHERS

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Abstract

The main purpose of this study was to investigate the relationship between autonomy, job satisfaction, and burnout of teachers at selected Universities in Mandalay. This study was based on Deci and Ryan's Self-Determination Theory, Herzberg's Motivation-Hygiene Theory, and Maslach's Multidimensional Theory of Burnout. In this research, both quantitative and qualitative research methods were used to carry out the study. *"Teaching Autonomy Scale (TAS)"* developed by Pearson and Hall (1993) to study the perceptions of teachers on autonomy, *"Minnesota Satisfaction Questionnaire (MSQ-Short form)"* developed by Weiss, Dawis, England and Lofguist (1977) to find out the perceptions of teachers on job satisfaction, and *"Maslach Burnout Inventory (MBI-ES)"* developed by Maslach, Jackson and Schwab (1996) to examine burnout perceived by teachers were used. Besides, interview questions were utilized to gain detailed information about autonomy, job satisfaction, and burnout of teachers. In the quantitative study, the target sample was 317 teachers, and 30 teachers participated in the qualitative study. Descriptive statistics such as means, and standard deviations, and Pearson-product moment correlation coefficient were used to analyze data. And data collected from interviews with teachers were categorized and analyzed to complement quantitative findings on autonomy, job satisfaction, and burnout of teachers. The findings of this study indicated that autonomy was positively and moderately correlated with job satisfaction ($r = .582$, $p < .01$). So, it can be interpreted that if autonomy of teachers is increased, their job satisfaction will also be increased. Moreover, it was found that there was a negative and low correlation between autonomy and burnout of teachers ($r = -.255$, $p < .01$). So, it can be concluded that if autonomy of teachers is increased, the feeling of burnout at their job will also be decreased, and vice versa.

Keywords: autonomy, job satisfaction, burnout

Introduction

Teachers are the keystone of the learning process in all educational fields (Al-Siyabi, 2016). Nyamubi (2017) said that teachers are the heart of classroom instruction, so they are key to learners' productivity and hence to society's efficiency. Through the last decades, modern society demands high-quality teaching and learning from teachers and so it has been considered that teaching is one of the most stressful and demanding professions. The task of producing qualitative educational output has been an essential subject of concern (Al-Siyabi, 2016). Granting autonomy and empowering teachers is an appropriate starting point for education experts to solve current school problems (Short, 1994).

Moreover, Pearson and Moomaw (2006) mentioned that recognizing teaching as a profession and developing professional teachers is a possible solution to teachers' lack of motivation and satisfaction, as well as teacher burnout. If teachers are to be empowered and regarded as professionals, they must have the freedom to prescribe the best possible treatment for their students. Al-Siyabi (2016) commented that autonomy is a critical and contemporary term associated with educational quality, the innovation of the schools, colleges, and universities for many positive work outcomes. Because of effective teaching and successful learning are closely linked to teacher autonomy (Florio, 2016).

According to Saragih (2011), teachers with autonomy will be more motivated to do their best and lead to higher performance. In addition, the degree of autonomy perceived by teachers is

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an indication of current job satisfaction (Pearson & Moomaw, 2005). Job satisfaction happens when a teacher feels he or she is having stability, autonomy, career growth, and a comfortable work-life balance. So, this implies that a teacher is having satisfaction at the job as the work meets the expectations of the individual. If a teacher feels happy with their work, he or she will give back to the school with all their efforts. So, it is a moderator for generating the relationship between working conditions and individual outcomes (Dorman & Zapf, 2001, as cited in Nigama, Selvabaskar, Surulivel, Alamelu, & Joice, 2018).

In recent years, educators have become increasingly interested in the problems of teachers' stress and burnout. Research on burnout syndrome has generally come from a psychological orientation, which views burnout as a failure to cope with job stress (Bas, 2011). Maslach (1998) proposed that burnout develops as a result of mismatches between professionals and their job contexts in several work-life areas (i.e. workload, control, rewards, community, fairness, and values). In addition, Gavrilyuk, Loginova and Buzovkina (2013) said that teacher autonomy is negatively associated with teacher's feeling of burnout, and so teacher autonomy is one of the factors which must be taken into account to explain and prevent teacher burnout.

Significance of the Study

First, nowadays, the provision of quality education is very important for facilitating a nation's development (Nyamubi, 2017). To be able to provide quality education, teachers need to become quality teachers, and to attract and retain the quality teachers is a great challenge to the educational institutions (Nigama *et al.*, 2018). Lawson (2004) mentioned that teacher autonomy is an important element in retaining and recruiting expert or quality teachers. And it is also one of the essential elements in building true employee engagement (Maylett, 2016). Moreover, teacher autonomy is essential for ensuring an effective learning environment that addresses children's diverse needs (National Curriculum Framework, 2005, as cited in Sehrawat, 2014). An autonomous teacher feels more motivated when he/she is at liberty to choose his/her teaching strategies (Esfandiari & Kamali, 2016). Thus, White (1992) said that autonomy is one facet of teacher motivation needed in the teaching profession, and Langfred and Moye (2004) argued teacher autonomy is, relatively a modern phenomenon.

Second, every teacher must have the potential and clear intention to discharge their duty with utmost devotion to derive satisfaction from their work. Any work cannot be effectively done without satisfaction. So, job satisfaction is an important concept that is not only related to an individual but it is relevant for society's well-being. It is also one factor that will ensure class performance and productivity of schools. Besides, all countries around the world are trying to improve their quality of education, so that it meets the demand of globalization. Teachers would perform to maximum capacity, only if they are satisfied with their job. Thus, job satisfaction is an important phenomenon in every sector especially in the teaching profession (Nigama *et al.*, 2018).

Finally, Bevis (2008, as cited in Bas, 2011) said that teacher burnout is an ongoing problem in school systems throughout the world. Burnout is a gradual process widespread among many professionals and comes in response to prolonged exposure to stress (Maslach, Schaufeli, & Leiter, 2001). If the teachers work under stress or burnout, they cannot be satisfied with their job and it will create a negative impact on the job (Nigama *et al.*, 2018). Kremer and Hofman (1981) described that several motives account for teachers leaving the profession; the most frequently mentioned include (1) burnout, (2) lack of encouragement, (3) low professional status, (4) lack of promotional opportunity, and (5) lack of teaching autonomy. So, when teachers experience burnout, they become less effective and even leave the profession (Bevis, 2008, as cited in Bas, 2011). Therefore, teacher burnout is an issue that deserves attention in the teaching profession.

For the reasons mentioned above, this study is important as it helps to find out the perceptions of teachers on autonomy, job satisfaction, and burnout. Moreover, this study will explore the relationship between autonomy, job satisfaction, and burnout of teachers. So, this study can help policymakers, decision-makers, and administrators have a better understanding of the relationship between autonomy, job satisfaction, and burnout. And it can also support for them to build a satisfying working environment.

Purpose of the Study

The main purpose of the study is to investigate the relationship between autonomy, job satisfaction, and burnout of teachers at selected Universities in Mandalay. The specific purposes of the study are as follows:

- To study the levels of autonomy perceived by teachers at selected Universities in Mandalay,
- To find out the levels of job satisfaction perceived by teachers at selected Universities in Mandalay,
- To examine the levels of burnout perceived by teachers at selected Universities in Mandalay,
- To investigate the relationship between autonomy and job satisfaction of teachers at selected Universities in Mandalay, and
- To explore the relationship between autonomy and burnout of teachers at selected Universities in Mandalay.

Research Questions

This study will seek to answer the following research questions:

- What are the levels of autonomy perceived by teachers at selected Universities in Mandalay?
- What are the levels of job satisfaction perceived by teachers at selected Universities in Mandalay?
- To what extent do teachers perceive burnout at selected Universities in Mandalay?
- Is there any relationship between autonomy and job satisfaction of teachers at selected Universities in Mandalay?
- Is there any relationship between autonomy and burnout of teachers at selected Universities in Mandalay?

Definitions of Key Terms

Autonomy: Autonomy is having a sense of one's own identity and an ability to act independently and to exert some control over one's environment, including a sense of task mastery, internal locus of control and self-efficacy (Benard, 1995).

Job Satisfaction: Job satisfaction is defined as a nice, positive, inner state that originates from the appraisal of one's job or job experiences (Locke, 1976, as cited in Esfandiari & Kamali, 2016).

- **Burnout:** Burnout is a state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce the expected result or effect or reward (Freudenberger, 1980, as cited in Esfandiari & Kamali, 2016).

Scope of the Study

- The scope of this study is limited to four Universities under the Ministry of Education in Mandalay because this study was based on available time and resources of the researcher.

- The scope of participants is limited to assistant lecturers and lecturers at selected Universities under the Ministry of Education in Mandalay.

Conceptual Framework of the Study

This study analyzed three variables: autonomy, job satisfaction, and burnout. In this study, autonomy is the independent variable, and job satisfaction and burnout are dependent variables. The perceptions of teachers on autonomy were examined by using two subscales of autonomy according to Pearson and Hall (1993): "General Teaching Autonomy" and "Curriculum Autonomy". Moreover, the perceptions of teachers on job satisfaction were determined by using two subscales of job satisfaction according to Weiss *et al.* (1977): "Intrinsic Job Satisfaction" and "Extrinsic Job Satisfaction". Lastly, the perceptions of teachers on burnout were measured by using three subscales of burnout according to Maslach *et al.* (1996): "Emotional Exhaustion", "Depersonalization", and "Reduced Personal Accomplishment".

Moreover, this study was based on Deci and Ryan's Self-Determination Theory, Herzberg's Motivation-Hygiene Theory, and Maslach's Multidimensional Theory of Burnout. Self-Determination theory was developed by Edward L. Deci and Richard M. Ryan in the 1970s. This theory contends that human beings are motivated by three innate psychological needs: the needs for autonomy, competence, and relatedness (Ryan & Deci, 2000). Fredrick Herzberg developed the Motivation-Hygiene Theory in 1959. This theory states that there are intrinsic factors that result in satisfaction while there are extrinsic factors that prevent dissatisfaction, all of which act independently of each other (Herzberg, 1966, as cited in Silver, 1983). Christina Maslach developed the Multidimensional Theory of Burnout in 1990s. This theory conceptualizes burnout in terms of three core components: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach, 1998). The conceptual framework was illustrated by the following Figure 1.
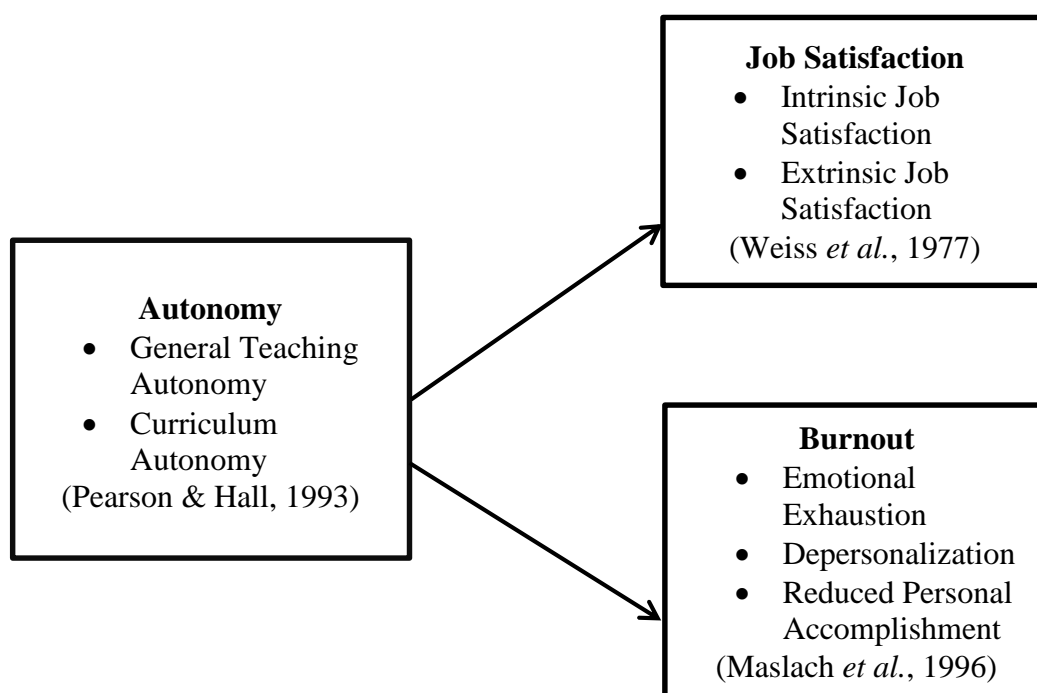
Figure 1 Conceptual Framework of the Study

Review of Related Literature

Autonomy

Jonge (1995) claimed that the concept of autonomy in old Greek is "autonomia". Autonomia is derived from the word "autonomos"; "autos" means self and "nomos" means habit, rule, principle, or law. According to Benard (1995), autonomy is referred to as the ability to act independently and to exert control over an individual's environment, including a sense of task mastery, internal locus of control, and self-efficacy. And it is the ability that regulates oneself and makes knowledgeable decisions by taking all relevant factors into account independently of rewards and punishments (Belias, Koustelios, Sdrolias, & Kamii, 1994, as cited in Ethridge, 1998). Besides, Gagne and Bhave (2011) said that people feel autonomous when they feel free to choose to do things that are interesting and/or personally meaningful to them. Belias, Koustelios, Sdrolias and Aspridis (2015) also defined autonomy as the extent to which an employee has significant independence and freedom of programming their work, as well as the choice of implementation of tasks.

Gozukara and Colakoglu (2016) reported that autonomy is a crucial part of professional development and it is directly related to the perceived responsibility of the employee that in turn binds with high intrinsic motivation (Belias *et al.*, 2015). Moreover, autonomy can make the employees creative and also allow them to take initiatives (Davis, 1994, as cited in Belias *et al.*, 2015) and it plays a vital role in employee well-being as employees can deal with work-related stress better when they have greater autonomy at work (Karasek, 1998, as cited in Gozukara & Colakoglu, 2016). Saragih (2011) said that autonomy keeps employees to believe that they have the competence and capabilities required to achieve their tasks and this leads to enhanced job performance and job satisfaction (Younes, 2012).

Teaching Autonomy Scale

During the late 1980s and early 1990s, two studies carried out by Pearson and Hall (1993) was contributed greatly to the advancement of teacher autonomy. The first study focused on faculty members in the College of Education at the University of South Florida in 1988and the original instrument used in their study was called *Teaching Environment Scale (TES)*. And the second study focused on public elementary, middle, and high school teachers. Moreover, because it is added on teacher demographic variables such as gender, age, years of teaching experience, highest degree earned, and the most years taught, and exploring their relationship to teaching autonomy in this study, Pearson and Hall changed the original instrument's name to *Teaching Autonomy Scale (TAS)* (Pearson & Hall, 1993).

The TAS instrument measures two components: autonomy over general teaching practices (general teaching autonomy), and autonomy over curriculum (curriculum autonomy). The assessment of general teaching autonomy includes classroom standards of conduct and personal on-the-job decision-making. Curriculum autonomy is the second component of the TAS and it refers to the issues concerning the selection of activities and materials and instructional planning and sequencing (Pearson & Hall, 1993). The researcher also used *Teaching Autonomy Scale (TAS)* to assess the perceptions of teachers on autonomy in this study.

Job Satisfaction

Job satisfaction is one of the most important issues in behavioral management in organizations (Randawa, 2003). Perera and Kajendra (2016) stated that job satisfaction is increasing in importance, as the competition for talent is high and still growing. Job satisfaction is one's general attitude or feeling toward one's job. In any organization, the employees' feelings or perceptions toward their work have a significant impact on the success or the failure of the

organization (Herzberg, 1959, as cited in Younes, 2012). Hughes (2006) argues that a satisfied worker is a productive worker. This means employees who have a high level of job satisfaction commit their time, energy, and effort to work which results in high productivity (Scott, 2004, as cited in Ayele, 2014). Inuwa (2016) concluded that job satisfaction has a positive and significant relationship with his or her performance, implying that a satisfied employee is believed to have a higher performance level. Higher job satisfaction produces lower absenteeism, and lower employee turnover (Hackman & Oldham, 1975). Moreover, Ahsan, Abdullah, Fie and Alam (2009) said that there is a significant negative relationship between job satisfaction and job stress. Thus, employees with higher or improved job satisfaction levels feel healthier and are more satisfied with their health (Fischer & Sousa-Poza, 2007).

Factors Influencing Job Satisfaction

Job satisfaction is a complex construct and it is influenced by very different factors, which are related to the job directly and indirectly (Persevica, 2011). In this study, these factors have been arranged according to two parts, namely, extrinsic and intrinsic factors (Weiss *et al.*, 1977). Perera and Kajendra (2016) said that there is a significant impact of both intrinsic and extrinsic factors on job satisfaction.

- **Intrinsic Job Satisfaction Factors**

Intrinsic job satisfaction refers to how people feel about the nature of the job tasks themselves (Weiss et al., 1977). Intrinsic job satisfaction factors are the elements of a job situation that can fulfill teachers' needs for psychological growth. When present, adequate, and positive in a job situation, these elements cause feelings of satisfaction in the teacher; however, when absent, inadequate, or negative, they do not generally cause feelings of dissatisfaction. The six intrinsic job satisfaction factors are: Achievement, Recognition, Work Itself, Responsibility, Advancement, Possibility of Growth (Herzberg, 1966, as cited in Silver, 1983).

- **Extrinsic Job Satisfaction Factors**

Extrinsic job satisfaction refers to how people feel about the aspects of the work situation that are external to the job tasks (Weiss et al., 1977). Extrinsic job satisfaction factors are the elements of a job situation that can fulfill teachers' pain-avoidance needs. When absent, inadequate, or negative in a job situation, these elements cause feelings of dissatisfaction; but when present, adequate, and positive, they do not generally cause feelings of satisfaction. The ten extrinsic job satisfaction factors are: Organization Policy and Administration, Supervision (technical), Salary, Interpersonal Relations (superior), Interpersonal Relations (subordinate), Interpersonal Relations (peer), Working Conditions, Status, Job Security, Effects on Personal Life (Herzberg, 1966, as cited in Silver, 1983).

Burnout

The term burnout was first coined in the 1970s by Freudenberger to describe the gradual emotional depletion and loss of motivation he observed among people who had volunteered to work for aid organizations in New York (Bakker, Demerouti, & Sanz-Vergel, 2014). Based on his observations, Freudenberger (1974, as cited in Esfandiari & Kamali, 2016) defined burnout as a state of mental and physical exhaustion caused by one's professional life, and he referred to the extinction of motivation or incentive, especially where one's devotion to a cause or relationship fails to produce the desired results.

During the same period, Maslach and colleagues interviewed human-services workers in California to find out how they were coping with client-related stressors. Based on the interviews,

burnout is defined as a psychological syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that is encountered among employees who work with other people, such as in social work, health care, and teaching (Maslach & Jackson, 1981). Thus, the initial descriptions of burnout by Freudenberger and Maslach generated a tremendous amount of attention and subsequent discussion and debate about this experience (Maslach *et al.*, 2001).

Measurement of Burnout

Maslach Burnout Inventory (MBI) is the most widely used instrument to measure burnout (Maslach *et al.*, 2001). The original MBI was developed during the late 1970s based on a program of field research within healthcare and human services. It is now known as the MBI-Human Services Survey (MBI-HSS). A second version of the MBI, *MBI-Educators Survey, or MBI-ES*, was developed for use by people working in educational settings (Maslach & Jackson, 1981). In both the HSS and ES forms, the labels for the three dimensions reflected the focus on occupations where workers interacted extensively with other people (clients, patients, students, etc.): emotional exhaustion, depersonalization, and reduced personal accomplishment (Schaufeli & Greenglass, 2001). In this study, the researcher used *the Maslach Burnout Inventory (MBI-ES)* to measure teachers' burnout at their job.

Emotional exhaustion refers to the feelings of being emotionally overextended and exhausted at work. It arises when workers start to feel tired, overwhelmed, and emotionally drained by the job (Maslach *et al.*, 2001). The key aspect of the burnout syndrome is increased by feelings of emotional exhaustion (Maslach & Jackson, 1981). Depersonalization refers to negative, cynical, or excessively detached responses to other people at work (Maslach *et al.*, 2001). According to Leiter and Maslach (2004, as cited in Man, Men, Sin, & Urn, 2015), depersonalization often develops in response to overload exhaustion. Reduced personal accomplishment refers to the feeling of loss of efficiency and productivity at work (Maslach *et al.*, 2001).

Methodology

Research Method

In this study, both quantitative and qualitative methods were adopted. In the quantitative method, data were collected by using the questionnaires. The qualitative results were obtained by interviewing the teachers.

Population and Sample

This study was limited to select four Universities under the Ministry of Education in Mandalay. The target population of this study was all assistant lecturers and lecturers at selected Universities in Mandalay. The researcher decided to choose an equal sample size for both assistant lecturers and lecturers from each University and so it consisted of 40 assistant lecturers and 40 lecturers from each University as a sample. Therefore, the total sample was 160 assistant lecturers and 160 lecturers in the quantitative study. In actual, 157 assistant lecturers and 160 lecturers responded to the questionnaire in this study. The total participants for interviewing were 15 assistant lecturers and 15 lecturers in the qualitative study.

Instrument

In this study, three questionnaires and six interview questions were chosen as instruments to collect the necessary data. Three questionnaires used by the researcher are *"Teaching Autonomy Scale (TAS)"* developed by Pearson and Hall (1993) to study the perceptions of teachers on autonomy, *"Minnesota Satisfaction Questionnaire (MSQ-Short form)"* developed by Weiss *et al.*

(1977) to find out the perceptions of teachers on job satisfaction, and *"Maslach Burnout Inventory (MBI-ES)"* developed by Maslach *et al* (1996) to examine burnout perceived by teachers.

Data Collection Procedure

After taking the permission from the responsible persons, the questionnaires were distributed to the teachers at selected Universities in Mandalay during the second week of December 2019 and collected them after one week. The researcher interviewed with the assigned teachers on 30 January through 13 February, 2020.

Data Analysis

The data obtained from the questionnaires was computer coded and processed using the Statistical Package for the Social Science (SPSS) software version 22. First, descriptive statistics such as means and standard deviations were calculated for the perception of teachers on their autonomy, job satisfaction, and burnout. The researcher identified the levels of mean scores for autonomy, and job satisfaction such as "1.00 to 2.33 = low level, 2.34 to 3.67 = moderate level, and 3.68 to 5.00 = high level". However, the mean scores for burnout was analyzed such as "1.00 to 1.49 = never, 1.50 to 2.49 = seldom, 2.50 to 3.49 = sometimes, 3.50 to 4.49 = often, and 4.50 to 5.00 = always". Moreover, the Pearson-product moment correlation coefficient was utilized to determine the relationship between autonomy, job satisfaction, and burnout of teachers. In this study, the correlation was analyzed in terms of Gay and Airasia (2003) such that if the correlation coefficient *r* was under ± .35, the relationship was low or not correlated; *r* between ± .35 and ± .65, moderately correlated; and *r* higher than ± .65, highly correlated. Finally, data collected from the qualitative analysis (interviews with teachers) was categorized, analyzed and interpreted to complement quantitative findings on autonomy, job satisfaction, and burnout of teachers.

Findings

To find out the levels of autonomy, job satisfaction, and burnout perceived by teachers at selected Universities in Mandalay, the descriptive statistics were calculated. The mean scores and standard deviations for autonomy, job satisfaction, and burnout perceived by teachers at selected Universities in Mandalay are presented in Table 1, Table 2, and Table 3 respectively.

Table 1 Mean Scores and Standard Deviations for Autonomy Perceived by Teachers at Selected Universities in Mandalay (N=317)

University		Dimensions		Autonomy	Remark
		GTA	CA		
A	Mean	3.43	3.48	3.44	Moderate
	SD	0.42	0.56	0.42	
B	Mean	3.63	3.70	3.66	Moderate
	SD	0.42	0.57	0.43	
C	Mean	3.62	3.80	3.68	High
	SD	0.48	0.53	0.45	
D	Mean	3.56	3.71	3.61	Moderate
	SD	0.50	0.47	0.45	
All Universities	**Mean**	**3.56**	**3.67**	**3.60**	**Moderate**
	SD	**0.46**	**0.54**	**0.44**	

1.00-2.33=Low   2.34-3.67=Moderate   3.68-5.00=High

Note-GTA = General Teaching Autonomy, CA = Curriculum Autonomy

According to Table 1, it was found that teachers at selected Universities in Mandalay perceived their autonomy at a moderate level in both two dimensions: "general teaching autonomy" ($\overline{X}$=3.56), and "curriculum autonomy" ($\overline{X}$=3.67). Moreover, it was found that teachers at selected Universities in Mandalay had higher mean scores in curriculum autonomy than in general teaching autonomy. All in all, the total mean score for autonomy perceived by teachers was 3.60. So, it can be concluded that teachers at selected Universities in Mandalay had a moderate level of autonomy.

Table 2   Mean Scores and Standard Deviations for Job Satisfaction Perceived by Teachers at Selected Universities in Mandalay (N=317)

University		Dimensions		Job Satisfaction	Remark
		IJS	EJS		
A	Mean	3.56	3.41	3.50	Moderate
	SD	0.41	0.58	0.44	
B	Mean	3.81	3.65	3.75	High
	SD	0.42	0.49	0.41	
C	Mean	3.75	3.64	3.71	High
	SD	0.42	0.47	0.39	
D	Mean	3.68	3.53	3.62	Moderate
	SD	0.46	0.48	0.43	
All Universities	**Mean**	**3.70**	**3.56**	**3.64**	**Moderate**
	SD	**0.44**	**0.51**	**0.43**	

          1.00-2.33=Low   2.34-3.67=Moderate   3.68-5.00=High

Note-IJS= Intrinsic Job Satisfaction, EJS= Extrinsic Job Satisfaction

As shown in Table 2, it was found that teachers at selected Universities in Mandalay perceived they had a high level of intrinsic job satisfaction ($\overline{X}$=3.70), however, they had a moderate level of extrinsic job satisfaction ($\overline{X}$=3.56). The total mean score for job satisfaction perceived by teachers was 3.64. Thus, it can be interpreted that teachers at selected Universities in Mandalay had a moderate level of job satisfaction according to their perceptions.

Table 3 Mean Scores and Standard Deviations for Burnout Perceived by Teachers at Selected Universities in Mandalay (N=317)

University		Dimensions			Burnout	Remark
		EE	D	RPA		
A	Mean	2.47	1.99	2.20	2.27	Seldom
	SD	0.68	0.61	0.50	0.47	
B	Mean	2.32	1.93	2.09	2.15	Seldom
	SD	0.76	0.67	0.41	0.50	
C	Mean	2.43	1.99	2.02	2.18	Seldom
	SD	0.63	0.64	0.45	0.42	
D	Mean	2.42	1.98	2.27	2.27	Seldom
	SD	0.81	0.66	0.56	0.53	
All Universities	**Mean**	**2.41**	**1.97**	**2.14**	**2.21**	**Seldom**
	SD	**0.72**	**0.64**	**0.49**	**0.48**	

        1.00-1.49=Never 1.50-2.49=Seldom 2.50-3.49=Sometimes 3.50-4.49=Often 4.50-5.00=Always
Note- EE= Emotional Exhaustion, D= Depersonalization, RPA =Reduced Personal Accomplishment

According to Table 3, it was found that teachers at selected Universities in Mandalay perceived they seldom experience the feelings of emotional exhaustion ($\overline{X}$=2.41), depersonalization ($\overline{X}$=1.97), and reduced personal accomplishment ($\overline{X}$=2.14). Among them, emotional exhaustion had higher mean score than depersonalization and reduced personal accomplishment. And, the total mean score for burnout perceived by teachers was 2.21. Thus, it can be said that teachers at selected Universities in Mandalay seldom experience the feeling of burnout based on their perceptions.

To investigate the relationship between autonomy and job satisfaction of teachers at selected Universities in Mandalay, the Pearson-product moment correlation coefficient was calculated.

Table 4 Correlation between Autonomy and Job Satisfaction of Teachers at Selected Universities in Mandalay (N=317)

Variables	Autonomy	Job Satisfaction
Autonomy	1	**.582**[**]
Job Satisfaction	**.582**[**]	1

[**]Correlation is significant at .01 level (2-tailed).

According to Table 4, it can be found that autonomy and job satisfaction perceived by teachers were correlated with *r* = .582 at .01 level. The finding showed that the direction of the correlation was positive. According to Gay and Airasian (2003), the relationship was moderately correlated. So, there was a significantly positive and moderate correlation between autonomy and job satisfaction of teachers at selected Universities in Mandalay. Therefore, it can be interpreted that if autonomy perceived by teachers increases then their job satisfaction will increase, and inversely, if autonomy perceived by teachers decreases then their job satisfaction will decrease.

To explore the relationship between autonomy and burnout of teachers at selected Universities in Mandalay, the Pearson-product moment correlation coefficient was computed.

Table 5 Correlation between Autonomy and Burnout of Teachers at Selected Universities in Mandalay (N=317)

Variables	Autonomy	Burnout
Autonomy	1	**-.255**[**]
Burnout	**-.255**[**]	1

[**]Correlation is significant at .01 level (2-tailed).

As shown in Table 5, it can be seen that autonomy and burnout perceived by teachers were correlated with *r* = -.255 at .01 level. And the finding indicated that the direction of the correlation was negative. According to Gay and Airasian (2003), the relationship was low correlated. So, there was a significantly negative and low correlation between autonomy and burnout of teachers at selected Universities in Mandalay. Therefore, it can be concluded that if autonomy perceived by teachers increases then the feeling of burnout at their job will decrease and vice versa, however, it has little effect on burnout according to the results.

In addition to quantitative data, teachers were asked three open-ended questions. The first open-ended question asked teachers to describe "Do you have autonomy when you perform teaching activities? If so, what roles do you have autonomy in your teaching?" Most of the teachers responded they have the autonomy to make their own choices in choosing teaching methods, teaching aids, and learning activities; they have the autonomy to select goals and objectives for

teaching themselves, and to select and use the forms of classroom assessment in teaching, however, some teachers responded they do not have autonomy in teaching. Next, the second open-ended question asked teachers about "Are you satisfied at work? If so, state the things that make you satisfying at work". Most of the teachers responded they are satisfied at work, however, some teachers responded they are not. The responses of teachers included both intrinsic and extrinsic factors, however, intrinsic factors were more than extrinsic factors. Finally, the third open-ended question asked teachers about "Are you exhausted at work? If so, state the things that make you feel exhausted at work". To summarize, most of the teachers responded they are not exhausted at work, however, some teachers responded they are exhausted at work. However, the responses were at the emotional exhaustion level.

According to interview responses, it can be interpreted that teachers have autonomy in selecting teaching methods and assessment activities, and in setting goals and objectives about the lesson. Next, it can be assumed that teachers have job satisfaction; however, intrinsic job satisfaction was stronger than extrinsic job satisfaction. Besides, it was found that teachers are satisfied because they have autonomy in selecting teaching methods, and they are also satisfied due to other intrinsic and extrinsic factors. At last, it can be concluded that teachers seldom experience the feeling of burnout. Moreover, it was found that teachers experience the feeling of burnout when they have low autonomy, and they also experience the feeling of burnout due to other factors.

Conclusion and Discussion

Research question one asked teachers to describe their perceptions on autonomy. According to the responses of teachers, it can be concluded that teachers at selected Universities in Mandalay had a moderate level of autonomy. Moreover, dimensions of autonomy; general teaching autonomy and curriculum autonomy had moderate mean values. It can be assumed that teachers at selected Universities in Mandalay had a moderate level of autonomy in setting classroom standards of conduct, personal on-the-job decision making, the selection of activities and materials, and instructional planning and sequencing. Autonomy is one of the essential elements in building true teacher engagement and in enhancing teacher performance and teacher job satisfaction Thus, it is still needed to enhance the freedom in carrying out their duties independently due to the current autonomy level of teachers was moderate at selected Universities in Mandalay.

Research question two asked teachers to describe their perceptions on job satisfaction. Based on the research findings, teachers at selected Universities had a moderate level of job satisfaction. In detail, one of the dimensions of job satisfaction, intrinsic job satisfaction had a high level. So, it can be assumed that teachers have the chances to do something that makes use of their abilities, to try their teaching methods, to tell students what to do, and to be somebody in the community and they also have the freedom to use their judgment and the feeling of accomplishment from the job. However, it was found that extrinsic job satisfaction had a moderate level. Thus, it is still needed to improve extrinsic factors such as working conditions, salary, organization policy, supervision, and interpersonal relations with colleagues or superiors because the current job satisfaction level was moderate.

Research question three asked teachers to describe their perceptions on burnout. It was found that the experience of burnout is seldom for teachers at selected Universities in Mandalay. Besides, looking back the dimensions of burnout, it was also found that teachers perceived they seldom experience the feelings of emotional exhaustion, depersonalization, and reduced personal accomplishment. Thus, it was concluded that teachers may feel tired and fatigued at work, they may have negative attitudes and feelings toward others, and they may have negative self-evaluation

about their job performance, however, this happening is rare. Among them, the mean score of the emotional exhaustion dimension was the highest. So, it can be assumed that teachers feel more emotionally tired and fatigued from the job than they develop negative feelings toward others, and they feel unhappy about themselves and dissatisfied with their accomplishments on the job.

Research question four investigated the relationship between autonomy and job satisfaction of teachers at selected Universities in Mandalay. By the findings, autonomy was positively and moderately correlated with job satisfaction. So, it can be concluded that if autonomy perceived by teachers increases, then their job satisfaction will increase. Also, the more autonomous the teachers are, the more satisfied with their job they will be. And this finding is in line with other previous studies (Koustelios, Karabatzaki, & Kousteliou, 2004; Skaalvik & Skaalvik, 2014; Gozukara & Colakoglu, 2016) conducted in different cultural contexts. Self-Determination Theory argued that when the need for autonomy is fulfilled, people feel more motivated, engaged, happy, and satisfied in their workplace. Moreover, the Motivation-Hygiene Theory mentioned that autonomy is one of the factors that are strong determinants of job satisfaction. Hence, the finding of research question four is also in harmony with the Self-Determination Theory and Motivation-Hygiene Theory.

Research question five examined the relationship between autonomy and burnout of teachers at selected Universities in Mandalay. It was found that autonomy is significantly and negatively correlated with burnout but the correlation is low. So, it can be interpreted that if autonomy perceived by teachers increases, the feeling of burnout in their workplace will decrease and vice versa, however, autonomy has little effect on burnout or to say otherwise, there is little association between autonomy and burnout. And it was found that this finding is consistent with the findings of Gavrilyuk *et al.* (2013), Javadi (2014), and Kim, Liu, Ishikawa and Park (2019). In the Multidimensional Theory of Burnout, it argued that if people have little control over the work they do, they will have the chance that the feeling of burnout occurs and so, autonomy is one of the factors that must be taken into account to prevent and reduce burnout. Therefore, the finding of research question five is also fit by the Multidimensional Theory of Burnout.

All in all, teachers at selected Universities in Mandalay had moderate levels of autonomy and job satisfaction, and they had the feeling of burnout, however, it rarely happened. According to this study, there was the relationship between autonomy, job satisfaction, and burnout of teachers at selected Universities in Mandalay. The results highlight the consequence of teachers' autonomy in enhancing their job satisfaction, and also showed that deficiency of perceived teacher autonomy can be regarded as a single of possible trouble and lead to burnout. Thus, paying attention to the role of autonomy as a crucial predictor of job satisfaction and burnout is a worthwhile effort. Developing a high level of perceived autonomy helps teachers make positive effects on their job satisfaction. Besides, it will prevent and reduce the burnout of teachers. Therefore, the understanding of the relationship between autonomy, job satisfaction, and burnout, it supports policymakers, decision-makers and administrators to build a satisfying working environment.

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PRESCHOOL TEACHERS' BELIEFS AND PRACTICES RELATED TO CLASSROOM MANAGEMENT

Myat Thiri Soe[1] and Nyein Ma Ma Khin[2]

Abstract

The objective of this study was to explore preschool teachers' beliefs and practices relating to classroom management at the selected public and international private preschools in Mandalay. A total of 38 preschool teachers from six chosen preschools, which include three public preschools and three international private preschools were invited to participate in this study. A mixed research method (both quantitative and qualitative methods) was used in this study. In order to collect and analyze the quantitative data, one instrument was constructed by the researcher based on the result of pre-interviews and literatures. There were four dimensions for classroom management, namely organizing of physical environment, management of planning and programming activities, management of relationship and communication, and management of children's behaviours. There were ten items for each dimension. The purpose of the instrument was only used to collect data for preschool teachers' beliefs related to classroom management. For qualitative analysis, observation, and interviews were performed on six teachers from public preschools and four teachers from international private preschools from Mandalay. According to the results of quantitative analysis results, preschool teachers from the selected preschools possess high beliefs concerning to classroom management. When observing and interviewing preschool teachers, some of their practices were inconsistent with their beliefs, therefore, our results show that there were consistency and inconsistency between their beliefs and practices.

Keywords: Classroom Management, preschool, preschool teachers, teachers' beliefs

Introduction

Children play a vital role in every aspect of the world to forge a beautiful and better society for every living. If one does good deeds during his/her childhood life, the person has a potential to benefit the world when he/she is grown into an adult. A good education can shape a person into a better person in the future (Samaulla, 2018). Preschools are the important places where children are learning the basic skills to harmonize with environmental factors and society (Yasar, 2008, as cited in Karakaya & Tufan, 2018) and they are also the first place where children firstly encounter social rules outsides of their families (Akduman, 2013, as citied in Karakaya & Tufan, 2018). Preschools are also the first learning places for children to adapt many social skills, such as forming friendships, acclimate to various environments and communicating with others (Topaloglu, 2013, as cited in Karakaya & Tufan 2018).

Preschool teachers could face many challenges as teaching preschoolers can be more difficult than teaching older children. In order to overcome this crisis, effective classroom management plays a vital role for teachers. Classroom management can be considered as a multifaceted activity and it extends beyond the traditional behavior management techniques advocated concern with students' disruptive behaviors (Chandra, 2015). If a teacher establishes a clear and consistent standard of behaviors in the classroom, a fight or harm to other children will be decreased. Without classroom management, children will feel unsafe, insecure, and not able to freely speak their emotions or participate. The benefit of having a positive classroom environment will be effective on children to work more effectively and openly share their feelings. Furthermore, poor classroom management could lead the children to have a feeling that their peers may make them unwelcome of unworthy (Ministry of Education, Ganyaupfu, 2013). Therefore, in this paper, the author focuses on preschool teachers' beliefs and practices related to classroom management.

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Purpose of the Study

To examine the preschool teachers' beliefs and practices related to classroom management at selected preschools in Mandalay.

The specific objectives

- To explore the preschool teachers' beliefs related to the four dimensions of classroom management at selected preschools in Mandalay,
- To explore the ways the preschool teachers' beliefs consistent with their practices in relation to four dimensions of classroom management at selected preschools in Mandalay, and
- To determine the reasons for chosen classroom practices of preschool teachers at selected preschools in Mandalay.

Research Questions

This study will seek to answer the following research questions:

- What are preschool teachers' beliefs related to the four dimensions of classroom management at selected preschools in Mandalay?
- In what ways are the preschool teachers' beliefs consistent with their practices in relation to four dimensions of classroom management at selected preschools in Mandalay?
- What are the reasons for chosen classroom practices of preschool teachers at selected preschools in Mandalay?

Theoretical Framework of the Study

Based on the related literature, the theoretical framework for this study is established. Preschool teachers' beliefs and practices in this study were based on four dimensions of classroom management. They are: (1) Organization of Physical Environment, (2) Management of Planning and Programming Activities, (3) Management of Relationship and Communication, and (4) Management of Children's Behaviours.

In organization of physical environment, there are five sub-dimensions. They are (a) Indoor Space, (b) Outdoor Space, (c) Furniture, (d) Learning centers/areas, and (e) Child-related displays. In management of planning and programming activities, there are two sub-dimensions: (a) Daily Schedule, and (b) Teaching Methods. In management of relationship and communication, there are three sub-dimensions: (a) Supervision of Children, (b) Teacher-Child Interaction, and (c) Interactions among Children. In management of children's behaviours, there are two sub-dimensions: (a) Rules, and (b) Discipline. Based on this theoretical framework, this study was designed to investigate the preschool teachers' beliefs and practices related to classroom management.

Definitions of Key Term

The term used throughout the current study are identified as below for clarity and understanding.

Classroom Management: Classroom management is the process by which teachers and schools set up and maintain appropriate behavior of students in classroom settings (Kratochwill, DeRoos, Blair, n.d). In this study, preschool teachers' classroom manyagement beliefs and practices were studied.

Preschool: Preschool is a school for children usually younger than those attending elementary school or kindergarten (Merriam-Webster, 2021).

Preschool Teachers: Preschool teachers are teachers who are motivated by a desire to deliver a well-rounded curriculum that provides a solid foundation for primary school (Meier, 2018).

Teachers' Belief: Teacher belief is defined broadly as tacit, often unconsciously held assumptions about students, classrooms, and the academic material to be taught (Kagan, 1992, as cited in Sahin, 2013).

Operational Definitions

- **Preschool Teachers:** In the study, this refers to teachers who teach to 3 to 5-year- old children.

- **Public and Private Preschools:** In this study, public preschools refer to preschools that are opened under the Department of Social Welfare. Private preschools refer to preschools that teach children by using the international curriculum.

Review of Related Literature

Organizing of Physical Environment

The majority of children spend most of their time in a classroom. It is a place where they can learn different skills considered to be essential and proper for them to gain success in their global association (Hannah, 2013). The quality of the classroom climate is based on a variety of aspects and one of these is the physical aspect in the classroom. Physical features in the class should provide various teaching-learning strategies (Ahmad & Amirul, 2018). Therefore, colorful classroom is necessary for creating a sense of belonging (Read, 2007, as cited in Ahmand & Amirul, 2018), transmitting information (Dudek, 2000, as cited in Ahmad & Amirul, 2018), guiding a piece of spatial information (Acredolo, 1979, as cited in Ahmad & Amirul, 2018) and promoting collaborative behavior (Read et al., 1999, as cited in Ahmad & Amirul, 2018).

Organizing the desks as a circle around the class is the proper way to adjust the seating plan. This will be appropriate in small class sizes, but this method is often used for all types of classrooms. This kind of setup also allows performing good public speaking and class debate, so all students can become a member of the same group. Teachers need to create an environment where students feel welcome to share their views without fear of judgement by permitting students one's peaking to grab more own ideas (Ahmad & Amirul, 2018). Inadequate facilities and spatial equality directly influence teachers' motivation and obliquely influence children's education (Salleh, Kamaruzzaman & Mahyuddin, 2013, as cited in Ahmad & Shaari, 2016). Moreover, physical weakness obstructs children's development because it makes undesirable behavioral barriers, causing disengagement and absence of integration with their surroundings (Gurkaynak, 1996, as cited in Ahmad & Shaari, 2016).

Management of Planning and Programming Activities

In this study, management of planning and programming activities is focused on teaching methods and classroom design and routines. In child-centered approach, the teaching method is more effectual because it does not centralize the flow of knowledge from the instructor to the children (Lindquist, 1995, as cited in Ganyaupfu, 2013) and it inspires goal-oriented behaviour among students (Slavin, 1996, as cited in Ganyaupfu, 2013). Furthermore, traditional teacher-centered approach is based on selected activities and arranged by the instructor and there is a great emphasis on the development of basic academic skills in children (Pianta et al., 2002; Stipek, 2004, as cited in Celik & Acar, 2018). So, this approach is the least practical, more theoretical, and

memorizing (Toe & Wong, 2000, as cited in Ganyaupfu, 2013), therefore, this kind of teaching method could lead students to lose interest and understanding in their school activities (Ganyaupfu, 2013).

Moreover, children's learning and developmental processes include a variety of play activities. Learning must be associated with the curriculum and the real word in consequential paths while experiencing the outside world (Kindergarten Curriculum Guide, n.d). Teachers should prepare a variable daily schedule and a variety of teaching methods rather than focusing on a fixed one (Copple & Bredekamp, 2009; Harms, Clifford & Cryer, 2005, as cited in Sahin, 2013). Moreover, a classroom should have a teacher and an assistant who support children's play, working in the centers, monitoring children and encouraging supportive friendship behaviors. Outdoor play activities are also an opportunity to engage children in a passionate and expensive release of energy. Additionally, providing books in the outdoor climate is also crucial to ensure some quietness and calm activities are available for children who need a break from active play. Furthermore, a well-planned schedule can encourage children to be more actively participate in their play (Knopf & Welsh, 2010).

Management of Relationships and Communication

Mashburn et al. (2008, as cited in Early, Maxwell, Ponder & Pan, 2016) stated that educational support or the quality of teacher-child interactions particular to instruction was a more powerful predictor of children's academic outcomes at the end of preschool than structural characteristics of quality like teacher education, class size, teacher-student ratio and provision of comprehensive services. Next, the classroom emotional situation involves the moment-to-moment verbal and non-verbal conversation between teachers and individual or every child, and it is normally measured at the classroom level (Lippard, Parp & Rouse, 2017). Then, a well-organized classroom allows more positive relationships between teachers and students, decreasing the probability of challenging behaviors to happen (Martella, Nelson, & Marchand-Martella, 2003, as cited in Guardino & Fullerton, 2010).

In early childhood settings, teachers can utilize various kinds of strategies to children such as listening to them, making eye contact with them, participating in one-to-one or face-to-face interconnection with them, and establishing positive relationships with them. In the preschool classroom, teachers must construct mutual respect with children and adults by waiting for other children to ask questions completely and encouraging children to pay attention to others speeches. Children who only get insecure relationships with teachers had more hardship interrelating with peers and engaged in more quarrel with teachers (Ostroksy & Jung, n.d.).

Young children are extremely interested in peers (Singer, 2010). Playing with peers are vital for a child from the very start of their preschool life (Lojk, 2017). Children who do not have a friend in preschool were having difficulties dealing with peers at the age of 10 (Woodward & Fregusson, 2000, as cited in Lojk, 2017). Hence, teachers should create opportunities such as taking boys and girls together to communicate, cooperate, and learn with one another. It is important for children not only to feel welcome and accepted by everyone but also to gain a supportive positive classroom climate (Manaster & Jobe, 2012). Moreover, the parent-teacher partnership has been recognized as a crucial role in children's development (Pirchio, Tritrini, Passiatore, & Taeschner, 2013). Children will alter their knowledge and practice into the knowledge and skills which is necessary to exist in the society if they make peer cultures (Corsaro and Rizzo, 1988, as cited in Aschermann, 2001). Moreover, community participation is important and it would help in better understanding children and their families (Senapaty, 2018).

Management of Children's Behaviours

Classroom behaviour is one of the difficult matters that teachers are facing every day because more students come to school with more complicated behavioural problems than they were in the past years and teachers confront the challenges of managing their behaviours (Eleftheria, Kafenia & Eleni, 2013).

Rules and routines prohibit problematic behaviours by providing students with specific, appropriate behaviours to engage in (Colvin et al., 1993, as cited in Oliver, Wehby & Reschlym, 2011). Many students believe that if they do disruptive behaviours, they will get attention. So, children who want to get attention do not have to do bad things. To reduce disruptive behaviours, a teacher can organize a classroom where children can communicate with one another and stay focused on the content at that time. Thus, children can know their own desire while staying engaged in the curriculum and disruptive behaviours will go to a lesser extent (Hannah, 2013). Therefore, preschool teachers should construct understandable and simple rules, and provide the children with the chance of discussing the rules (Copple & Bredekamp, 2009; Harms, Clifford & Cryer, 2005, as cited in Sahin, 2013).

For the development of the children behaviour, discipline becomes a foundation because it is very effective to create a moral behaviour. So, discipline should be instilled at the early stage of children's lives because it may affect the moral development of children. Discipline directs the children to learn about good things which comes their preparedness for their adult lives later on (Rahayuningsih & Sholikan, 2016). Many teachers assume that a discipline is a punishment. But discipline and punishment are not the same. Punishment is controlling children's behaviour whereas discipline is meant to develop the behaviour of children, especially in matters of conduct (UNESCO, 2006). However, at the preschool stage, positive discipline is not permitting children to do whatever they desire because they do not have the autonomy to do their own decisions and they do not know which things are correct or wrong. For constructing positive classroom discipline, teachers should be a role model of appropriate behaviour (Jesenia & Paola, 2015).

Methodology

Research Method

Quantitative and qualitative research method (both observation and interview) were used in this study to explore preschool teachers' beliefs and practices related to four dimensions of classroom management.

Population and Sample

As sample schools for the main study, three public preschools under the Department of Social Welfare and three international private preschools from Mandalay were selected. The sample schools were selected by using the cluster sampling method. Therefore, 38 preschool teachers participated in this study.

For qualitative study, two public preschools and two international private preschools among six selected preschools in Mandalay (highest mean scored preschools and lowest mean scored preschools) were selected to conduct observations and interviews. From selected preschools, six preschool teachers from selected public preschools and four preschool teachers from selected international private preschools were selected to conduct interviews and observations about their classroom management.

Data Collection Procedure

The set of questionnaires was developed by the researcher after reviewing the related literatures and doing pre-interviews. For content validity, the questionnaire was evaluated and revised by the panel of experts who were well-experienced in Educational Administration and Leadership. Based on their reviews, comments, and suggestion, the instruments were modified again. This panel included eight experts: a professor (Head of the Department of Educational Theory, Sagaing University of Education), four associate professors, three lecturers who were well-versed in the Educational Administration field. Based on their reviews, comments, and suggestion, the instruments were modified again.

To collect the required data from the selected public and international private preschools, the researcher had to get permission from the responsible person of the Department of Social Welfare, Mandalay. Pilot study was conducted with preschool teachers from one public and one international private preschool. After collecting the data, the researcher reviewed and revised items included in the questionnaire. The modified questionnaires were distributed to teachers from six preschools (three public preschools and three international private preschools) in Mandalay. A valid response rate was 100%. Finally, the obtained data were analyzed.

For qualitative study, all instruments were simultaneously reviewed by the panel of experts who were well-experienced in Educational Administration and Leadership for content validity. After analyzing the quantitative data, the qualitative data concerning with the preschool teachers' practices related to four dimensions of classroom management were collected.

(a) Observations: Firstly, the selected classrooms from selected preschools were observed by using observation checklists to examine the preschool teachers' practices related to four dimensions of classroom management. Before making classroom observations, two MEd candidates were requested to participate as observers in this study. They were offered observation checklists and instructed how to observe and record behaviours of teachers and children. All observers, the researcher and two MEd candidates observed the one classroom and compared the findings. It was found that above 90% of findings were consistent with each other. Then, observations were conducted by the researcher, and two MEd candidates in selected preschools. Only each classroom was observed in one day to study preschool teachers' practices about classroom management.

(b) Interviews: In the interview session, the participants were encouraged to describe their management practices in their classroom. Moreover, they were requested to present why they use those practices in their classroom clearly. Informal interviews were frequently conducted with teachers after making observations. The researcher wrote detailed notes during interviews or just after finishing each informal interview. The formal interviews were carried out by using the interview questions which consisted of 3 items. The data from formal interviews were recorded with the audio recorder.

Findings

The main purpose of this study is to examine the preschool teachers' beliefs and practices related to classroom management at selected preschools in Mandalay. To study the preschool teachers' beliefs related to classroom management, forty five-point Likert-type items developed by researcher was used. The mean values of preschool teachers' beliefs related to four dimensions of classroom management are described in Table 1.

Table 1 Mean Values for Preschool Teachers' Beliefs Related to Four Dimensions of Classroom Management

Schools Dimensions	Public	Private
Physical Environment	**4.75**	**4.70**
Planning and Programming Activities	**4.63**	**4.80**
Relationships and Communication	**4.73**	**4.82**
Behaviour Management	4.36	4.48
Overall Teachers' Beliefs	**4.62**	**4.70**

Note: 1.00-2.33=low level   2.34-3.67=moderate level   3.68-5.00=high level

According to Table 1, all teachers from 6 preschools perceived that they had a high level of beliefs in four dimensions of classroom management. In other words, teachers from public preschools and international private preschools perceived that they had high levels of beliefs in "Physical Environment", "Planning and Programming Activities", "Relationships and Communication", and "Behaviour Management". Similarly, when studying the mean values for overall teachers' beliefs related to the four dimensions of classroom management between public and private schools, high levels of teachers' beliefs were found in two types of schools.

In order to analyze the differences in four dimensions of classroom management between public preschools and private preschools, independent samples *t*-test was calculated.

Table 2 Mean Values and   Independent   Samples *t*-Test Results of Preschool Teachers' Beliefs Related to Four Dimensions of Classroom Management

Dimensions	Schools	N	Mean	*t*	MD	*df*	*P*
Physical Environment	Public	17	4.75				
	Private	21	4.70	4.20	0.42	36	.472
Planning and Programming Activities	Public	17	4.63				
	Private	21	4.80	-1.533	-.175	36	.146
Relationships and Communication	Public	17	4.73				
	Private	21	4.82	-.791	.090	36	.456
Behaviour Management	Public	17	4.36				
	Private	21	4.48	-1.211	-.117	36	**.001**
Overall Teachers' Beliefs	Public	17	4.62				
	Private	21	4.70	4.20	0.42	36	.472

Note: 1.00-2.33=low level   2.34-3.67=moderate level   3.68-5.00=high level

According to findings shown in Table 2, there was a significant difference in perceptions of teachers on only one dimension, "Behaviour Management" between public preschools and private preschools. There was no significant difference in perceptions of teachers on the other three dimensions between public preschools and private preschools.

Table 3 Summary of Qualitative Research Findings for Preschool Teachers' Practices Related to Four Dimensions of Classroom Management

Public	Private
1. There was child-related furniture in the classrooms	
2. Not appropriate teacher-child ratio: 1:25	2. Appropriate teacher-child ratio: 1:4
3. Large outdoor playground	3. Small outdoor playground
4., Teach by using various kinds of age-appropriate teaching methods	
5. Not enough teaching aids	5. Enough teaching aids
6. Prepare lesson plans a month ago	6. Prepare lesson plans a week ago
7., There was a close relationship between teacher and children, and between peers	
8. Sometimes gave age-appropriate punishment to children if they broke the rules	
9. Give specific feedback to children for their performance	
10. The monthly schedule was schemed by the Department of Social Welfare	
11. Teach children to have good manners by using various kinds of methods	

Discussion and Conclusion

Analyses of quantitative and qualitative data collected from the study attempted to answer the three questions.

Research question 1 studied the preschool teachers' beliefs related to four dimensions of classroom management. When studying the preschool teachers' beliefs related to four dimensions of classroom management, it was found that all the mean values were above 3.68. This means that all preschool teachers from selected schools had high levels of beliefs related to four areas of classroom management. In order to analyze the differences in four dimensions of classroom management between public preschools and private preschools, there was a significant difference in perceptions of teachers on only one dimension, "Behaviour Management" between public preschools and private preschools. There was no significant difference in perceptions of teachers on the other three dimensions between public preschools and private preschools.

Research question 2 studied the ways the preschool teachers' beliefs consistent with their practices in relation to four dimensions of classroom management at selected preschools in Mandalay. According to the results of a qualitative study (observations and interviews), it was found that preschool teachers' beliefs and practices are consistent in three dimensions "Management of Planning and Programming Activities, Management of Relationships and Communication, and Management of Children's Behaviours." However, their beliefs concerning "Organizing Physical Environment" dimension were high in quantitative findings, their actual practices are not as high as their beliefs because of the characteristics of their schools such as insufficient movement area, high class size and some deficiencies related to learning areas.

To sum up, according to both the quantitative and qualitative research findings, it could be concluded that preschool teachers' beliefs and practices are not consistent in some dimensions. Moreover, public preschool teachers' practices have also differed from those of private preschool teachers depending on the organization of physical environment.

Recommendations

Based on the findings of our study, some recommendations for responsible persons under the Department of Social Welfare, parents and teachers are presented as follows:

More teachers should be employed in public preschools by the Government and training courses or refresher courses concerning early childhood education and classroom management for teachers should be arranged. Age-appropriate teaching aids should also be provided for public

preschools. Similarly, the teacher-child ratio should be optimal in order to ensure that children get all the care and attention that they need from the teachers.

Parents should study about early childhood education. They should make contact with teachers every day to know about their children's daily routines in schools if possible. They should also cooperate with schools to manage their children's inappropriate behaviours. Again, they should use gentle and polite words in front of their children and try not to use rude words and act bad behaviour in front of their children. They should observe their children's behaviours in order to know about them completely. In addition, they should participate actively in school meetings and workshops.

Teachers should learn about classroom management for preschool children and early childhood education to improve their professional development. They should attend professional development programs such as ECCD programs or workshops. They should cooperate with parents to manage students' behaviours. They also should explain to parents about early childhood education and give advice on them how to behave in front of their children.

This study was conducted with a small sample size. It is not enough to represent the overall determents of preschool teachers' beliefs and practices related to classroom management. Hence, further research needs to be conducted with a larger sample size in order to broaden the generalizability of the results.

Acknowledgement

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RELATIONSHIP BETWEEN PRINCIPALS' LEADERSHIP STYLES AND TEACHERS' FOLLOWERSHIP STYLES

Ei Thinzar Maung[1] and Han Ni Lwin[2]

Abstract

The purpose of this study was to explore the relationship between principals' leadership styles and teachers' followership styles at Basic Education High Schools in Nyaung Shwe Township. The theoretical framework of this study was developed based on Hersey, Blanchard (1996, as cited in Safitri & Fahmi, 2014) and Kelley (1992, as cited in Safitri & Fahmi, 2014). Mixed method (quantitative and qualitative) was used in this study. For quantitative study, 255 teachers from 11 selected schools participated in this study. The reliability coefficient (Cronbach's alpha) was 0.854. According quantitative analysis, principals from schools in Nyaung Shwe Township mostly exhibited telling leadership styles and teachers from schools mostly exhibited conformist followership styles. Furthermore, according to integration model, out of 11 selected schools, 7 schools (S1, S2, S3, S4, S5, S6 and S9) were found that principals' leadership style corresponded with teachers' followership style. And then, 4 schools (S7, S8, S10 and S11) were found that principals' leadership style did not correspond with teachers' followership style. According to the results, if the principals cannot exhibit the correspondent leadership styles, the improvement of schools will not be achieved as they wished. Moreover, if the principals exhibit the correspondent leadership style with teachers' followership styles, the teachers will be happy to stay at their schools and they will try their best and they will perform the schools' activities actively and as the result, the school will improve.

Keywords: Principals' Leadership Styles, Teachers' Followership Styles

Introduction

Members of today's organizations must think and do; manage both others and themselves; make decisions and perform real work; must learn how to both lead and follow (Johnson, 2003). Hassan (2004, as cited in Essa & Alattari, 2019) noticed that leadership is a collective role since no one can be a leader alone, but can exercise leadership by actively participating in a group within a given situation. Thus, the leadership is the interaction of the leader and followers in a certain situation in which these parties has a unique network that branch in several directions and intersects these networks with each other. Flexible leaders will be able to use a variety of behaviors in their leadership (Vandayani, Kartini, Hilmiana & Azis, 2015). Followership is an art that encompasses many attributes, such as loyalty, dedication, trustworthiness, self-management, courage, compliance with rules, and accountability-traits that do not come naturally, but must be learnt and made practical in daily experiences.

The concept of followership seems to be greatly overlooked but like leadership, it requires a mastery of skills. In the absence of followership skill development, leader-follower relationships in an array of settings could be ineffective. Unique traits, characteristics, and behavior of followers dominate leader-follower relationship (Collinson, 2006). Followers, like leaders must behave responsibly and need some direction in doing so. Leaders need the conceptual knowledge and skills necessary to engage followers in productive and satisfying mutual pursuits. Success or failure of organizations, including educational institutions, is a result of both the leaders' and followers' roles (Avolio & Reichard, 2008, as cited in Safitri & Fahmi, 2014).

Relationship between leaders and followers is very important to maintain and improve so that the concepts of leadership skills and followership skills are effective. The teachers are mostly conformers thus principals should use situational leadership styles. This situation is not perfect

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unless there is a good relationship between principals and teachers. Thus, it is necessary to understand the relationship between principals' leadership styles and teachers' followership styles. Therefore, this study will explore the relationship between principals' leadership styles and teachers' followership styles at Basic Education High Schools in Nyaung Shwe Township.

Purpose of the Study

Main Purpose

The main purpose of the study is to examine the relationship between principals' leadership styles and teachers' followership styles at Basic Education High Schools in Nyaung Shwe Township.

Specific purposes

The specific purposes of the study were:

- to explore the leadership styles that principals mostly exhibit at Basic Education High Schools in Nyaung Shwe Township,
- to explore the followership styles that teachers mostly exhibit at Basic Education High Schools in Nyaung Shwe Township, and
- to determine if leadership styles correspond with followership styles at Basic Education High Schools in Nyaung Shwe Township.

Research Questions

This research dealt with the following questions regarding principals' leadership styles and teachers' followership styles at selected Basic Education High Schools in Nyaung Shwe Township.

1. Which leadership styles do principals mostly exhibit at Basic Education High Schools in Nyaung Shwe Township?
2. Which followership styles do teachers mostly exhibit at Basic Education High Schools in Nyaung Shwe Township?
3. Do leadership styles correspond with followership styles at Basic Education High Schools in Nyaung Shwe Township?

Definitions of Key Terms

The terms used throughout the current study were identified below for clarity and understanding.

- *Leadership* is the ability to inspire confidence and support among the people who are needed to achieve organizational goals (Dubrin, 2003, as cited in Kim, 2011).

- *Leadership style* is defined as the leader's preferred way of behaving when in a leadership mode (Johnson, 2003).

- *Followership* is defined as the ability of people who use to follow. Followership is what people do when they interact in an organization with leaders to accomplish something, to get something done (Rost, 2008, as cited in Kim, 2011).

- *Followership style* is defined as the follower's preferred way of behaving when in a following mode (Johnson, 2003).

Operational Definition

Principals' leadership style is defined as the different capacities of people who use to lead. Leadership is the skill to change and govern according to the circumstances of the followers. Teachers' followership style is defined as the willingness to participate in working towards the attainment of the group mission.

Limitations of the Study

- The scope of this study was limited to selected Basic Education High Schools in Nyaung Shwe Township because this study was based on available time and resources of the researcher.

- The findings of this study could not be generalized to any other group than high schools in Nyaung Shwe Township and other townships in Myanmar.

Review of Related Literature

Leadership

Leadership is an influence of relationship among leaders and followers who propose real changes that reflect their mutual purposes (Rost, 1991). The ingredients of effective leadership are complex and depend on the specific leadership situation, the difficulty of tasks, the degree of a leader's authority and the maturity and capabilities of followers (Bass, 1981, as cited in Chowdhury, 2014). In an education field, leadership is often regarded as the single most important factor in the success or failure of institutions (Hoy & Miskel, 2013). School leadership is of secondary importance to learning. The leadership styles of leaders may also influence quality of work culture in the organization. If the leaders characterize poor qualities of leadership styles it may affect the quality work culture in the organization (Ali, N.M., Jangga, Ismail, Kamal & Ali, M. N., 2015).

Styles of Leadership

According to Hersey and Blanchard, situational leadership theory is based on two dimensions: relationship behavior and task behavior. Based on these two dimensions, there are four leadership styles: telling, selling, participating and delegating that reflect behaviors along two dimensions.

- **Telling Style**: The follower lacks capability and is unwilling or insecure about the tasks. In this case more emphasis is on task and less on relationship (Raza & Sikandar, 2018).

- **Selling Style:** Here the follower lacks capability but is willing or confident to perform the task. In this case, there is a high relationship and high task consideration to facilitate performance (Raza & Sikandar, 2018).

- **Participating Style**: Here the follower possesses capability but is unwilling or insecure about the tasks. In this case, there is a high relationship and low task consideration to facilitate performance (Raza & Sikandar, 2018).

- **Delegating Style**: The follower possesses capability and is willing or confident about the tasks. In this case, there is less emphasis is on task and relations (Raza & Sikandar, 2018).

Followership

Followership can be defined as the characteristics, behaviors and processes of individuals acting on relation to leaders (Uhl-Bien, Riggio, Lowe, & Carsten, 2014, as cited in Cruickshank, 2017). Followership also exists in situations where there is organized leadership (Blackshear, 2004). Potter, Rosenbach & Pittman (2001, as cited in Schwind, 2009) emphasize that no

followership style is better than any other in every context. All followership styles have their place in certain organizations, or even in different parts of an organization. These styles are often influenced by personal characteristics, but may even be influenced by the nature of the leader, or the culture of the organization.

Styles of Followership

Kelley's (1992, as cited in Northouse, 2019) typology is currently the most recognized followership typology. Kelley sorted followers' styles on two dimensions: independent critical thinking and active engagement. Based on these two dimensions, there are five follower role types:

- **Exemplary Followers:** Kelly (1992, as cited in Schwind, 2009) says exemplary followership is the most ideal style in all organizations. Exemplary followers think independently and are active engagement in their roles and applying their talents for the benefit of the organization (Kelley, 1998, as cited in Beckerleg, 2002).

- **Alienated Followers:** Alienated followers think for themselves and exhibit a lot of negative energy and proactively provide alternative solutions to the leader (Kelley, 2008, as cited in Novikov, 2016; Northouse, 2019).

- **Pragmatist Followers:** Pragmatist followers have a moderate level of engagement and critical thinking (Kelley, 1992, as cited in Novikov, 2016). Pragmatic followers have qualities of all four extremes (alienated, exemplary, conformist, and passive) and are able to adapt their style to their current environment (Schwind, 2009; Daft, 2008).

- **Conformist Followers:** Conformist followers who are yes people and very active followers that unquestioningly follow leader directions and always on the leader's side but still look to the leader for direction and guidance (Kelley, 2008, as cited in Novikov, 2016; Northouse, 2019).

- **Passive Followers:** Passive followers (sometimes called "sheep") who look to the leader for direction and motivation (Northouse, 2019). Passive followers unquestioningly follow the leader but only after being given constant direction (Kelly, 2008, as cited in Novikov, 2016).

Theoretical Framework of the Study

The theoretical framework of this study was developed based on Hersey, Blanchard (1996) and Kelley (1992). The Hersey and Blanchard situational leadership theory is based on two dimensions: task behavior and relationship behavior (Hersey, Blanchard, & Johnson, 1996, as cited in Safitir & Fahmi, 2014). Based on these two dimensions, there are four leadership styles: telling, selling, participating and delegating.

- **Telling style** reflects a high concern for tasks and a low concern for people and relationship. This is a very directive style. The leader gives explicit directions about how tasks should be accomplished.

- **Selling style** is based on high concern for both tasks and relationships. With this approach, the leader explains decisions and gives followers a chance to ask questions and gain clarity about work tasks.

- **Participating style** is characterized by high relationship and low task behavior. The leader shares ideas with followers, encourages participation, and facilitates decision making.

- **Delegating style** reflects a low concern for both tasks and relationships. This leader provides little direction or support because responsibility for decisions and their implementation is turned over to followers (Daft, 2008).

The Kelley followership typology has two dimensions: independent critical thinking and active engagement. Based on these two dimensions, there are five styles of followership: exemplary, alienated, pragmatic, conformist, and passive.

- **Exemplary Followers:** Exemplary followers (sometimes called "star" followers) are rank high in both active engagement and independent critical thinking. Exemplary followers think for themselves and are willing to challenge leaders by providing alternative solutions if they disagree with the leader. They proactively support organizational goals and leader decisions that are congruent with their beliefs (Kelley, 1992, as cited in Novikov, 2016).

- **Alienated Followers**: An alienated follower thinks independently and critically but is not active in carrying out the role. They do not contribute to the positive direction of the organization (Suda, 2013).

- **Pragmatist Followers:** Pragmatists have a moderate level of engagement and portray a moderate level of critical thinking (Kelley, 1992, as cited in Novikov, 2016). They are uncommitted and wait to see where things they take action (Kelley, 2008, as cited in Novikov, 2016).

- **Conformist Followers:** The conformist follower is highly engaged and eager to do the work but low in independent thinking skills and lack original ideas. They willingly take orders, but do not question the leader's ideas or decisions. They like having someone above them and work to please (Schwind, 2009).

- **Passive Followers:** Passive followers, also referred to as "sheep," are neither independent thinker, nor are they active in their role. They rely on others and look to the leaders to do the thinking. Many passive followers have not developed their followership skills, so they basically do nothing (Kelly, 1992, as cited in Schwind, 2009).

The theoretical framework of this study is illustrated in the following Figure 1.
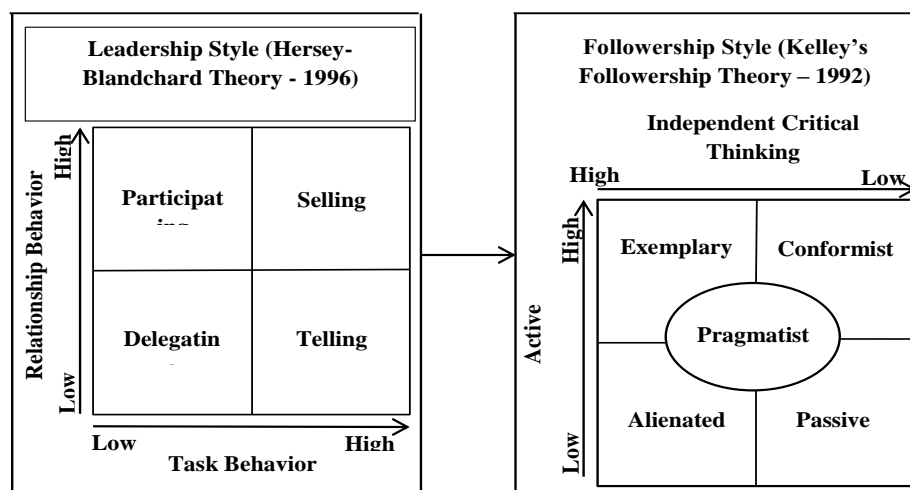
Figure 1   Theoretical Framework for the Relationship between Leadership Style and Followership Style

Adapted from: Safitri & Fahmi (2014). The relationship of leadership style and followership style (Case: Andalas University).

Methodology

In this study, both quantitative and qualitative research methods were used. For quantitative analysis, *"Leadership Effectiveness and Adaptability Description Questionnaire"* developed Hersey and Blanchard (1996, as cited in File & Shibeshi, 2012), and *"Kelley's Followership Styles Questionnaire"* developed by Kelley (1992, as cited in Johnson, 2003) were used to collect the required data. The reliability coefficient (Cronbach's alpha) of Kelley's Followership Styles Questionnaire was 0.854.

Simple random sampling method was used. For quantitative analysis, 255 teachers from 11 selected Basic Education High Schools in Nyaung Shwe Township participated. The descriptive statistic, such as simple frequency was used to investigate the predominantly perceived leadership style of principals and followership style criteria developed by Fobbs (2010, as cited in Novikov, 2016) was used to investigate the predominantly perceived followership styles of teachers. The integration model (Bjugstad, Ken, Spotlight & Comcast, 2006, as cited in Safitri & Fahmi, 2014) was applied to determine if followership styles correspond with leadership styles at selected high schools. For qualitative analysis, 18 teachers from 4 selected Basic Education High Schools in Nyaung Shwe Township participated. And, interviews with selected teachers were conducted to capture phenomena in teachers' own words about principals' leadership styles and teachers' followership styles by using thematic analysis method (Saldaña, 2009).

Research Findings

Quantitative Research Findings

The result of the teachers' perception of their principals' leadership styles were shown in Table 1.

Table 1 Frequency of Teachers' Perception of their Principal' Leadership Styles of High School in Nyaung Shwe Township   (N=255)

Schools	Frequency			
	Selling	**Telling**	**Participating**	**Delegating**
S1	123	125	52	23
S2	112	116	89	17
S3	129	139	93	43
S4	88	90	69	54
S5	128	130	126	53
S6	113	114	83	47
S7	133	126	104	54
S8	154	80	112	41
S9	145	86	37	77
S10	102	60	43	20
S11	146	100	117	57

According to Table 1, out of 11 high schools, teachers from **S1**, **S2**, **S3**, **S4**, **S5** and **S6** perceived that their principals mostly exhibited Telling style and second mostly exhibited Selling Style. On the other hand, teachers from the remaining schools (**S7**, **S8**, **S9**, **S10**, and **S11**) perceived that their principals mostly exhibited Selling Leadership Style and second mostly exhibited Telling Style.

The result of the teachers' perception of their followership styles were shown in Table 2. According to Table 2, out of 11 high schools, teachers from **S1**, **S2**, **S3**, **S4**, **S5**, **S6** and **S10**

perceived that they mostly exhibited Conformist Followership Style and second mostly exhibited Pragmatist Style and Exemplary Style and very rarely exhibited Passive Style but none of them exhibited Alienated Style. On the other hand, teachers from **S7**, **S8** and **S11** perceived that they mostly exhibited Pragmatist Followership Style and second mostly exhibited Exemplary Style and Conformist Style and very rarely exhibited Passive Style but none of them exhibited Alienated Style. Finally, teachers from remaining school (**S9**) perceived that they mostly exhibited Passive Followership Style and second mostly exhibited Pragmatist Style and Exemplary Style and very rarely exhibited Conformist Style but none of them exhibited Alienated Style.

Table 2 Frequency of Teachers' Perception of their Followership Styles of High Schools in Nyaung Shwe Township (N=255)

Schools	Frequency				
	Exemplary	**Conformist**	**Alienated**	**Passive**	**Pragmatist**
S1	6	10	0	1	5
S2	6	10	0	0	7
S3	4	15	0	0	9
S4	4	12	0	0	3
S5	5	11	0	1	10
S6	4	10	0	1	9
S7	4	5	0	0	11
S8	4	6	0	2	12
S9	6	4	0	7	6
S10	5	7	0	2	4
S11	7	3	0	2	11

The results of the teachers' perception of their followership styles were shown in Table 3. Based on the result, if we take a look to the integration model between leadership styles and followership styles by Bjugstad (2006, as cited in Safitri & Fahmi, 2014), seven schools such as **S1**, **S2**, **S3**, **S4**, **S5**, **S6** and **S9** corresponded. Five schools such as **S7**, **S8**, **S10** and **S11** did not correspond.

Table 3   Mostly Exhibited Principals' Leadership Styles and Teachers' Followership Styles of Schools

Schools	Mostly Exhibited Principals' Leadership Styles	Mostly Exhibited Teachers' Followership Styles	Correspond/ does not Correspond
S1	Telling	Conformist	Correspond
S2	Telling	Conformist	Correspond
S3	Telling	Conformist	Correspond
S4	Telling	Conformist	Correspond
S5	Telling	Conformist	Correspond
S6	Telling	Conformist	Correspond
S7	Selling	Pragmatist	Does not correspond
S8	Selling	Pragmatist	Does not correspond
S9	Selling	Passive	Correspond
S10	Selling	Conformist	Does not correspond
S11	Selling	Pragmatist	Does not correspond

Based on the *open-ended responses* of teachers, principals from Basic Education High Schools in Nyaung Shwe Township mostly exhibited telling leadership style (for example the

principal points practically about the facts that should be done in teaching activities and co-curriculum activities). Again, teachers from Basic Education High Schools in Nyaung Shwe Township mostly exhibited conformist followership style (for example the teachers performed the processes set by principal to be successful and participated dynamically in school activities).

Finally, according to the *interview* responses of participants, it was found that the principals of **S4** and **S5** mostly exhibited telling leadership style and teachers of **S4** and **S5** mostly exhibited conformist followership styles. Principals' leadership styles corresponded with teachers' followership styles according to integration model. In addition, it was found that the principals of **S8** and **S10** mostly exhibited selling leadership style and teachers of **S8** and **S10** mostly exhibited conformist followership styles. Principals' leadership styles did not correspond with teachers' followership styles according to integration model.

Qualitative Research Findings

The sample of this study consisted of 11 Basic Education High Schools in Nyaung Shwe Township. Based on the quantitative results, if we take a look to the integration model between leadership styles and followership styles by Bjugstad, two correspondent schools (**S4** and **S5**) and two not correspondent schools (**S8** and **S10**) were selected for interview. For qualitative analysis, the interview transcripts were analyzed by thematic analysis methods. The overall framework for analyzing data was arranged into three levels. Firstly, when teachers were asked about their principal's leadership styles at **S4**, they showed their different perceptions, for examples;

> *"Our principal solves problems with teachers."*

> *"Our principal negotiates conflicts."*

> *"Our principal lets to reveal others' opinions freely."*

Then, when teachers were asked about their followership styles at **S4**, they answered differently, for examples;

> *"I learn/study more by myself."*

> *"I perform the assigned tasks dutifully."*

For **S4**, at Level 1 interview transcripts were analyzed into *40* codes as shown in above examples. And then in Level 2, *40* codes were developed under *7* categories. They were related to selling leadership styles, telling leadership styles, participating leadership styles, delegating leadership styles, exemplary followership styles, conformist followership styles, passive followership styles and pragmatist followership styles. And at Level 3, codes from Level 2 were analyzed in search of answers for main research questions. After analyzing the data collected into three levels, three main themes were discovered to answer the research questions. They are:

1) Principal' mostly exhibited leadership style of **S4** was telling style.

2) Teachers' mostly exhibited followership style of **S4** was conformist style.

3) According to the integration model, principal's leadership style corresponded with teachers' followership styles.

And then, when teachers were asked about their principal's leadership styles at **S5**, they showed their different perceptions, for examples;

> *"Our principal never makes decision alone."*

> *"Our principal makes decision as he wished."*

Then, when teachers were asked about their followership styles at **S5**, they answered differently, for examples;

"I tell the principal frankly what I want."

"80% of the teachers are super active."

For **S5**, at Level 1 interview transcripts were analyzed into *46* codes as shown in above examples. And then in Level 2, *46* codes were developed under *6* categories. They were related to selling leadership styles, telling leadership styles, participating leadership styles, exemplary followership styles, conformist followership styles and pragmatist followership styles. And at Level 3, codes from Level 2 were analyzed in search of answers for main research questions. After analyzing the data collected into three levels, three main themes were discovered to answer the research questions. They are:

1) Principal' mostly exhibited leadership style of **S5** was telling style.

2) Teachers' mostly exhibited followership style of **S5** was conformist style.

3) According to the integration model, principal's leadership style corresponded with teachers' followership styles.

And then, when teachers were asked about their principal's leadership styles at **S8**, they showed their different perceptions, for examples;

"Our principal lets to reveal others' opinions freely."

"Our principal respects teachers' teaching/learning situation."

Then, when teachers were asked about their followership styles at **S8**, they answered differently, for examples;

"I use to teach my students about music."

"All teachers help solve problems."

For **S8**, at Level 1 interview transcripts were analyzed into *45* codes as shown in above examples. And then in Level 2, *45* codes were developed under *6* categories. They were related to selling leadership styles, telling leadership styles, participating leadership styles, exemplary followership styles, conformist followership styles and pragmatist followership styles. And at Level 3, codes from Level 2 were analyzed in search of answers for main research questions. After analyzing the data collected into three levels, three main themes were discovered to answer the research questions. They are:

1) Principal' mostly exhibited leadership style of **S8** was selling style.

2) Teachers' mostly exhibited followership style of **S8** was conformist style.

3) According to the integration model, principal leadership style did not correspond with teachers' followership styles.

And then, when teachers were asked about their principal's leadership styles at **S10**, they showed their different perceptions, for examples;

"Our principal always reconciles us."

"Our principal makes the schools competition."

Then, when teachers were asked about their followership styles at **S8**, they answered differently, for examples;

"I take care of school in summer holiday."

"I only participate in teaching."

For **S10**, at Level 1 interview transcripts were analyzed into *61* codes as shown in above examples. And then in Level 2, *61* codes were developed under *8* categories. They were related to selling leadership styles, telling leadership styles, participating leadership styles, delegating leadership styles, exemplary followership styles, conformist followership styles, passive followership styles and pragmatist followership styles. And at Level 3, codes from Level 2 were analyzed in search of answers for main research questions. After analyzing the data collected into three levels, three main themes were discovered to answer the research questions. They are:

1) Principal' mostly exhibited leadership style of **S10** was selling style.

2) Teachers' mostly exhibited followership style of **S10** was conformist style.

3) According to the integration model, principal leadership style did not correspond with teachers' followership styles.

Discussion and Conclusion

According to the perceptions of teachers in both quantitative and qualitative analysis, for research question one, it was found that principals from Basic Education High Schools in Nyaung Shwe Township mostly exhibited telling leadership styles. Daft (2008) suggested that the leader who used telling leadership style gives explicit directions about how tasks should be accomplished. Therefore, it can be interpreted that principals from Basic Education High Schools in Nyaung Shwe Township gave definite directions and guidance to teachers, motivated teachers to do the new jobs, listened to the teachers' opinions but they did not focus on the relationship between principals and teachers. For research question two, it was found that teachers from Basic Education High Schools in Nyaung Shwe Township mostly exhibited conformist followership styles. Kelley (2008, as cited in Novikov, 2016) and Northouse (2019) suggested that conformist followers who are yes people and very active followers that unquestioningly follow leader directions and always on the leader's side but still look to the leader for direction and guidance. Therefore, it can be interpreted that teachers from Basic Education High Schools in Nyaung Shwe Township are super active followers, have done what the principals direct, and performed effectively the things given for them. Furthermore, it could be suggested that teachers should give advices and suggestions about the schools' improvement to principals conveniently.

For research question three, it was found that two types of schools: correspondent schools and not correspondent schools. It can be interpreted that most of the principals from Basic Education High Schools actually know their teachers' followership styles but some principals do not actually know about their teachers. This finding was consistent with Safitri and Fahmi (2014) research and it can be interpreted that if the principals cannot exhibit the corresponding leadership styles, the improvement of schools will not be achieved as they wished. Therefore, it can be interpreted that if the principals exhibit the corresponding leadership style with teachers' followership styles, the teachers will be happy to stay at their schools and they will try their best and they will perform the schools' activities actively and as the result, the school will improve. On the other hand, sometimes it could be the teachers who miss perceived themselves as someone who is the best in the world.

In any school organization, we must understand the functions of both leadership and followership in our schools and realize that the motivation of followers (teachers) will have an impact on the effectiveness of the school (Crippen, 2012). The greatest successes in an organization require that people in both roles perform maximally (Kelley, 1992, as cited in Beckerleg, 2002).

Therefore, it could be suggested that principals should move from one leadership style to another to meet the changing needs of the schools and their teachers. According to literature, exemplary followership style is the best style so it could be suggested that all teachers from selected schools should turn their style into exemplary style in order to achieve organizational success. Therefore, it is suggested that not only the principals should adjust their leadership styles and teachers' actual followership styles but also teachers themselves must realize their followership styles.

Recommendations for Further Research

Based on the research findings, the recommendations are as follows:

- This research was limited at Basic Education High Schools in Nyaung Shwe Township, Southern Shan State. Therefore, similar research should be conducted at primary schools, middle schools, high schools in other states or regions.

- Again, this study was conducted based on teachers' perceptions of principals' leadership styles and teachers' followership styles. Therefore, further studies are needed to conduct by students' rating and principals' rating.

- In this research, quantitative and qualitative research methods were utilized but interview was conducted in order to obtain detailed information about teachers' perceptions on their principals' leadership styles and their followership styles.

Acknowledgements

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RELATIONSHIP BETWEEN PRINCIPALS' LEADERSHIP STYLES AND TEACHER MOTIVATION

Mi Mi Win[1] and Han Ni Lwin[2]

Abstract

The purpose of this study was to explore the relationship between principals' leadership styles and teacher motivation. The theoretical framework was based on Kurt Lewin's leadership model and Fredreick Herzberg's two factors theory of motivation. The reliability coefficient (Cronbach's alpha) was **.639** for overall. A total of 246 teachers from 5 selected Basic Education High Schools in Monywa Township participated in this study. Moreover, mixed research method (quantitative and qualitative research methods) was used in this study. The results of this study indicated that teachers perceived that their principals mostly practiced democratic leadership. And they perceived that they were moderately motivated under their principals and also by other factors such as their students, school climate and their attitudes on teaching profession and good relationships with colleagues. In addition, the teachers were demotivated when their principal cannot lead them well or they face the difficulties in the classroom. The results of this study found that there was a positive and significant relationship between principals' autocratic leadership. And democratic leadership of principals were positively and moderately correlated with teacher motivation. Then, there was a positive and slightly correlation between principals' laissez-faire leadership and teacher motivation.

Keywords: Leadership, Leadership Styles, Teacher Motivation

Introduction

Leadership is the ability to increase a group toward the vision or set of goals. Principals' leadership is one of the managerial qualities of the school which interact with members of the school organization and has a large impact on the turnover rate of the organization. It is very important for school system to accomplish its goals and its necessary objectives (Mills, 2005, as cited in Chaudhry & Javed, 2012). Motivated teachers are more dedicated to the school organization. They have job satisfaction and as a result of this, they work more productively (Osterloh, Bruno & Frost, 2001, as cited in Dahie, Mohamed & Jam'ale, 2015). For this reason, principals should motivate teachers to use their knowledge and skills towards organizational aims (Lindner, 1998, as cited in Dahie et al., 2015). When a school leader motivates his subordinates, he or she needs to satisfy their desires and make them to behave in an effective manner (Lekia & Emmanuel, 2018). On the other hand, leaders should not create an atmosphere of unmotivated personnel and must lead to an active highly motivated workforce (Kappen, 2012).

When the principals are exhibiting behaviors that can support teacher motivation, there can be not only an increase in student achievement but also the more effective school as a whole. So, if the teachers are more highly motivated by a particular leadership style; then that information would be extremely useful to districts and training organizations worldwide (Price, 2008). Positive leadership influences significantly on the teachers and the turnover of the school organization. Teacher motivation will lead the productivity of the organization (Dahie et al., 2015). And then motivation in an organization influence the leader's desire to meet the needs of the teachers and their increased efficacy (Lekia & Emmanuel, 2018). Therefore, principals should know that teacher-supportive leadership practice is important for students' learning (Shephred-Jones, Jill & Salisbury-Glennon, 2018).

In this study, the relationship between the principals' leadership styles and teacher motivation will be explored by studying the perceptions of teachers from the selected Basic

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Education High Schools in Monywa Township. The information gathered from this study can be helpful for teachers and principals in order to understand the correlation between different leadership styles of principals and teacher motivation. Then the principals become appreciate on how appropriate leadership style of school principals can influence effectively on the teachers' motivation and can improve the qualities and approaches of administration to maintain their schools effectively.

Purposes of the Research

Main Purpose

The main purpose of this study was to explore the relationship between principals' leadership styles and teacher motivation at Basic Education High Schools in Monywa Township.

Specific Purposes

The specific purposes were:

- To explore teachers' perceptions of their principals' leadership styles in the high schools at Monywa Township
- To explore teachers' perceptions of their motivation levels in the high schools at Monywa Township
- To determine if there are any significant differences in teacher motivation according to their demographic data (gender, age, position, academic qualification and total Service)
- To investigate the relationship between principals' leadership styles and teacher motivation

Research Questions

The following research questions guided the direction of the study.

1. What are the teachers' perceptions of their principals' leadership styles that are mostly practiced at selected high schools in Monywa Township?
2. What are the teachers' perceptions of their motivation levels at high schools in Monywa Township?
3. Are there any statistical differences in teacher motivation levels according to their demographic data (gender, age, position, academic qualification and total service)?
4. Is there any significant relationship between principals' leadership styles and teacher motivation?

Definition of Key Terms

The terms used throughout the current study were identified below for clarifying and understanding.

Leadership - is the basic function which mobilizes both leaders and followers to think, believe and motivate in a manner that satisfies emerging organizational needs and also their individual needs or wants (Donaldson, 2001, as cited in Price, 2008).

Leadership Style- is the manner in which people are directed and motivated by a leader to achieve organizational goals (Khajeh, 2018).

Autocratic Leadership is a type of leadership in which the leaders make decisions without consulting their team members, even if their input would be useful (Mind Tools Content Team [MTCT], 2019).

Democratic Leadership is a type of leadership in which the leaders make the final decisions, but they include team members in the decision-making process (MTCT, 2019).

Laissez-faire Leadership is a type of leadership in which the leaders give their team members a lot of freedom in how they do their work and how they set their deadlines and support with resources and advice if needed but otherwise they don't get involved (MTCT, 2019).

Teacher Motivation is the attribute that moves teachers to do or not to do something. It can be defined as the act of making teachers feel that their work is recognized and valued and at the same time, they get the rewards worth their input (Broussard & Garrison, 2004, as cited in Nyakundi, 2012).

Operational Definitions

Leadership is the process in which the leaders manage their subordinates with certain motives and values to achieve the desired goals of their organization.

Leadership Style is the behavior that the leaders practice to direct, control and motivate their followers to perform the tasks.

Motivation is the force for the people to do something by being satisfied their individual needs so that become have to accomplish the task.

Teacher Motivation is the incentive force that makes teachers feel satisfied in their work and moves toward their best performance.

Limitations of the Study

- The scope of the study aws limited to selected Basic Education High Schools in Monywa Township because this study was based on available time and resources of the researcher.

- The findings of this study could not be generalized to any other group than high schools in Monywa Township and other townships in Myanmar.

Review of Related Literature

Leadership is the basic function which mobilizes both leaders and followers to think, believe and motivate in a manner that satisfies emerging organizational needs and also their individual needs or wants (Donaldson, 2001, as cited in Price, 2008). Psychologist Kurt Lewin developed his framework of leadership styles in 1939 and it provided the foundation of many of the approaches that followed afterwards. Based on Lewin's leadership model, the leadership styles can be identified three approaches: autocratic leadership, democratic leadership and laissez-faire leadership (Price, 2008).

Firstly, autocratic leadership style is the type of leaders in which leaders make decisions without consulting their school members including teachers, even if their input would be useful. (Price, 2008). Democratic leadership style is the type of leaders in which leaders make the final decisions, but they include school members in the decision making process. They encourage creativity and teachers are often highly engaged in projects and decisions. (Price, 2008). Laissez-faire leadership style is the type of leaders in which leaders give their school members a lot of freedom in how they do their work and how they set their deadlines. This autonomy can lead to high job satisfaction but it can be damaging their time well, or if they don't have the knowledge, skills or self- motivation to do their work effectively (Price, 2008).

Teacher motivation is the attribute that moves the teachers to do or not to do something. It can be defined as the act of making teachers feel that their work is recognized and valued and at

the same time, they get the rewards worth their input. (Broussard & Garrison, 2004, as cited in Nyakundi, 2012). Many research found that there are significant correlations between principals' use of democratic and autocratic styles and teacher motivation levels (Dahie et al., 2015; Lekia & Emmauel, 2018; Mary, 2012; Price, 2008). On the other hand, Gilbar (2015) concluded that teacher's perceptions of principals' transformational behaviors were more correlated to the level of their motivation then self-reported behaviors by principals.

Moreover, some studies found that teachers are demotivated by autocratic leadership styles and there are negative correlations between autocratic leadership style and teacher motivation (Mary, 2012; Price, 2008). More teachers were satisfied with their jobs in relation to democratic leaders (Kiboss & Jemiryott, 2014). Many research found that teachers tend to more highly motivated and inspired by democratic principals (Barenge, 2016; Bhatti, Maitlo, Shaikh, Hashmi & Shaikh, 2012; Lekia & Emmanuel, 2018; Mary, 2012; Price, 2008). Laissez-faire leadership style has a negative relationship with motivation (Chaudhry & Javed, 2012; Kashagate, 2013; Chowdhurg, 2014).

Theoretical Framework

Leadership is the basic function which mobilizes both leaders and followers to think, believe and motivate in a manner that satisfies emerging organizational needs and also their individual needs or wants (Donaldson, 2001, as cited in Price, 2008). Based on Lewin's leadership model, the leadership styles can be identified three approaches: autocratic leadership, democratic leadership and laissez-faire leadership (Price, 2008).

Firstly, *Autocratic Leadership Style* is the type of leaders in which leaders make decisions without consulting their school members including teachers, even if their input would be useful. This style can be demoralizing and it can lead to high levels of absenteeism and staff turnover of teachers. But autocratic leaders give clear direction and do not take much time to do the task so they tend to complete the goals effectively and quickly.

Democratic leadership Style is the type of leaders in which leaders make the final decisions, but they include school members in the decision-making process. They encourage creativity and teachers are often highly engaged in projects and decisions. As a result, school members tend to have high job satisfaction and high productivity of teachers. However, in certain situations, the different views of many members in decision making lead to delay to accomplish the task in time.

Laissez-faire Leadership Style is the type of leaders in which leaders give their school members a lot of freedom in how they do their work and how they set their deadlines. They provide support with resources and advice if needed but otherwise they don't get involved. This autonomy can lead to high job satisfaction but it can be damaging their time well, or if they don't have the knowledge, skills or self- motivation to do their work effectively. It can also occur when managers don't have control over their work and the teachers.

Teacher Motivation is the aspect that comes out from receiving and responding external drives and exploring internal needs of teacher. If the needs of teachers are fulfilled and supported by their leaders, their exhibit their capabilities for the fullest potential.

If different leadership styles of principals directly correlate and affect on teacher motivation, it can provide great opportunities for principals to increase teacher's motivation through the right leadership behaviors and then to improve their schools effectively (Price, 2008). Therefore, this study will determine if there is any relationship between different leadership styles of principals and teacher motivation. In this study, the theoretical framework was illustrated based on literature reviews.

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┌─────────────────────────────┐                    ┌─────────────────────────┐
│      Leadership Styles       │                    │                         │
│    Autocratic leadership     │ ───────────▷       │   Teacher Motivation    │
│    Democratic Leadership     │                    │                         │
│   Laissez-faire Leadership   │                    │                         │
└─────────────────────────────┘                    └─────────────────────────┘
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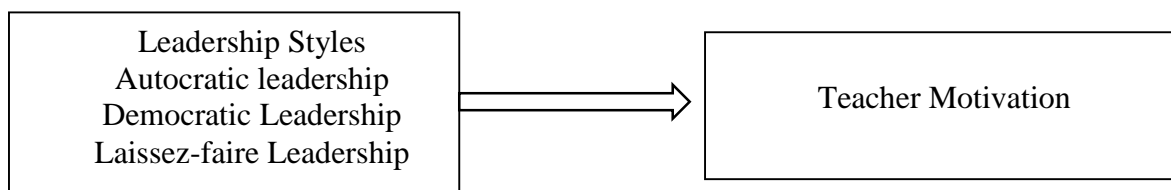
Figure 1 Framework of Relationship between Principals' Leadership Styles and Teacher Motivation

Source: **Haque, M.A., Haque, M.F., & Islam, M.S. (2014)** *Motivational theories – A critical analysis*

Price (2008). *The relationship between the teacher's perception of the principal's leadership style and personal motivation*

Methodology

In this study, both quantitative and qualitative research methods were used. For quantitative analysis, "Questionnaire for Teachers" was developed based on two instruments, "Principals' Leadership Styles" and "Teacher Motivation" developed by Price (2008). Reliability coefficients (Cronbach's alpha) of the instruments were **.536** for leadership questionnaire, **.634** for teacher motivation questionnaire and **.639** for overall questionnaire.

The sample population is selected according to simple random sampling method. For quantitative analysis, 246 teachers from five selected Basic Education High Schools in Monywa Township. Descriptive Statistics, Independent sample *t*-Test, one-way ANOVA and the Pearson correlations of the variables were calculated by using Statistical Package for the Social Sciences (SPSS) (Morgan, Leech, Gloeckner & Barrett, 2004).

For qualitative analysis, the participants of this study were fifteen teachers from three selected Basic Education High schools in Monywa Township. And interviews with selected teachers were conducted to capture phenomena in teachers' own words about principals' leadership styles and teacher motivation by using thematic analysis method (Saldaña, 2009).

Research Findings

Quantitative Research Findings

The results of quantitative analysis are shown in the following tables.

The descriptive results of principals' leadership styles were shown in Table 1.

Table 1 Descriptive Statistics of Principals' Leadership Styles Perceived by Teachers at Selected Basic Education High Schools in Monywa Township

Schools		Principals' Leadership Styles		
		Autocratic Leadership	**Democratic Leadership**	**Laissez-faire Leadership**
Total N=246	**Mean**	2.66	2.97	2.29
	Standard Deviation	0.28	0.34	0.36

Scoring Direction: 1.00-2.00= less frequently practice, 2.01-3.00=moderately practice, 3.01- 4.00= mostly practice

According to Table 1, teachers in selected high schools perceived that their principals mostly practice democratic leadership styles than other two leadership styles. When comparing the mean values of leadership styles in all selected high schools, teachers from these schools perceived

that their principals mostly practiced democratic leadership than other two leadership styles. It can be vividly seen in the following Figure 2.
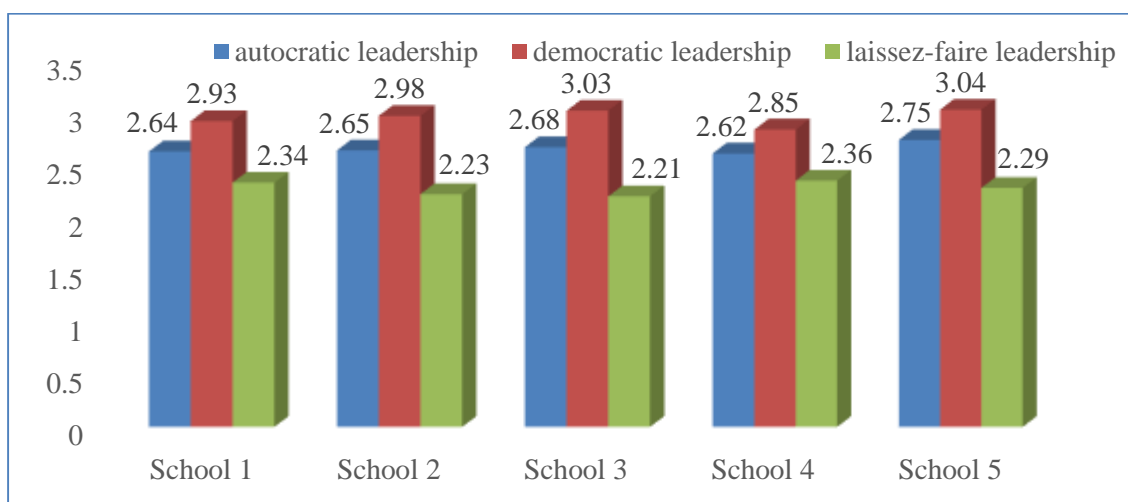
Figure 2 Comparison of Mean Values for Principals' Leadership Styles in Selected Basic Education High Schools

The descriptive results of teacher motivation were shown in Table 2. According to the Table 2, overall mean value of perception of teachers in selected in high schools showed that their motivation level by their principals' leadership was moderate (2.75). When comparing the mean values of motivation for selected schools, the mean value of teachers' motivation by their principal in school 5 was highest (2.81) and those of school 1 and school 2 were second highest (2.76).

Table 2 Descriptive Statistics of Teacher Motivation Levels at Selected Basic Education High Schools in Monywa Township

Schools	Teacher Motivation		
	Mean	**Standard Deviation**	**Level**
Total (N=246)	2.75	0.27	moderate

Scoring Direction: (1.00-2.00=low, 2.01-3.00=moderate, 3.01-4.00=high)

Next, the mean value of teacher motivation of school 3 was 2.72. And it was found that the teachers in school 4 had lowest mean score (2.69). Therefore, it implies that teachers in each of selected schools perceived that they were moderately motivated under their principals. It can be vividly seen in the following Figure 3.
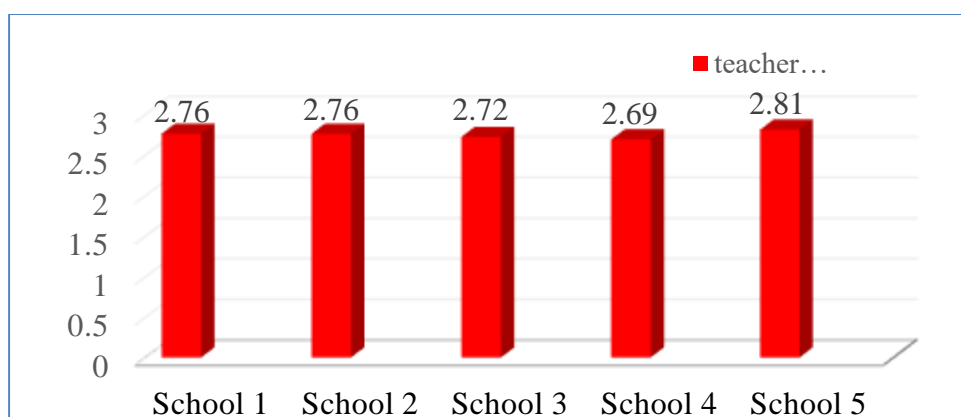
Figure 3 Comparison of Mean Values for Teacher Motivation Levels in Selected Basic Education High Schools

According to the Table 3, autocratic leadership style of principals (*r*=.522, *p*<0.01), democratic leadership style(*r* =.470, *p*<0.01) and laissez-faire leadership (*r* =.190, *p*<0.01) were significantly correlated to teacher motivation of schools.

Table 3   Correlation between Principals' Leadership Styles and Teacher Motivation

	1	2	3	4
Autocratic Leadership	1			
Democratic Leadership	.477**	1		
Laissez-faire Leadership	.324**		1	
Teacher Motivation	.522**	.470**	.190**	1

 **Correlation is significant at the 0.01 level (2-tailed).

Qualitative Research Findings

For qualitative analysis, the interview transcripts were analyzed by thematic analysis methods. The overall framework for analyzing data was arranged into three levels. Firstly, when teachers were asked about their principal's leadership styles, they showed their different perceptions, for examples;

"*Our principal can delegate the school task to do equally to all teachers*."

"*Our principal likes to control detail on all school works.*"

"*Our principal cannot say anything about school tasks whether good or bad and allow us to do by our own.*"

Then, when teachers were asked whether they are motivated by their principal, they answered differently, for examples;

"*We are really motivated by their effective principals*."

"*We are also motivated by good relation between colleagues and good school conditions*"

"*We are sometimes demotivated by bad classroom conditions and also when our principals cannot manage the school well."*

At Level 1, these interviews transcripts were analyzed into 28 codes such as task delegation, control detail, motivation by effective principals, motivation by colleague relation and so on. And then, in Level 2, *28* codes were developed under *6* categories. They were related to three types of leadership styles: autocratic leadership, democratic leadership and laissez-faire leadership and the facts that the teachers were motivated not only by their principals but also by other factors and why they were demotivated. And at Level 3, codes from Level 2 were analyzed in search of answers for main research questions. After analyzing the data collected into three levels, three main themes were discovered to answer the research questions. They are:

1) The teachers at Basic Education High Schools in Monywa Township perceived that their principals mostly practiced democratic leadership.

2) The teachers were motivated by their principals who practiced appropriate leadership styles at different situations and also by other factors such as their students, school climate and their attitudes on teaching profession and relationships with colleagues.

3) The teachers could be demotivated when their principal cannot lead them well or they face the difficulties with their students.

Conclusion and Discussion

According to the results of both quantitative and qualitative research findings, concerning research question one, it was found that the teachers at selected Basic Education High Schools in Monywa Township perceived that t heir principals mostly practiced democratic leadership. Blake and Mouton (1935, as cited in Price, 2008) maintained that a democratic leader is intent on building relationships, is focused on build an environment in which team members are motivated to reach their highest potential. Therefore, it can be interpreted that principals from all high schools in Monywa Township mostly practiced democratic leadership that can be appropriate in motivating teachers towards educational development.

For research question two, in quantitative and qualitative findings, it was found that teachers are moderately motivated by their principal's leadership styles. In qualitative findings, teachers are also motivated by other factors such as students, school climate, attitudes on their profession and relationships with colleagues. Hygiene factors such as working conditions, coworker relations, policies and rules, their supervisor quality and salary can motivate teachers (Haque et al., 2014). So, these finding is consistent with Haque et al. (2014).

Moreover, it was further found that the teachers can be demotivated by when their principal cannot lead them well or they face the difficulties with their students in the classroom. Haque et al. (2014) pointed that these factors can motivate workers but the dissatisfaction of one of these factors move to demotivation. Therefore, it can be interpreted that teachers in high schools in Monywa Township are motivated if their principals support to increase satisfaction in their job or they fulfill their hygiene needs. Next, the teachers could be demotivated when they did not satisfy intrinsic and extrinsic needs in their job.

When examined whether there were significant differences in teacher motivation levels in selected high schools for research question three, it was found that there were no statistically significant differences in teacher motivation levels in these schools according to demographic data (gender, position, age, academic qualification and total service) of teachers. It can be concluded that motivation levels of teachers in selected schools in Monywa Township could not change depending on their demographic data.

For research question four, there was a positive and significant relationship between autocratic leadership styles and teacher motivation ($r = .522$, $p < 0.01$). Mary (2012) and Price (2008) in their research mentioned that there were negative correlation between autocratic leadership styles and teacher motivation. Nevertheless, it can be interpreted that teachers in Basic Education High Schools in Monywa Township are moderately motivated by autocratic leaders who give them clear directions about what need to do and how to be done.

Then, it was found that there was a positive and significant relationship between democratic leadership styles and teacher motivation ($r = .470$, $p < 0.01$). This result can be supported by many research findings of Barenge (2014), Lekia and Emmanuel (2018), that there was a positive and highly correlation between democratic leadership style and teacher motivation. Mary (2012) and Price (2008) concluded that teachers tend to more motivated and inspired by democratic leaders. Therefore, it can be suggested that teachers in selected schools perceived that when principals mostly practice democratic leadership in their schools, they can more motivate teachers to work happily and successfully.

Finally, it was found that a positive but slightly correlation existed between laissez-faire leadership styles and teacher motivation levels ($r = .190$, $p < 0.01$) in this study. But, Price (2008) mentioned that there is no statistically significant relationship between principals' laissez-faire leadership and teacher motivation. Again, Chaudhry and Javed (2012), Kashagate (2013) and Chowdhurg (2014) found that there was negative relationship between laissez-faire leadership and

teacher motivation. However, the results of this study pointed that teachers in Basic Education High Schools in Monywa Township were slightly motivated when their principals allowed them to work freely by themselves.

Recommendations for Further Research

Based on the research findings, the recommendation are as follows:

1. This research was limited at Basic Education High Schools in Monywa Township, Sagaing Region. Therefore, similar research should be conducted at primary schools, middle schools and high schools in other states or regions.

2. Again, this study was conducted based on teachers' perceptions of principals' leadership styles. Therefore, further studies are needed to conduct by principals' ratings and parents' ratings.

3. This study was conducted for a short period. Therefore, the period for the intervention and the content to be learnt should be extended. In this research, quantitative and qualitative research methods were utilized. Besides, observations should also be conducted.

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RELATIONSHIP BETWEEN PRINCIPALS' DECISION MAKING STYLES AND TEACHER EMPOWERMENT

Yuzana Hlaing[1] and Han Ni Lwin[2]

Abstract

The purpose of this study was to explore the relationship between principals' decision making styles and teacher empowerment. The theoretical framework of this study was developed based on Scott and Bruce (1995) and Short and Rinehart (1992). The reliability coefficient (Cronbach's alpha) was 0.910. Mixed research method (quantitative and qualitative) was used in this study.280 teachers from 8 high schools in Sagaing Township were participated in this study. According to quantitative results, teachers from Sagaing Township answered that their principals most highly practiced "rational" decision making styles ($\overline{X}$=3.98), followed by "dependent" ($\overline{X}$=3.50), "spontaneous" ($\overline{X}$=2.72), "intuitive" ($\overline{X}$=2.69), and "avoidant" decision making styles ($\overline{X}$=2.60). And, it was found that teachers from all selected high schools had high empowerment levels ($\overline{X}$=3.78).Furthermore, it was found that there were significant and positive relationship between principals' rational decision making styles and teacher empowerment (r=.473, p<0.01), significant and positive relationship between principals' dependent decision making styles and teacher empowerment (r=.386, p<0.01), significant and low relationship between principals' spontaneous decision making styles and teacher empowerment (r=.120, p<0.05), significant and low relationship between principals' intuitive decision making styles and teacher empowerment (r=.164, p<0.01), and no correlation between principals' avoidant decision making styles and teacher empowerment (r=.086). The results of qualitative data were consistent with the findings of quantitative results. Therefore, based on the results, it can be suggested that the principals should make decisions based on rational reasons and discussion with teachers so that the teachers feel empowered and take responsibilities, which in turn, can directly or indirectly increase school achievement.

Keywords: Principals' Decision Making Styles, Teacher Empowerment

Introduction

Decision making is the process of selecting the best choice to achieve the goals of the organizations. Decision making is similar to management and sometimes it is even equal. The future management emphasizes on the process of decision making. Therefore, decision making has long been recognized as being at the heart of the organizations (Owens, 2000). All principals in educational organizations also have to deal with decision making process. Indeed, principals make decisions by various styles and their decision making styles indicates their perceptions and their qualities (Ghaleno, Pourshafei, & Yunesi, 2015). How decisions are effectively made in a school are usually reliant on principals because they are the staffs who are usually in charge of setting up the decision making process (Nutt, 2008). Therefore, in a school, principals' strategies and styles used for decision making approach and showing decision making behaviors are becoming of high importance (Cetel, Aksoy, Caliskan, & Tennur, 2013).

Teacher empowerment is the possession and use power of teacher to enact teaching tasks and school activities in order to improve school achievement. Empowerment is a key strategy in organization to expand and adapt to the changes. Today's work environment needs empowered employees that can be able to decide, provide solutions and be accountable in front of their work (Joker, Hosseinzadeh, & Davoudi, 2014). When teachers are more empowered, student achievement, responsiveness to student conflict, teacher satisfaction, and the school environment are likely to improve (Short & Johnson, 1994). Teacher empowerment can also encourage teacher effectiveness, leading to improved student learning (Blasé & Blasé, 2001). The outcomes of teacher

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empowerment are high energy levels, positive attitudes, high productivity and commitment to education (Blasé & Blasé, 2001).

Blasé and Blasé (2001) reported that principal's leadership and behavior is the largest contributor to teachers' sense of empowerment. Principals and teachers together, can successfully manage the education system to bring about improved student achievement and competencies to meet the demands of the 21st Century workplace (Blasé & Blasé, 2001; Lucas & Valentine, 2001). When the principals give enough empowerment to the teachers, they can discover their potential and limitations for themselves as well as developing competence in their professional development. Since there is a correlation between teacher empowerment and student success, the principal should make suitable decisions and create environment that will foster the empowerment of teachers (Balyer, 2017). If the principals use suitable decision making styles, the teachers can be empowered and the education system can be successful (Wren, 1995).

Aims of the Research

Main Aim

The main aim of this study was to investigate the relationship between principals' decision making styles and teacher empowerment at Basic Education High Schools in Sagaing Township.

Specific Aims

The specific aims of this study were:

(1) To explore teachers' perceptions of their principals' decision making styles at Basic Education High Schools in Sagaing Township
(2) To determine teachers' perceptions of their empowerment levels at Basic Education High Schools in Sagaing Township
(3) To determine whether there are any significant differences in teacher empowerment according to their demographic data (gender, age, position, academic qualification, and service year) at Basic Education High Schools in Sagaing Township
(4) To examine the relationship between principals' decision making styles and teacher empowerment at Basic Education High Schools in Sagaing Township

Research Questions

This research dealt with the following questions regarding principals' decision making styles and teacher empowerment at Basic Education High Schools in Sagaing Township.

(1) What are the teachers' perceptions of their principals' decision making styles at Basic Education High Schools in Sagaing Township?
(2) What are the teachers' perceptions of their empowerment levels at Basic Education High Schools in Sagaing Township?
(3) Are there any significant differences in teacher empowerment according to their demographic data (gender, age, position, academic qualification, and service year) at Basic Education High Schools in Sagaing Township?
(4) What is the relationship between principals' decision making styles and teacher empowerment at Basic Education High Schools in Sagaing Township?

Definitions of Key Terms

Important terms were carefully defined in explaining the concepts underlying the development of the investigation.

(1) Decision making style is defined as the way how people make decisions in different situations (Zmud, 1979, as cited in Alqarni, 2003).

(2) Principals' decision making styles can be defined as the response patterns exhibited by principals in decision making situations of the educational organization (Olcum & Titrek, 2015).

(3) Empowerment is defined as the possession and use of power in the pursuit of occupational improvement, professional autonomy, and the overall improvement of the organization (Smith & Lotven, 1993, as cited in Lintner, 2008).

(4) Teacher empowerment is defined as the combination of respect and dignity for teachers which allows them to take responsibility for and participate in work-related decisions (Blasé & Blasé, 2001).

Scope of the Study

- The scope of this study was limited to selected Basic Education High Schools in Sagaing Township because this study was based on available time and resources of the researcher.
- The findings of this study could not be generalized to any other schools than high schools in Sagaing Township.

Operational Definitions

In this study, "principals' decision making styles" refer to the principals' response-patterns in making decisions about school procedures. "Teacher empowerment" can be operationally defined as teachers' autonomy and use of power in both teaching tasks and school activities.

Review of Related Literature

Decision Making

Decision making can be defined as the process of choosing one alternative form among a set of rational alternatives (Lunenburg & Ornstein, 2012). Decision making pervades all other administrative function. Planning, organizing, staffing, directing, coordinating, and controlling all include decision making (Lunenburg & Ornstein, 2012). Effective decision making requires an understanding of the situation. An effective decision would be the one that optimizes profits, sales, staff welfare, or market share. In some situations, an effective decision may be the one that minimizes loss, expenses, or staff turnover. Principals and teachers at all levels make decisions. These decisions have some influences, whether large or small, on the performance of both faculty and students. Therefore, principals and teachers must develop decision making skills because they have to make many decisions that will affect the organization (Lunenburg & Ornstein, 2012).

Decision Making Styles

Decision making style can be defined as the habitual response pattern of a person in making decisions (Scott & Bruce, 1995). Decision making styles can differ depending on the decision makers' approach to decision making. People use different levels of all five styles, but one style is usually dominant. According to Scott and Bruce (1995), there are five different decision making styles. These five styles of decision making are rational, intuitive, dependent, avoidant, and spontaneous.

- **Rational decision making style:** Rational decision making style is characterized by the search for data and information, developing alternative and logical evaluation of alternatives. This rational decision making style use logical, reasoning and well-structured approach for making decisions.

- **Intuitive decision making style:** Intuitive decision making style is characterized by tendency to depend on premonitions and feelings. This means that intuitive decision making style depends upon hunches, feelings, personal experiences and gut feeling.

- **Dependent decision making style:** Dependent decision making style is characterized by receiving direction and support from others to make a decision. In other word, a dependent decision making style is defined as a search for advice, help, support and guidance for making important decisions.

- **Avoidant decision making style:** Avoidant decision making style is characterized by attempt to avoid making decision whenever possible. Avoidant decision making style is defined by withdrawing, postponing, moving back, ignoring the decision processes.

- **Spontaneous decision making style:** Spontaneous decision making style is characterized by making quick, rapid, impulsive, and prone to make snap decision. This style is also characterized by a feeling of immediacy and a desire to finish the decision making process as fast as possible (Bayram & Aydemir, 2017).

Teacher Empowerment

According to Lintner (2008), empowerment means bringing the responsibility for decision making to the lowest possible level, which specifies that the administrator does not make all the decisions. Empowerment can also be defined as a form of decentralization that places decision making and accountability at the lowest level: thus, teachers are involved in decisions about instruction, curriculum because they are the ones in the classroom, closest to the students. Lintner (2008) points out that three key elements in teacher empowerment are the ability to act, the opportunity to act, and the desire to act. Empowered teachers are highly competent and work in schools that provide opportunities to show competence. A school that values empowerment of teachers will be better at finding and developing resources than a school that does not support an empowerment philosophy (Short, 1994).

Dimensions of Teacher Empowerment

Short and Rinehart (1992) identified six dimensions of empowerment. Each of the six attributes is discussed as follows.

- **Decision making:** The decision making dimension of empowerment involves teachers' participation in critical decisions that directly affect their work. Teachers have increased control over their work environment when their opinions influence the outcome of the decision making process. Teachers are less willing to participate in decision making if they perceive that their opinions are not taken in to consideration by the principal when the final decision is made (Short, Miller-Wood, & Johnson, 1991).

- **Impact:** The attribute of impact refers to teachers' perceptions that they have an effect and influence on school life (Short, 1994). Teachers' self-esteem and confidence grow when they feel they are doing something worthwhile and are recognized for their accomplishments (Ashton & Webb, 1983). Teacher impact also means that teachers influence other faculty members to take part in reform efforts and school improvement initiatives (Short, 1994).

- **Status:** The status attribute of empowerment refers to the sense of esteem, respect, and admiration attributed by students, parents, community members, peers, and superiors to the

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profession of teaching. Recognition of teacher status can be found in comments and attitudes from the various constituents of the school environment and student response to the teacher's instructions (Short & Johnson, 1994).

- **Autonomy:** Autonomy is the dimension of teacher empowerment that refers to teachers' beliefs that they can control certain aspects of their work life such as scheduling, curriculum, textbooks, and instructional planning (Short, 1994; Short & Johnson, 1994; Short & Rinehart, 1992). Autonomous individuals will generally have an attitude of collegiality, risk taking, and ongoing learning and experience greater satisfaction in the workplace as autonomy increases (Lintner, 2008).
- **Professional growth:** Professional growth refers to teachers' perception that the school in which they work provides them with opportunities to grow and develop professionally, to learn continuously, and to expand one's own skills through the work life of the school (Short & Johnson, 1994).
- **Self-Efficacy:** Self-efficacy refers to teachers' perceptions that they have the skills and ability to help students learn, are competent in building effective programs for students, and can effect changes in student learning. Self-efficacy develops as individuals acquire self-knowledge and the belief that they are personally competent and have mastered skills necessary to affect desired outcomes (Short, 1994; Short & Johnson, 1994).

Rosenholtz (1991) stated that teachers' sense of self efficacy and professional certainty relates to teachers' decisions to remain in teaching. An understanding of the six dimensions of teacher empowerment should be provided the bases for developing strategies to help teachers become more empowered in their work lives (Short, 1994).

Theoretical Framework

The theoretical framework of this study was based on Scott and Bruce (1995) and Short and Rinehart (1992). Five decision making styles developed by Scott and Bruce (1995) are:

- **Rational decision making style** is characterized by the search for data and information, developing alternative and logical evaluation of alternatives.
- **Intuitive decision making style** is characterized by tendency to depend on premonitions and feelings.
- **Dependent decision making style** is characterized by receiving direction and support from others to make a decision.
- **Avoidant decision making style** is characterized by attempt to avoid making decision whenever possible.
- **Spontaneous decision making style** is characterized by making quick, rapid, impulsive, and prone to make snap decision (Bayram & Aydemir, 2017).

Six dimensions of teacher empowerment developed by Short and Rinehart (1992) are:

- **Decision making** refers to teachers' participation in critical decisions that directly affect their work, involving issues related to budgets, teacher selection, scheduling, and curriculum.
- **Professional growth** refers to the teachers' perception that the school provides them opportunities to grow and develop professionally, to continue to learn, and to expand their skills during their work in school.
- **Status** refers to the professional respect and admiration that the teachers perceive that they earn from colleagues.
- **Self-efficacy** refers to the teachers' perception that they are equipped with the skills and ability to help students learn, and are competent to develop curricula for students.

- **Autonomy** refers to the teachers' feeling that they have control over various aspects of their working life, including scheduling, curriculum development, selection of text books and planning instruction.
- **Impact** refers to the teachers' perception that they can affect and influence school life (Short & Rinehart, 1992).

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┌─────────────────────────────┐          ┌─────────────────────────────┐
│  Principals' Decision Making│          │     Teacher Empowerment     │
│           Styles            │          │                             │
│                             │          │   Decision making           │
│     Rational                │          │   Professional growth       │
│     Intuitive               │──────────▶│   Status                    │
│     Dependent               │          │   Self-efficacy             │
│     Avoidant                │          │   Autonomy                  │
│     Spontaneous             │          │   Impact                    │
│        (Scott & Bruce, 1995)│          │        (Short & Rinehart, 1992)│
└─────────────────────────────┘          └─────────────────────────────┘
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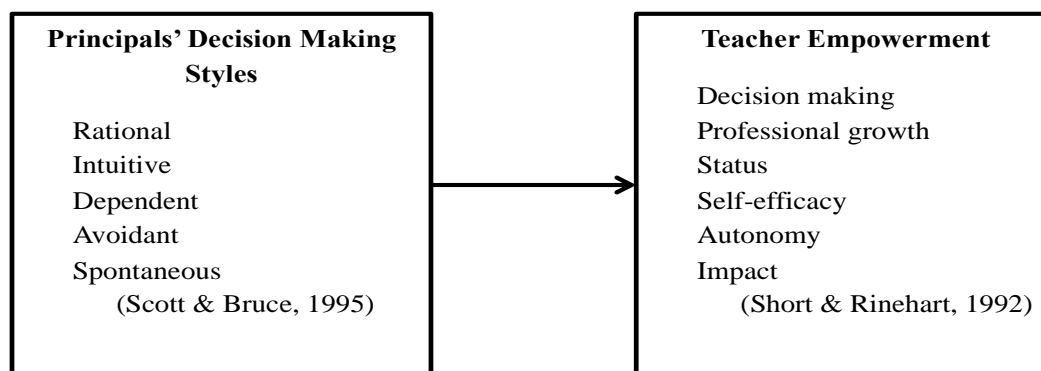
Figure 1   Theoretical Framework for Relationship between Principals' Decision Making Styles and Teacher Empowerment

Methodology

In this study, both quantitative and qualitative research methods were used. For quantitative analysis, **"*General Decision Making Style (GDMS)*"** developed by Scott and Bruce (1995), and *"School Participant Empowerment Scale (SPES)"* developed by Short and Rinehart (1992) were used to collect the required data. The reliability coefficient (Cronbach's alpha) was 0.77 for decision making questionnaire and 0.89 for teacher empowerment questionnaire. Simple random sampling method was used. For quantitative analysis, 280 teachers from 8 selected Basic Education High Schools in Sagaing Township participated. Descriptive statistics, Independent samples *t*-Test, one-way ANOVA Post Hoc Test, and the Pearson correlations of the variables were calculated by using SPSS (Morgan, Leech, Gloeckner, & Barrett, 2004). For qualitative analysis, 20 teachers from 4 selected Basic Education High Schools in Sagaing Township participated. And, interviews with selected teachers were conducted to capture phenomena in teachers' own words about principals' decision making styles and teacher empowerment by using thematic analysis method (Saldaña, 2009).

Findings

Quantitative Findings

According to Table 1, teachers in selected high schools perceived that their principals highly practiced **"rational decision making style"** than the other four decision making styles.

Table 1   **Descriptive Statistics for Principals' Decision Making Styles Perceived by Teachers in Selected High Schools in Sagaing Township   (N=280)**

Principals' Decision Making Styles	Mean Values	SD
Rational	**3.98**	0.47
Intuitive	2.69	0.81
Dependent	3.50	0.37
Avoidant	**2.60**	0.67
Spontaneous	2.72	0.64

Scoring direction: 1-2.33= low level, 2.34-3.67= moderate level, 3.68-5= high level

According to Table 2, teachers in selected high schools in Sagaing Township perceived that their empowerment level was **high**.

Table 2 Descriptive Statistics for Teacher Empowerment in Selected High Schools in Sagaing Township

Teacher Empowerment	Mean Values	SD
Professional Growth	3.70	0.45
Decision Making	3.29	0.58
Status	3.90	0.37
Self-Efficacy	4.00	0.34
Autonomy	4.05	0.34
Impact	3.73	0.38
Overall Teacher Empowerment	**3.78**	0.33

Scoring direction: 1-2.33= low level, 2.34-3.67= moderate level, 3.68-5= high level

According to overall teacher empowerment results in Tables 3 and 4, teachers who were under 25 years of age had higher empowerment level than the teachers who were 40-44 years and above 55 years of age.

Table 3 ANOVA Results for Teacher Empowerment according to their Age

Teacher Empowerment	Sum of Squares	df	Mean Square	F	p
Between Groups	1.851	7	.264	2.590*	.013
Within Groups	27.776	272	.102		
Total	29.627	279			

Note: *$p<.05$

Table 4 ANOVA Results for Teacher Empowerment according to their Age

Teacher Empowerment	Age Groups (I)	Age Groups (J)	Mean Difference (I-J)	Sig.
Professional Growth	Under 25	25-29 years	.572*	.042
		Above 55	.578*	.039
Decision Making	Under 25	Above 55	.745*	.043
Overall Teacher Empowerment	Under 25	40-44 years	.402*	.047
		Above 55	.432*	.032

Note: *$p<.05$

According to the Table 5, there was a significant and moderate relationship between principals' rational decision making styles and teacher empowerment ($r= .473$, $p<0.01$), a significant and low relationship between principals' intuitive decision making styles and teacher empowerment ($r= .164$, $p<0.01$), a significant and moderate relationship between principals' dependent decision making styles and teacher empowerment ($r= .386$, $p<0.01$), no correlation between principals' avoidant decision making styles and teacher empowerment ($r= .086$), and a significant and low relationship between principals' spontaneous decision making styles and teacher empowerment ($r= .120$, $p<0.05$).

Table 5 Correlation between Principals' Decision Making Styles and Teacher Empowerment

	Rational	Intuitive	Dependent	Avoidant	Spontaneous	Empowerment
Rational Sig. (2-tailed)	1					
Intuitive Sig. (2-tailed)	-.171** .004	1				
Dependent Sig. (2-tailed)	.365** .000	.233** .000	1			
Avoidant Sig. (2-tailed)	-.206** .001	.700** .000	.395** .000	1		
Spontaneous Sig. (2-tailed)	-.188** .002	.719** .000	.327** .000	.744** .000	1	
Empowerment Sig. (2-tailed)	**.473** .000	**.164** .006	**.386** .000	**.086** .152	**.120** .045	1

**Correlation is significant at the 0.01 level (2-tailed).

**Correlation is significant at the 0.05 level (2-tailed).

Qualitative Findings

　　　For qualitative analysis, the interview transcripts were analyzed by thematic analysis method. The overall framework for analyzing data was arranged into three levels. Firstly, when teachers were asked about their principals' decision making styles, they showed their different perceptions. Some examples are;

　　　"Our principal makes decisions based on rules and regulation"

　　　"In making decisions, their principal considers various options to improve school achievement."

　　　"Their principal makes decisions based on rules and regulation."

　　　Then, when teachers were asked whether they were empowered by their principal, they answered differently. Some examples are;

　　　"The teachers are empowered in making decisions about the teaching methods, teaching tasks, as deans, class teachers."

　　　"The teachers are empowered in the school activities, such as librarian, school committee members."

　　　In level 1, interview transcripts were analyzed into 21 codes such as logical and systematic decisions, discussion with others, decision on personal feelings, quick decision, working effectively due to principal's right decisions, and so on. In level 2, 21 codes were developed under 8 categories. They were related to five decision making styles of principals: rational, intuitive, dependent, avoidant, and spontaneous and the facts that the teachers were empowered by their principals and the teachers were not empowered by their principals. Finally, in the Level 3 analysis, codes from level 2 were analyzed in search of answers for main research questions. After analyzing the data collected by thematic analysis, three main themes were discovered to answer the research questions. They are:

- The teachers at selected Basic Education High Schools in Sagaing Township perceived that their principals most highly practiced rational decision making styles.
- There were more empowered teachers than not-empowered teachers at selected Basic Education High Schools in Sagaing Township.

- Finally, the teachers were empowered by their principals' use of rational decision making styles and dependent decision making styles.

According to the results of both quantitative and qualitative findings, it was found that the teachers perceived that their principals most highly practiced rational decision making styles. It was also found that teacher at selected Basic Education High Schools in Sagaing Township were highly empowered. Finally, it was found that the teachers were empowered by their principals' use of rational decision making styles and dependent decision making styles.

Conclusion and Discussion

According to both quantitative and qualitative findings, it was found that teachers from selected Basic Education High Schools in Sagaing Township perceived that their principals mostly practiced "rational" decision making styles. It can be interpreted that the principals made decisions based on rules and regulations, in logical and systematic ways, and by thinking carefully various options for school improvement. According to Koutouzis and Malliara (2017), if the principals use rational decision making styles, teacher job performance can increase. Therefore, it can be concluded that if the principals make decisions based on rational reasons, school achievement can be increased.

In addition, it was found that teachers from selected Basic Education High Schools in Sagaing Township had high empowerment levels ($\overline{X}$=3.78). It can be interpreted that teachers from selected Basic Education High Schools in Sagaing Township had a high empowerment level to perform their teaching tasks and school activities. According to Short (1994), empowered teachers are highly competent, work in schools that provide opportunities to show competence. It can be concluded that if the principals try their best to increase teacher empowerment, teachers can work more effectively to increase school achievement.

Furthermore, it was found that there was a significant and positive relationship between principals' "rational" decision making styles and "teacher empowerment" (r= .473, p<0.01). It can be concluded that when the principals make decisions by thinking carefully and in a logical and systematic way, the teachers are empowered and take more responsibility and be more loyal to the organizations. According to Koutouzis and Malliara (2017), if the principals use rational decision making style, teacher's job satisfaction and job performance can increase. Therefore, it could be suggested that principals should make decisions based on rational reasons with equity in order to increase teacher empowerment, which can directly or indirectly increase school achievement.

Finally, it was found that there was a significant and positive relationship between principals' "dependent" decision making styles and "teacher empowerment" (r= .386, p<0.01). It can be concluded that when the principals make decisions by discussing with all teachers and accept their advice from meetings, the teachers feel involved in decision making processes of school and then they feel empowered. According to Koutouzis and Malliara (2017), principals' dependent decision making style can increase teacher job satisfaction. Therefore, it could be suggested that principals should discuss with other teachers, deans, school committees in making decisions so that all teachers can involve and feel empowered.

The results of this study pointed out that teachers in Sagaing Township were empowered by their principals' rational decision making styles and dependent decision making styles. According to Allwood and Salo (2012), rational decision making style is the most constructive, associated with better outcomes and an efficient decision making style. Therefore, it could be suggested that principals should make decisions in a logical and systematic way by discussing with teachers in order to increase teacher empowerment.

Recommendations for further research

Based on the research findings, the recommendations are as follows:

- Further studies are needed to be expanded principals' decision making styles, teacher empowerment and their relationship to school achievement.
- This study was conducted based on teachers' perceptions about principals' decision making styles and teacher empowerment. Therefore, further studies are needed to gather the data from other sources such as the principals, colleagues and students.
- In this research, questionnaires were used to obtain the quantitative data and interview was conducted to gain the detailed information about principals' decision making styles and teacher empowerment. Therefore, observations should also be conducted in further research.

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RELATIONSHIPS AMONG ADMINISTRATIVE BEHAVIOUR OF PRINCIPALS, WORK MOTIVATION AND ORGANIZATIONAL COMMITMENT OF TEACHERS

Saw Khun Aung[1] and Zin Nwe Than[2]

Abstract

The purpose of this study is to investigate relationships among administrative behaviour of principals, work motivation and organizational commitment of teachers at selected Basic Education High Schools in Mogaung Township. Quantitative research methods were applied to collect required data. The sample for quantitative study was selected through purposive sampling which included 243 teachers from 6 selected Basic Education High Schools in Mogaung Township. This quantitative study was conducted by using three instruments: "*Administrative Behaviour Scale*" to assess the perceptions of teachers on their principals' administrative behaviour, "*Work Motivation Scale*" to find out the perceptions of teachers on their work motivation, "*TCM Employee Commitment Survey*" to evaluate the perceptions of teachers on their organizational commitment. Data were computed by utilizing descriptive statistics and Pearson product-moment correlation analyses through SPSS software. According to the result of this study, teachers perceived that there were high levels of administrative behaviour of their principals, their work motivation and organizational commitment at selected high schools in Mogaung. Moreover, administrative behaviour of principals was positively and moderately correlated with organizational commitment of teachers ($r=0.629$, $p<0.01$). Moreover, a positive and high correlation was found between work motivation and organizational commitment of teachers ($r=0.790$, $p<0.01$). Again, administrative behaviour of principals was significantly and highly correlated with work motivation of teachers ($r=0.726$, $p<0.01$). Therefore, it can be concluded that if the level of administrative behaviour of principals was high, the work motivation of teachers will also be high and thereby leading greater organizational commitment of teachers.

Keywords: Administrative Behaviour of Principal, Work Motivation, Organizational Commitment

Introduction

A principal holds a key position in the administration of school. When the principal plans, organizes, communicates and takes decisions in order to achieve the goals of school, these specific behaviours of planning, organizing, communication and decision making become his administrative behaviour. Moreover, Ajay (2002, as cited in Arya, 2015) found that administrative behaviour of principal, which can impact performance of the students, play a central role in effective school. Thus, the administrative behaviour of a principal is an inspiring force that creates healthy climate, high morale, motivation and commitment in the institution (Rangan, 2007).

Similarly, Teachers need to be motivated first to improve their performance to ensure that their goals are carried out efficiently (Erdener & Dalkiran, 2017). Moreover, Sahertian (2000, as cited in Mustafa & Othman, 2010) asserted that teacher's seriousness in teaching depends on teacher work motivation and professional competencies. In addition, Motivation among teachers is an essential factor for improving the effectiveness and achievements in the classroom and at school (Ololube, 2006, as cited in Accariya & Khalil, 2016). Moreover, one of the key factors that influence the organizational commitment is the motivation related to the commitment formation (Steer & Porters, 1990, as cited in Tentama & Pranungsari, 2016).

Moreover, the study of commitment to the organization is important because organizational commitment can influence employees' creativity, innovativeness, adaptation, and reduces

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withdrawal behaviors. When teachers' commitment is high, educational institutions benefit in many ways (Das, 2017). Since teaching is a demanding profession, commitment and perseverance have been identified as critical factors for the success of educational institutions. In particular, a teacher's commitment is deemed instrumental in reaching out to this degree of success (Hueberman, 1993, as cited in Mohan & Kaur, 2014).

Therefore, this study explores the relationships among administrative behaviour of principals, work motivation of teachers and their organizational commitment at selected Basic Education High Schools in Mogaung Township. This study might provide insights into approaches which can support organizational commitment of the teachers by developing effective administrative behaviour of principals and work motivation of teachers. In such a way, exploring the relationships among administrative behaviour of principals, work motivation and organizational commitment of teachers is necessary and it is important for principals, teachers and education.

Purpose of the Study

The main purpose of this study is to explore relationships among administrative behaviour of principals, work motivation and organizational commitment of teachers.

The specific purposes of this study are:

(1) To investigate perceptions of teachers on administrative behaviour of their principals,

(2) To explore perceptions of teachers on their work motivation,

(3) To determine perceptions of teachers on their organizational commitment,

(4) To examine the relationship between administrative behaviour of principals and organizational commitment of teachers,

(5) To study the relationship between work motivation of teachers and their organizational commitment, and

(6) To investigate the relationship between administrative behaviour of principals and work motivation of teachers.

Research Questions

The following research questions guide the direction of the study.

1. How do teachers perceive administrative behaviour of their principals at selected Basic Education High Schools in Mogaung Township?

2. How do teachers perceive their work motivation at selected Basic Education High Schools in Mogaung Township?

3. How do teachers perceive their organizational commitment at selected Basic Education High Schools in Mogaung Township?

4. Is there any relationship between administrative behaviour of principals and organizational commitment of teachers at selected Basic Education High Schools in Mogaung Township?

5. What is the relationship between work motivation of teachers and their organizational commitment at selected Basic Education High Schools in Mogaung Township?

6. What is the relationship between administrative behaviour of principals and work motivation of teachers at selected Basic Education High Schools in Mogaung Township?

Scope of the Study

1. The scope of this study is limited to Basic Education High Schools in Mogaung Township.

2. The sample schools are limited to the schools in which the principals have at least one year of administrative service at the current schools.

3. The findings of the study may not be generalized to any group other than high schools in Mogaung Township.

Definitions of Key Terms

For the purpose of clarity, this study utilizes following operational definitions.

Administrative Behaviour is considered as the 'on-the-job' behaviour of a school principal (Taj, 2002, as cited in Parkash & Hooda, 2018). In this study, administrative behaviour of principals includes planning, organization, communication and decision making.

(i) **Planning** generally means working out a detailed outline of the activities to be undertaken for the achievement of the goals of schools, of the method to be employed of participating teachers and accessories (Shaikh, 2016).

(ii) **Organization** concerns the relationship between principals and teachers with respect to the delegation of responsibilities and authorities (Shaikh, 2016).

(iii) **Communication** refers to the extent of freedom of flow of dynamic communication among principal, teachers, students, higher authorities and communities (Taj, 2002, as cited in Parkash & Hooda, 2018).

(iv) **Decision Making** is the core activity that a school performs to carry out the administrative process in order to accomplish action (Taj, 2002, as cited in Parkash & Hooda, 2018).

Work Motivation is the process that arouses, energizes, directs, and sustains behavior and performance among teachers (Slocum, & Hellriegel, 2009 as cited in Ogonda, Orwa, Peter & Jedida, 2015). In this study, work motivation includes job security, flexibility in job, social climate, extrinsic motivation and intrinsic motivation.

(i) **Job Security** is the objective sign of presence or absence of such factors as tenure and assurance of or threats to continued employment (Silver, 1983).

(ii) **Flexibility in Job** can be defined as a state of equilibrium achieved between working priorities and private/personal lifestyle of teachers (Shaikh, 2016).

(iii) **Social Climate** is social interaction among the colleagues (Shaikh, 2016).

(iv) **Extrinsic Motivation** is called tangible benefits related to job such as salary, fringe benefits and job security (Latham, 1998, as cited in Shaikh, 2016).

(v) **Intrinsic Motivation** refers to self-respect of accomplishment and personal growth of teachers (Ellis, 1984, as cited in Shaikh, 2016).

Organizational Commitment is a psychological state among teachers exhibiting a positive disposition and loyalty to the school (Meyer & Allen, 1990, as cited in Jackson, 2018). In this study, organizational commitment includes affective commitment, continuance commitment and normative commitment.

(i) **Affective Commitment** is the teacher's emotional attachment to, identification with, and involvement in the school (Meyer & Allen 1990, as cited in Pachua, 2018).

(ii) Continuance Commitment is awareness of the costs associated with leaving the school (Meyer & Allen, 1990, as cited in Patil, 2016).

(iii) Normative Commitment is a feeling of obligation to continue employment in school (Meyer & Allen, 1990, as cited in Patil, 2016).

Review of Related Literature

Administrative Behaviour

The concept of the "behaviour of the administrator" was introduced by Simon (1947, as cited in Rajeevalochana, 1981). According to him, administrative behaviour is defined as an organized system where the administrator maintains a relationship from lower to higher strata of the organization. Kakati (2017) also stated that administrative behaviour is one of the important factors for administrative success because it affects the behaviour of the other persons of the institution.

The school principal is the head of the masters or teachers in a particular school. He holds the key position and plans, coordinates and organizes various programs (Deodas, 2016). As a leader of the school, it is the behaviour of principal that improves or affects the quality of work that goes on in the school. Proper administrative behaviour of the principal will improve the teaching learning situation, team spirit, mutual respect and cooperation in the institution. The success of a school, therefore, depends upon the administrative behaviour of the principal (Kakati, 2017). Aspects of administrative behaviour have been grouped under four components by Taj (1998, as cited in Deodas, 2016): Planning, Organization, Communication and Decision Making.

Planning is the working out in broad outlines the things that need to be done and the method for doing them to accomplish the purpose set for the enterprise (Gullick, 1974, as cited in Thirunavukkarasu, 2000). Planning is the first step in any academic and administrative assignment. The principal has to plan all kinds of his activities in time for implementing various programs with success (Riti, 2010). According to Kakati (2017), during planning principal should seek cooperation of his staff. Planning area includes the items pertaining to the activities in the school which are decided in advance before the commencement of the academic year (Parkash & Hooda, 2018).

The next important task of the principal is organization. The principal can shape organizations to become better equipped in attaining their objectives in an effective way. This area includes the functions pertaining to how the principal distributes the work to be carried out by different staff members for the academic year and how he fixes up the responsibilities of each staff member (Riti, 2010). According to Deodas (2016), the school principal's organizing duties consist of the following tasks: organization of school plant, organization of the instructional work, organizing activities and organization of office work.

Communication, the lifeblood of every school or every organization, is the process that links the individual, the group and organization (Keyton, 2011 as cited in Lunenburg & Ornstein, 2012). In a school, communication means the direction, information, ideas, explanation and questions which are transmitted from principal to staff, staff to principal or staff to staff. Effective communication is important for good academic ambiance of the school. The principal should inform his ideas or planning to his staff time to time. He should organize meeting of various cells to exchange ideas and views on a particular matter. In addition, the principal should held meeting with different stakeholders of the school to get the feedback of the school (Kakati, 2017).

Decision making, universally defined as the process of choosing from among alternatives, is important to an understanding of educational administration (Lunenburg & Ornstein, 2012).

Similarly, all school activities from the beginning of the session to the end are important issues of decision-making. Before taking a decision the principal should consult the matter with his staff. This area is concerned with the decision making process of school heads, that is, the quickness and speediness of the decisions based on certain facts, experiences and rationality, etc. (Riti, 2010). In addition, the school principals have to select the best alternatives at the right time (Deodas, 2016).

Work Motivation

The relationship between a person and his or her work is a basic element of social life (Gehlawat, 2012). Work motivation is the process that arouses, energizes, directs, and sustains behavior and performance among employees (Slocum & Hellriegel, 2009 as cited in Ogonda *et al.*, 2015). Accordingly, Jennifer Vanbaren (2010, as cited in Gehlawat, 2012), work motivation is a process used to encourage and inspire workers to perform their jobs thoroughly and well.

The educational organizations and school systems should have great attention in motivating teachers for a better performance and in achieving the expected educational goals and objectives for the future development of the country (Demeke*et al*., 2014, as cited in Ushuri, 2016). Work Motivation among teachers is an essential factor for improving the effectiveness and achievements in the classroom and at school (Ololube, 2006, as cited in Accariya & Khalil, 2016). Furthermore, teacher work motivation has been found to be correlated with high performing students (Michael Owa, 2002 as cited in Ushuri, 2016). Work motivation consists of five components: job security, flexibility in job, social climate, intrinsic motivation and extrinsic motivation (Shaikh, 2016).

Job security is one's expectation about continuity in job situation. Job security is the objective sign of presence or absence of such factors as tenure and assurance of or threats to continued employment (Silver, 1983). It has to do with employee feeling over loss of job or loss of desirable job feature such as current working conditions. Therefore, job security is an important factor in employee commitment (Abdullah & Ramay, 2012 as cited in Dhuryana & Hussain, 2018).

Flexibility in job can be defined as a state of equilibrium achieved between working priorities and private/personal lifestyle. In effect, workers should be able to enjoy their personal time outside of the working environment without guilt or worry about work all the time (Shaikh, 2016).

Social climate is social interaction among the colleagues. When people work in a supportive environment, they strive to produce results. Such an environment is called a positive social climate. Social interaction among colleagues may be beneficial in several ways. They promote better working relationships, which in the longer term may improve the quality of work (Shaikh, 2016).

Tangible benefits related to job such as salary, fringe benefits and job security are known as extrinsic motivation or called extrinsic rewards (Latham, 1998, as cited in Shaikh, 2016). It concerns factors outside one's job. Extrinsic factors reflect outcomes generated by performing the job and are concerned with the context or environment in which the job has to be performed (Furnham, 2005, as cited in Ushuri, 2016). That is, the behaviour is not performed for its own sake, but instead to receive a reward or to avoid some punishment once the behaviour has ended (Pelletier et al., 1997, as cited in Demir, 2011).

Intrinsic work motivation is the motivation to perform an activity in order to experience the pleasure and satisfaction inherent in the activity (Slocum & Hellriegel, 2009, as cited in Ogonda *et al.*, 2015). It is concerned with self-generation factors that influence an individual to behave in a particular way (Armstrong, 2007, as cited in Ushuri, 2016). According to Ellis (1984, as cited in Shaikh, 2016), intrinsic motivation is self-respect of accomplishment and personal growth. That is, the emotional and personal benefits of the job itself are known as intrinsic rewards.

Organizational Commitment

Organizational commitment reflects the strength of the bond which employees feel towards their organizations (Dogan & Kilic, 2008, as cited in Patil, 2016). Thus, Organizational commitment is a psychological state that characterizes the employee's relationship with the organization with its implications for the decision to continue membership in the organization (Meyer & Allen, 1990 as cited in Manocha, 2016).

Similarly, committed teachers also have strong psychological attachment to their institutions, students and subject areas (Das, 2017). Therefore, teachers with high levels of commitment work harder, demonstrate stronger affiliation to their schools, and show more desire to carry out the goals of teaching than teachers with low levels of commitment (Celep, 2000, as cited in Manocha, 2016). Therefore, it can be said that educational organizations such as schools, colleges and universities require individuals who are committed to their profession and the well-being of students (Das, 2017).

In the present investigation, the three dimensional model of organizational commitment by Meyer and Allen (1990, as cited in Manocha, 2016) has been used. The first dimension of organizational commitment is affective commitment, which represents the individual's emotional attachment to the organization. According to Meyer and Allen (1990, as cited in Pachua, 2018) affective commitment is "the employee's emotional attachment to, identification with, and involvement in the organization". Organizational members, who are committed to an organization on an affective basis, continue working for the organization because they want to (Beck & Wilson, 2000 as cited in Misra, 2013). The strength of affective organizational commitment is influenced by the extent to which the individual's needs and expectations about the organization are matched by their actual experiences (Storey, 1995as cited in Pachua, 2018).

The second dimension of organizational commitment is continuance commitment. Meyer and Allen (1990, as cited in Patil, 2016) defined continuance commitment as "awareness of the costs associated with leaving the organization". It is calculative in nature because of the individual's perception or weighing of costs and risks associated with leaving the current organization (Meyer & Allen, 1990, as cited in Misra, 2013). Meyer and Allen (1990, as cited in Misra, 2013) further stated that "employees whose primary link to the organization is based on continuance commitment remain because they need to do so". The strength of continuance commitment, which implies the need to stay, is determined by the perceived costs of leaving the organization (Meyer & Allen, 1984, as cited in Pachua, 2018).

The last dimension of the organizational commitment is normative commitment. Meyer and Allen (1990, as cited in Patil, 2016) defined normative commitment as "a feeling of obligation to continue employment". Internalized normative beliefs of duty and obligation make individuals obliged to sustain membership in the organization. In terms of the normative dimension, the employees stay because they should do so or it is the proper thing to do. The strength of normative organizational commitment is influenced by accepted rules about reciprocal obligation between the organization and its members (Suliman& Lies, 2000, as cited in Pachua, 2018).

Methodology

Quantitative Method

Quantitative research method was utilized to find out the relationships among perceptions of teachers on administrative behaviour of principals, work motivation and organizational commitment of teachers.

Population and Sample

There are 9 Basic Education High Schools in Mogaung Township. Among them, 6 Basic Education High Schools were selected based on the criterion that the principal had been at least one complete year at the current school. Although there are 260 teachers (senior, junior and primary teachers) in six selected Basic Education High Schools in Mogaung Township, only 243 teachers participated in the study. For Pilot test, the preliminary instruments were field tested by 104 teachers in 2 selected high schools in Mohnyin Township.

Research Instruments

"Questionnaire for Teachers" was mainly used in this study for quantitative data. "Questionnaire for Teachers" included three questionnaires: *"Administrative Behavior Scale"* which consisted of 50 items and developed by Taj (2002, as cited in Shaik, 2016), *"Work Motivation Questionnaire"* which comprised of 30 items and developed by Shaikh (2016) and *"TCM Employee Commitment Survey"* which contained 24 items and developed by Meyer and Allen (1990, as cited in Kant & Rangannavar, 2013). Cronbach's alpha reliability coefficient of *"Administrative Behaviour Scale", "Work Motivation Scale"* and *"TCM Employee Commitment Survey"* were 0.943, 0.850 and 0.787 respectively. All the questionnaires used 5-point Likert scale including "(1) strongly disagree", "(2) disagree", "(3) undecided", "(4) agree", and "(5) strongly agree".

Preliminary Review and Data Collection Procedure

Before the survey questions were sent to the sample population, they were reviewed and revised by supervisor who was qualified for the doctorate in Educational Administration and panel of eight experts who are well-experienced in Educational Administration and Leadership. After getting the validation, a pilot test was conducted at two selected high schools in Mohnyin Township and questionnaires were collected after five days later. Based on these findings, the questionnaires were modified again under the guidance of supervisor. Then, questionnaire were distributed to teachers at selected Basic Education High Schools in Mogaung Township at the end of the November and collected in December. Collected data were finally analyzed by computing descriptive statistics and Pearson product-moment correlation analyses.

Findings

The purpose of this study was to explore the relationships among administrative behaviour of principals, work motivation and organizational commitment of teachers at selected Basic Education High Schools in Mogaung Township.

Quantitative Research Findings

Principals' Administrative Behaviour Perceived by Teachers in Selected High Schools

Table 1 presents the mean values and standard deviations of principals' administrative behaviour perceived by teachers at selected high schools in Mogaung Township. According to statistical information given in Table 1, the mean values for all dimensions of principals' administrative behaviour, such as "planning", "organization", "communication" and "decision making", were at high levels in all six selected high schools. Similarly, the mean values for "overall principals' administrative behaviour" of all six selected high schools were also at high levels based on teachers' ratings.

Among selected high schools, the mean values of all dimensions for principal's administrative behavior perceived by teachers from S5 were the highest and those of principal's administrative

behavior perceived by teachers from S2 were the lowest. In addition, "communication" dimension had the highest mean value (4.01), followed, in descending order, by "organization" (4.00), "planning" (3.97) and then "decision making" (3.94).

Table 1   Mean Values and Standard Deviations of Principals' Administrative Behaviour Perceived by Teachers in Selected High Schools (N=243)

Dimensions	High Schools						Composite Means
	S1	S2	S3	S4	S5	S6	
Planning	3.98 (.275)	3.91 (.236)	3.97 (.274)	3.95 (.222)	4.05 (.159)	4.03 (.185)	**3.97 (.236)**
Organization	4.00 (.328)	3.96 (.165)	3.99 (.261)	4.00 (.205)	4.07 (.172)	4.04 (.219)	**4.00 (.228)**
Communication	4.03 (.246)	3.94 (.243)	4.01 (.219)	4.01 (.157)	4.07 (.151)	4.06 (.159)	**4.01 (.213)**
Decision Making	3.91 (.314)	3.84 (.303)	3.99 (.212)	3.96 (.212)	4.04 (.151)	4.04 (.112)	**3.94 (.257)**
Overall Principals' Administrative Behaviour	**3.99** (.264)	**3.92** (.214)	**3.99** (.229)	**3.99** (.172)	**4.06** (.143)	**4.04** (.164)	**3.98** (.211)C

Note: 1.00-2.33=low level,   2.34-3.67=moderate level,   3.68-5.00=high level

Teachers' Work Motivation Perceived by Teachers in Selected High Schools

Table 2 shows the mean values and standard deviations for each dimension of work motivation and "overall work motivation".

Table 2   Mean Values and Standard Deviations of Teachers' Work Motivation Perceived by Teachers in Selected High Schools (N=243)

Dimensions	High Schools						Composite Means
	S1	S2	S3	S4	S5	S6	
Job Security	3.85 (.328)	3.98 (.391)	3.91 (.399)	4.00 (.219)	4.10 (.216)	4.22 (.152)	**3.99 (.295)**
Flexibility in Job	3.95 (.272)	3.96 (.209)	3.85 (.214)	4.05 (.244)	4.13 (.160)	4.25 (.245)	**4.00 (.249)**
Social Climate	4.00 (.311)	3.98 (.243)	3.92 (.232)	4.07 (.237)	4.11 (.164)	4.25 (.256)	**4.03 (.259)**
Extrinsic Motivation	3.80 (.362)	3.87 (.251)	3.73 (.364)	3.86 (.244)	4.08 (.152)	4.12 (.205)	**3.89 (.303)**
Intrinsic Motivation	4.02 (.192)	3.99 (.264)	3.88 (.310)	4.01 (.182)	4.11 (.188)	4.17 (.201)	**4.01 (.247)**
Overall Work Motivation	**3.92** (.220)	**3.96** (.195)	**3.86** (.200)	**4.00** (.161)	**4.10** (.142)	**4.20** (.194)	**3.98** (.212)

Note: 1.00-2.33=low level,   2.34-3.67=moderate level,   3.68-5.00=high level

According to statistical information shown in Table 2, the mean values for all dimensions of work motivation, such as "job security", "flexibility in job", "social climate", "extrinsic

motivation" and "intrinsic motivation" perceived by teachers in all six selected high schools were at high levels. Accordingly, the mean values for "overall work motivation" perceived by teachers from six selected schools were also at the high levels.

Among selected high schools, the mean value for "job security" dimension perceived by teachers from S5 was the highest and the mean value for "job security" dimension perceived by teachers from S1 was the lowest. On the other hand, the mean values for four dimensions such as "flexibility in job", "social climate", "extrinsic motivation" and "intrinsic motivation" perceived by teachers from S6 were the highest and those of S3 were the lowest. Similarly, when studying the mean values for "overall work motivation" of selected high schools, S6 was the highest (4.20) and S3 was the lowest (3.86) among selected high schools.

Teachers' Organizational Commitment Perceived by Teachers themselves in Selected High Schools

Mean values and standard deviations for dimensions of organizational commitment perceived by teachers at selected high schools in Mogaung Township are presented in Table3.

Table 3   Mean Values and Standard Deviations of Organizational Commitment Perceived by Teachers in Selected High Schools (N=243)

Dimensions	High Schools						Composite Means
	S1	S2	S3	S4	S5	S6	
Affective Commitment	3.91 (.249)	3.95 (.248)	3.77 (.375)	4.00 (.200)	4.16 (.166)	4.11 (.104)	**3.97 (.274)**
Continuance Commitment	3.77 (.239)	3.85 (.198)	3.71 (.281)	3.89 (.198)	4.01 (.101)	4.08 (.156)	**3.86 (.234)**
Normative Commitment	3.93 (.284)	3.93 (.205)	3.74 (.255)	3.92 (.201)	4.07 (.125)	4.08 (.179)	**3.93 (.238)**
Overall Organizational Commitment	3.87 (.198)	3.91 (.179)	3.74 (.198)	3.93 (.143)	4.08 (.101)	4.09 (.109)	**3.92 (.198)**

 Note: 1.00-2.33=low level,   2.34-3.67=moderate level,   3.68-5.00=high level

According to Table 3, the mean values for three dimensions of organizational commitment, such as "affective commitment", "continuance commitment", and "normative commitment", were at high levels in six selected high schools. Similarly, the mean values for "overall organizational commitment" of all selected high schools were also at high levels based on the ratings of teachers.

When analyzing the mean values of three dimensions of organizational commitment perceived by teachers among selected high schools, the mean value for "affective commitment" perceived by teachers from S5 was the highest but the mean value for "affective commitment" perceived by teachers from S3 was the lowest. On the other hand, the highest mean values for two dimensions of organizational commitment, namely, "continuance commitment" and "normative commitment", were found in S6 and the lowest mean values for those dimensions were found in S3. Again, when studying the mean values for "overall organizational commitment" of selected high schools, S6 was the highest (4.09) and S3 was the lowest (3.74) among selected high schools.

Relationships among Perceptions of Teachers on Principals' Administrative Behaviour, Work Motivation and Organizational Commitment of Teachers

The Pearson product-moment correlation was utilized to find out the relationships among principals' administrative behaviour, work motivation and organizational commitment of teachers. Table 4 displays the correlation between perceptions of teachers on principals' administrative behaviour and organizational commitment at all selected high schools in Mogaung Township.

Table 4 Correlation between Perceptions of Teachers on Principals' Administrative Behaviour and their Organizational Commitment

Variables	Affective Commitment	Continuance Commitment	Normative Commitment	Organizational Commitment
Planning	.534**	.387**	.482**	.592**
Organization	.564**	.339**	.481**	.587**
Communication	.555**	.320**	.464**	.568**
Decision Making	.523**	.333**	.423**	.542**
Administrative Behaviour	.598**	.378**	.509**	**.629****

**Correlation is significant at the 0.01 level (2-tailed)

Based on findings of Table 4, it was found that four dimensions of the administrative behaviour of principals, such as "planning", "organization", "communication" and "decision making" were positively and significantly correlated with three dimensions of organizational commitment, such as "affective commitment", "continuance commitment" and "normative commitment". In the same way, there was a statistically positive and moderate correlation between "overall administrative behaviour" and "overall organizational commitment" ($r=0.629$, $p<0.01$). Therefore, it can be interpreted that if the level of principals' administrative behaviour is high, the level of organizational commitment of teachers will also be high.

Table 5 Correlation between Perceptions of Teachers on their Work Motivation and Organizational Commitment

Variables	Affective Commitment	Continuance Commitment	Normative Commitment	Organizational Commitment
Job Security	509**	.511**	.492**	.534**
Flexibility in Job	.473**	.372**	.485**	.559**
Social Climate	.556**	.400**	.622**	.664**
Extrinsic Motivation	.536**	.448**	.441**	. .601**
Intrinsic Motivation	.580**	.367**	.541**	.629**
Work Motivation	.679**	.542**	.657**	**.790****

**Correlation is significant at the 0.01 level (2-tailed)

Table 5 displays the correlation between perceptions of teachers on their work motivation and organizational commitment in selected Basic Education High Schools in Mogaung Township. When studying the relationship between work motivation and organizational commitment of teachers in selected high schools, it was found that all dimensions of the work motivation, such as "job security", "flexibility in job", "social climate", "extrinsic motivation" and "intrinsic motivation" were positively and moderately correlated with all dimensions of organizational commitment, such as "affective commitment", "continuance commitment" and "normative commitment". Moreover, it was also found that there was a statistically significant and high

relationship between "overall work motivation" and "overall organizational commitment" (*r*=0.790, *p*<0.01) in selected high schools. It can be interpreted that if the level of work motivation increases, the level of organizational commitment of teachers will also be increased.

Table 6   Correlation between Principals' Administrative Behaviour and Teachers' Work Motivation

Variables	Planning	Organi-zation	Communi-cation	Decision Making	**Administrative Behaviour**
Job Security	.538**	.533**	.527**	.549**	.588**
Flexibility in Job	.391**	.460**	.458**	.389**	.468**
Social Climate	.556**	.548**	.552**	.471**	.585**
Extrinsic Motivation	.615**	.558**	.532**	.486**	.602**
Intrinsic Motivation	.562**	.518**	.568**	.469**	.582**
Work Motivation	.686**	.672**	.675**	.609**	**.726****

**Correlation is significant at the 0.01 level (2-tailed)

Table 6 displays the correlation between principals' administrative behaviour and teachers' work motivation in all selected high schools. Based on findings, all dimensions of administrative behaviour, such as "planning", "organization", "communication" and "decision making" and all dimensions of work motivation, such as "job security", "flexibility in job", "social climate", "extrinsic motivation" and "intrinsic motivation", were positively and significantly correlated with each other. In addition, it was found that there was a positive and high correlation between "overall principal's administrative behaviour" and "overall work motivation" (*r*=0.726, *p*<0.01). Therefore, it can be interpreted that if the level of principals' administrative behavior is high, the level of teachers' work motivation will also be high.

Discussion and Conclusion

This study highlights to explore the relationships among administrative behaviour of principals, work motivation and organizational commitment of teachers at selected Basic Education High Schools in Mogaung Township.

Research question one investigated the perceptions of teachers on administrative behaviour of their principals at selected Basic Education High Schools in Mogaung Township. According to the ratings of teachers, it was found that principals from selected Basic Education High Schools in Mogaung Township had high levels of administrative practices in "planning", "organization", "communication" and "decision making". Similarly, mean values for "overall administrative behaviour" of selected principals were at high levels in all selected Basic Education High Schools. Therefore, it was found that principals in selected high schools in Mogaung Township planned school activities in advance and delegated school tasks and instructional tasks to teachers. Moreover, they gave teachers important information and made collaboration with experienced teachers and school committees when making decisions.

Research question two was to explore the perceptions of teachers on their work motivation at selected Basic Education High Schools in Mogaung Township. According to teachers' self-ratings, teachers from selected Basic Education High Schools in Mogaung Township had high levels of work motivation in "job security", "flexibility in job", "social climate", "extrinsic motivation" and "intrinsic motivation". Similarly, the mean values of "overall work motivation" of teachers indicated that they had high levels of work motivation in their schools. Therefore, it was found that

teachers from selected high schools in Moguang Township had no difficulties in performing school tasks and instructional tasks. They enjoyed their teaching in their schools. Moreover, their principals and colleagues treat them like family members. Moreover, their efforts were recognized and appreciated by their principals and colleagues.

Research question three examined organizational commitment perceived by teachers in selected Basic Education High Schools in Mogaung Township. According to perceptions of teachers' ratings, it was found that teachers from selected high schools in Mogaung Township had high levels of "affective commitment", "continuance commitment" and "normative commitment". Similarly, the mean values of "overall organizational commitment" of teachers indicated that they had high levels of organizational commitment. Therefore, teachers in selected high schools in Moguang Township loved their schools and assumed that their school problems were their own problems. Moreover, the majority of teachers wanted to stay in their current schools.

Research question four explored the relationship between perceptions of teachers on their principals' administrative behaviour and their organizational commitment at selected Basic Education High Schools in Mogaung Township. According to the perceptions of teachers, "administrative behaviour of principals" was positively and moderately correlated with "organizational commitment of teachers". Thus, if the principals correctly practice administrative behavior such as planning, organizing, communicating and decision making in their schools, the teachers will have "affective commitment", "continuance commitment" and "normative commitment" to their schools.

Research Question five analyzed whether there is a relationship between perceptions of teachers on their work motivation and organizational commitment at selected Basic Education High Schools in Mogaung Township. Based on research findings, there was a positive and high correlation between "work motivation" of teachers and "organizational commitment" of teachers. Therefore, it can be concluded that if teachers receive adequate "job security", "flexibility in job", "social climate", "extrinsic motivation" and "intrinsic motivation", they will more commit to their teaching profession and schools.

Research question six examined the relationship between perceptions of teachers on administrative behaivour of principals and their organizational commitment at selected high schools in Mogaung Township. The results of study demonstrated that there was a positive and high relationship between "principals' administrative behavior" and "work motivation of teachers". Therefore, it can be stated that the principals systematically practice administrative behavior such as "planning", "organization", "communication" and "decision making" in their schools, work motivation of teachers such as "job security", "flexibility in job", "social climate", "extrinsic motivation" and "intrinsic motivation" were also be high.

Based on the findings of this study, the researcher wants to offer some suggestions for principals and teachers from high schools in Mogaung Township. First of all, when analyzing teachers' perceptions on mean values of administrative behaviour of principals at selected high schools in Mogaung Township, all dimensions of administrative behavior were at high levels. However, selected principals more practiced "organization" and "communication" than "planning" and "decision making" in their schools. Therefore, principals from high schools in Mogaung Township should equally and effectively employ four administrative functions to improve their schools.

Accordingly, based on the findings of work motivation perceived by teachers in selected Basic Education High Schools in Mogaung Township, all dimensions of work motivation, were at high levels in selected high schools. However, it was found that "extrinsic motivation" was the weakest dimension for teachers among all dimensions of work motivation. Hence, high schools in

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Mogaung Township should have a system of rewards to encourage good behavior of teachers. Principals from high schools in Mogaung Township should motivate teachers to work hard by using a combination of intrinsic and extrinsic factors.

On the other hand, when exploring the mean values of organizational commitment perceived by teachers at selected high schools in Mogaung Township, all dimensions of organizational commitment were at high levels. However, it was found that "continuance commitment" was the lowest among the dimensions. Therefore, the principals of high schools in Mogaung Township need to utilize effective strategies for teachers in order to stay in their current schools. For examples, principals provide teachers with necessary materials and facilities, treat teachers as one of their families, respect teachers' views and help teachers when they encounter difficulties.

All in all, the principals should carry out four administrative practices, namely, as "planning", "organization", "communication" and "decision making" in their schools. In addition, they should also emphasize the importance of work motivation. If they do so, consequently, organizational commitment of the teachers will be increased to a certain level. Therefore, it can be generalized that the more principals practice administrative behavior highly, the more organizational commitment of teachers will also be high. Similarly, the more work motivation of teacher is increased, the more organizational commitment of teachers will also be increased.

Recommendations for Further Research

This section presents recommendations for further study. This study explores the relationship among principals' administrative behaviour, work motivation and organizational commitment of teachers in Mogaung Township. Based on research findings, the recommendations are as follows:

- This research was limited to Basic Education High Schools in Mogaung Township in Kachin State. Therefore, a replication of this study should be conducted in other Townships, States and Divisions.

- A comparative research should be conducted in high schools, middle schools and primary schools regarding those variables to determine the similarities and differences among different school levels.

- Again, this study was mainly based on teachers' perceptions. Therefore, further studies should be conducted by using the ratings of students, principals and superiors.

- Moreover, large population should be used as it can ensure for a better generalization of data. Expanding the sample population can provide a greater insight into the perception of three variables.

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A STUDY OF TEACHERS' KNOWLEDGE AND APPLICATION TOWARDS CIVIL SERVICE ETHICS AND DISCIPLINE FOR TEACHERS

Ghon Yee Win[1] and Zin Nwe Than[2]

Abstract

Teachers with civil service status should know and apply civil service ethics and discipline for teachers in day-to-day dealings because they are the makers of history who prepare the future disciplined citizens of a country. This research study explored knowledge and application of teachers towards civil service ethics and discipline for teachers in Basic Education High Schools, Sagaing Township. Purposive sampling method was used to select 335 teachers from 10 Basic Education High Schools in Sagaing Township as sample of the study. Quantitative research method was used in this study. The questionnaire for knowledge and application towards civil service ethics and discipline for teachers developed by the researcher was used for data collection. The generated data was analyzed using Item Percent Correct (IPC), Descriptive statistics, One-way ANOVA and Tukey HSD test. The results of the study revealed that the levels of teachers' knowledge towards civil service ethics and discipline for teachers were found to be at satisfactory and above satisfactory. The teachers always applied civil service ethics and discipline for teachers (Mean= 4.60, SD= 0.43). There was statistically significant difference in knowledge of teachers according to schools. Similarly, significant difference was found in teachers' application according to schools. Based on the findings, it can be concluded that teachers apply civil service ethics and discipline for teachers according to their knowledge levels. Thus, teachers' attitude towards civil service ethics and discipline for teachers should be analyzed in further research.

Keywords: civil service, ethics, discipline

Introduction

Schools are vital places to shape the mental horizons of new generations, to convey both wide and deep knowledge, to foster values that produce healthy and stable societies, and to promote solidarity and avoid rivalry and hatred. Hence, teachers carry an enormous responsibility in their daily practice (Stromquist, 2018). Teachers are responsible to produce physically, mentally, morally, socially and psychologically well-developed citizens with critical thinking skills and produce citizens who respect and follow the law by practicing their civic and democratic duties and upholding standards of human rights and develop union spirit (National Education Law, 2014, 2015).

Because teachers will stand as gate-keepers to increasingly powerful forms of knowledge and to the powers of discrimination required to use them wisely and for the good of others, many foresee an increasing emphasis on ethics in the teacher's role (Totterdell, 2000). The ethics is the basis for democratic teaching and learning. Behaving ethically was at the heart of what it entails to be a professional (Mahere, 2014).

The teachers with civil service status must be guided by civil service ethics as a disciplinary role to monitor the conduct or practice of civil service teachers. Teaching is a profession that calls for a high degree of discipline and moral rectitude (Chirwa, 2014). A disciplined teacher helps learners develop their own beliefs and values for society (Ndung'u, 2017). For teachers to be able to exercise discipline, they should use a code of conduct, and school policy and regulations effectively and efficiently (Mtsweni, 2008).

In the Republic of the Union of Myanmar, based on teachers' status as civil servants, they should follow civil service ethics and discipline Thus, teachers' knowledge and application towards

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civil service ethics and discipline for teachers play an important role to keep a disciplined teaching force that is professional so that schools produce disciplined citizens for the country.

Purpose of the Study

The purpose of this study was to investigate teachers' knowledge and application towards civil service ethics and discipline for teachers at Basic Education High Schools in Sagaing Township. Specific objectives of this research were as follows:

1. to investigate the levels of teachers' knowledge towards civil service ethics and discipline for teachers,
2. to find out the variations of teachers' knowledge towards civil service ethics and discipline for teachers among schools,
3. to identify teachers' application towards civil service ethics and discipline for teachers, and
4. to explore the variations of teachers' application towards civil service ethics and discipline for teachers among schools.

Research Questions

This study was conducted with the following research questions.

1. What are the levels of teachers' knowledge towards civil service ethics and discipline for teachers?
2. Is there any variation of teachers' knowledge towards civil service ethics and discipline for teachers among schools?
3. How do teachers perceive their application towards civil service ethics and discipline for teachers?
4. Is there any variation of teachers' application towards civil service ethics and discipline for teachers among schools?

Definition of Key Terms

The following terms are used in the study.

- **Civil Service**: Civil service are civil servants consisting of people working in government ministries, departments and agencies at Union, Region and State level, including doctors, nurses and teachers, but excepting armed forces and the police (Union Civil Service Board, 2017).
- **Ethics**: Ethics is defined as the principles of conduct that influence the actions of individuals, groups, or organizations (Banter, 2003).
- **Discipline**: Discipline is defined as a form of adherence to rules that have been established (Bahrodin, 2007, as cited in Fahrurrazi & Novriansyah, 2018).

Scope of the Study

This study is restricted to Basic Education High Schools, Sagaing Township. The participants in this study are all teachers from Basic Education High Schools, Sagaing Township. This study is designed to investigate teachers' knowledge and application towards civil service ethics and discipline for teacher.

Review of Related Literature

Ethics

Ethics in philosophy is the study of morality. The word "morality" comes from the Latin *moralis*, which means "customs" or "mores" (Thiroux, 1985) and the word *ethics* has its roots in the Greek word *ethos,* which translates to "customs," "conduct," or "character" (Northouse, 2016). The two words "morality" or "ethics" has to do with what is right or wrong or bad or good in a moral sense.

Ethics seeks to establish and prescribe norms, standards, or principles for evaluating the actual practices concerning what one ought to do, what consequences ought to be achieved, and what sort of persons one ought to become (Lawhead, 2011). The study of ethics is commonly grouped into three areas: descriptive ethics, normative ethics, and meta-ethics (Fischer & Ravizza, 1992).

Ethical Principles for Teachers

A Code of Ethical Principles for the Teaching Profession

The ethical principles deriving from epistemological authority and from professional purpose are fundamental to teaching (Tomlinson & Little, 2000). They are:

Teachers must:

1. respect the nature of knowledge; and the canon of knowledge;
2. respect professional knowledge, skills and experience;
3. show independence of mind and action;
4. discern and respect the interests of persons taught;
5. acknowledge social interdependence;
6. respect the families and social situation of those being taught;
7. exercise and accept responsibility for influence which may be long term;
8. recognize their own fallibility;
9. respect and work co-operatively with professional colleagues;
10. recognize and put to work the contribution of those taught and their associates in education; and
11. be willing to promote professional values, expertise and interest, by commenting publicly on education policy.

Applied Professional Ethics for Pedagogues

The following are some of the main or principal applications of pedagogic professional ethics (Dr. Khin Zaw, 2001).

1. Following the ethical principle of always acting in the best interests of his client, the teacher must regard an ethical obligation to treat information about the students and perhaps even about their home as strictly confidential.

2. The teacher must publicize his discovery one way or another so that the younger generation everywhere may benefit from instruction informed and improved by his fresh insight.

3. The third ethical case concerns the teacher who gives a pupil or pupils special tutoring. It is distinctly unethical to accept pay for this extra service.

4. The teacher must not issue notes and/ or programmed textual material for a price.

5. It will require considerable sacrifice of personal fame and fortune on the part of the teacher.

6. A teacher must not apply for a particular position till a vacancy occurs in that position.

7. An applicant for a teaching profession must not underbid for a vacancy.

8. It is unethical to break an existing contract unilaterally.

9. The teacher should not accept a position from a blood relation.

10. The pedagogic profession must discipline itself by keeping high at all times the standards of admission into its fellowship.

11. The teacher should be honest in writing testimonials for fellow teachers.

12. It is ethical to acknowledge the help.

13. It is the ethical duty of every teacher to report instances of unethical conduct to the committee in charge.

14. A teacher's strike is definitely unethical.

15. Myanmar teachers take the part of the noble Arsariya, concering himself with maximum sacrifice and minimal gain, with both material and spiritual well-being of his pupils, in this world and even for the other worlds after.

Basic Ethical Principles for Teaching

The basic ethical principles for teachers listed by Hill and Zinsmeister (2011) include the following:

1. Ethical teachers have disciplinary competence**.**

2. Ethical teachers teach effectively through effective pedagogy.

3. Ethical teachers provide balanced content and free inquiry.

4. Ethical teachers respect students.

5. Ethical teachers foster academic integrity.

6. Ethical teachers use objective and fair assessments.

7. Ethical teachers protect their students' confidentiality.

8. Ethical teachers have professionally appropriate relationships with their students.

Civil Service Ethics and Discipline

In the Republic of the Union of Myanmar, civil service duties, ethics and discipline were stipulated in the "Civil Service Code of Conduct" (2004) that was formulated during the State and Peace Development Council (SPDC) regime. The National League for Democracy (NLD) administration revised it in order to improve civil service ethics and discipline and published in 2017 (Union Civil Service Board, 2017).

The service personnel must follow the conduct mentioned below. They are:

1. Allegiance to the Union;

2. Abiding the provisions contained in the Constitution and the existing laws;

3. Performing the interest of the Union and its citizens with regard;

4. Maintaining and safeguarding of the state-owned properties and finance not to be lost and misappropriated;

5. Carrying out the assigned duties and responsibilities efficiently;

6. Abiding the rules, regulations, by-laws, orders, directives made by this law and specific workplace conditions, orders, and directives particularly stipulated by the respective services personnel organization;

7. Being free from party policies;

8. Attending the trainings stipulated by the Civil Services Board;

9. Avoiding from depravity and misconduct;

10. Avoiding from misappropriation of vested authority according to the duty;

11. Avoiding from bribery; and

12. Respect to the public.

The discipline regulations consist of working hours, performance of duties and proficiency, and personnel behaviour.

The service personnel shall refrain from doing the following disciplinary offences relating to working hours:

(a) Lateness for work without sufficient reasons;

(b) Early departure from work without sufficient reasons;

(c) Absence from work without permission of the responsible superior officer;

(d) Absence without leave in breach of leave discipline;

(e) Taking more days than admissible leave or failure to return to work at the end of the leave period without sufficient reasons; and

(f) Failure to join the transferred post at the end of the admissible joining time without sufficient reasons.

The service personnel shall refrain from doing the following offences relating to performance of duties and proficiency:

(a) Failure to fulfill duties or negligence in performing duties, and lack of proficiency for the appointed post or poor qualification or lack of qualification;

(b) Loss and damage of the State-owned money or property due to the negligence or failure to obey rules, regulations, orders and directives; and

(c) Failure to abide by the orders and directives issued in accord with law.

The service personnel shall refrain from doing the following disciplinary offences relating to behavioural discipline in the workplace:

(a) Submitting personal data which are important in consideration for appointment, promotion and scholarship by cheating or concealing or conducting dishonestly;

(b) Lacking honesty, cheating, attempting to cheat or abetting to cheat in the performance of official duties;

(c) Making false allegation against any other service personnel with intent to cause harm, anonymous communication by misappropriating the name of other person or concealing the right name;

(d) Instigating or initiating or abetting to cause the disruption of peace at workplace or of utility among service personnel;

(e) Gambling or consuming drinks or drugs intoxicant at workplace;

(f) Using narcotic drugs and psychotropic substances;

(g) Acting in discourteous manners in performing the duties;

(h) Quarrelling with or assaulting any other person or causing affray at workplace;

(i) Willful destruction of office equipment or causing loss and damage to it;

(j) Violation of the disciplines for the safety and security of the workplace willfully or negligently;

(k) Behaving without dignity and wearing disrespectable attire by a service personnel;

(l) Taking bribe, giving or accepting gratification;

(m) Soliciting or obtaining or agreeing to accept any benefits including pecuniary benefits for the task to be carried out or business which has been carried out in discharge of the service personnel's duties;

(n) Soliciting or obtaining or agreeing to accept any benefits including pecuniary benefits to persuade any other service personnel to carry out a case or to prevent him of discharging his duties;

(o) Soliciting or obtaining or agreeing to accept any benefits including pecuniary benefits to carry out a case in an unfair way by themselves or by any other service personnel;

(p) Soliciting or obtaining or agreeing to accept the above illegal benefits directly from the persons and from the persons related to the case or the individual;

(q) Misappropriation or attempt to misappropriate or abetting in the misappropriation of money or property related to the work;

(r) Violation of rules of conduct and disciplines laid down for the service personnel organization and the category of service personnel;

(s) Refusal to obey the legitimate instructions of the superior officer by the service personnel themselves or instigating, threatening and inducing other service personnel to do so;

(t) Failure to protect classified official documents or providing confidential information directly or indirectly to the irrelevant persons;

(u) Writing or distrusting books which is seditious for the State and the State Government; and

(v) Participating or instigating or abetting in any activity which has an adverse effect on national security and rule of law.

Civil Service Ethics and Discipline for Teachers

In this study, the teachers' knowledge and application towards civil service ethics and discipline for teachers were investigated with three dimensions based on civil service ethics and discipline of the Republic of the Union of Myanmar and ethical principles for teachers by Tomlinson and Little (2000), Dr. Khin Zaw (2001), and Hill and Zinsmeister (2011). These dimensions are (1) teachers' civil service ethics, (2) work discipline and (3) personal discipline.

(1) Teachers' civil service ethics: Teachers should observe civil service ethics: be loyal to the Union, abide the provisions contained in the Constitution and the existing laws, perform the interest of the Union and its citizens with regard, maintain and safeguard of the state-owned properties and finance not to be lost and misappropriated, carry out the assigned duties and responsibilities efficiently, abide the rules, regulations, by-laws, orders, directives made by this law and specific workplace conditions, orders, and directives particularly stipulated by the respective organization, be free from party policies, avoid from depravity and misconduct, avoid from misappropriation of vested authority according to the duty, avoid from bribery; and respect to the public.

(2) Work discipline: Teachers should be transparent and accessible evidence of their commitment to the community and the society they serve. They should be punctual. They should be subject mastery and learn new teaching methods to optimize students' learning. They should cooperate in educational research and engage in educational reforms. They should obey school rules and

regulations and maintain school and examination principles. They should create classroom environments conducive to students' learning.

(3) Personal discipline: Teachers should conduct ethically with students, parents, community and society as role models. They should work together with colleagues for students' interest. They should refrain from drinking alcohol and fights. They consider students' difference in learning. They should maintain confidentiality about school and students' information. They should cooperate with responsible people to enhance school success. They should treat students with justice and respect values of the society. They should inform parents about students' learning.

Methodology

Research Method

Quantitative research method was used in this study.

Population and Sample

The target population of this study was teachers from Basic Education High Schools in Sagaing Township. There are 13 Basic Education High Schools. Out of 13 Basic Education High Schools in Sagaing Township, 3 Basic Education High Schools were tested for pilot study. After extracting 3 high schools which had already been used for pilot study, 10 schools were used for the main study. 335 teachers from 10 selected schools participated in the study.

Research Instrument

Utilizing the reviewed literature, a set of questionnaire to collect the required data about teachers' knowledge and application towards civil service ethics and discipline for teachers was developed. It consists of four components. Firstly, 5 items for demographic data of participants such as gender, age, position, qualifications, and service are included. Secondly, 30 true/false items to investigate their knowledge concerning teachers' civil service ethics, work discipline and personal discipline. Thirdly, 30 five-point Likert type items (1=never, 2=seldom, 3=sometimes, 4=often, 5=always) assess teachers' application towards civil service ethics and discipline for teachers in three main categories: teachers' civil service ethics, work discipline, and personal discipline. The last component includes two open-ended questions to explore suggestions of teachers.

Data Collection

The questionnaire was confirmed for content validity through several iterations of item endorsement by the four experienced teachers from department of educational theory, Sagaing University of Education. After expert validation, the pilot study was conducted in 1st week of December, 2019. 84 teachers from 3 Basic Education High Schools in Sagaing Township participated in the pilot study. The reliability coefficient (Cronbach α) was 0.78 for the questionnaire. According to the result from the pilot study, the questionnaire was reviewed and modified. After taking permission from the responsible person, the modified questionnaires were distributed to selected 10 Basic Education High Schools in Sagaing Township in 3rd week of December, 2019 and they were collected again in the 4th week of December, 2019.

Analysis of the Data

The collected data of this study were systematically analyzed by using the Statistical Package for the Social Science software version 20. Knowledge of teachers towards civil service ethics and discipline for teachers was determined by using Item Percent Correct (IPC) value of each item included in the questionnaire and average score percent. To investigate the percentage,

means and standard deviations, descriptive statistics was used. One-way Analysis of Variance (ANOVA) test was used to investigate whether there were significant differences among selected schools. When the ANOVA was significant, Tukey post hoc analyses were followed in order to know which specific means are different from which other ones. Then, responses from open-ended questions were analyzed to complement findings on differences in teachers' perceptions on their knowledge and application towards civil service ethics and discipline for teachers.

Research Findings

Table 1 shows number and percentages of teachers showing levels of knowledge towards civil service ethics and discipline for teachers.

As shown in Table 1, it could be interpreted that levels of teachers' knowledge level towards civil service ethics and discipline for teachers was not below satisfactory level. 4 (1%) of teachers were in satisfactory level and 331 (99%) of teachers were in above satisfactory level. Table 2 shows mean scores and standard deviations of teachers' knowledge towards civil service ethics and discipline for teachers among schools.

Table 1 Number and Percentages of Teachers Showing Levels of Knowledge towards Civil Service Ethics and Discipline for Teachers

Scoring Range	No. of Teachers (%)	Remark
<50%	-	Below Satisfactory Level (0-14 scores)
50% - 74%	4 (1%)	Satisfactory Level (15-22 scores)
≥ 75%	331 (99%)	Above Satisfactory Level (23-30 scores)

Scoring Range: <50% = Below Satisfactory   50%-74% = Satisfactory   ≥75% = Above Satisfactory

According to Table 2, it could be found that the rating of teachers from School 2 was the highest mean score and School 7 was the lowest mean score in "Teachers' Civil Service Ethics". It could be seen that School 4 teachers' knowledge about "Work Discipline" was the highest and School 9 teachers' knowledge in "Work Discipline" was the lowest according to the mean scores. In knowledge about "Personal Discipline", the mean score of teachers from School 3 was the highest and School 9 was the lowest. Overall, the mean score of knowledge about "Civil Service Ethics and Discipline for Teachers" was the highest in teachers from School 8 and was the lowest in teachers from School 9.

Table 2 Mean Scores and Standard Deviations of Teachers' Knowledge towards Civil Service Ethics and Discipline for Teachers among Schools

Variable / School	Teachers' Civil Service Ethics M (SD)	Work Discipline M (SD)	Personal Discipline M (SD)	Teachers' Overall Knowledge M (SD)
School 1 (n_1=58)	9.53 (.65)	9.22 (.94)	8.88 (1.01)	27.64 (1.90)
School 2 (n_2=35)	9.62 (.65)	9.37 (.73)	8.74 (.89)	27.74 (1.60)
School 3 (n_3=42)	9.38 (.70)	9.24 (.88)	9.33 (.72)	27.95 (1.58)
School 4 (n_4=23)	9.09 (.60)	9.57 (.59)	8.83 (.72)	27.48 (.99)
School 5 (n_5=21)	9.43 (.51)	9.33 (.80)	9.05 (1.02)	27.81 (1.89)
School 6 (n_6=47)	9.30 (.88)	9.49 (.83)	9.02 (.74)	27.81 (1.75)
School 7 (n_7=36)	9.03 (.77)	9.19 (.75)	8.94 (.92)	27.17 (1.78)
School 8 (n_8=31)	9.52 (.68)	9.52 (.72)	9.10 (.94)	28.13 (1.84)
School 9 (n_9=17)	9.59 (.51)	7.65 (1.06)	8.59 (1.18)	25.82 (2.01)
School 10 (n_{10}=25)	9.48 (.59)	8.96 (.93)	8.76 (.93)	27.20 (1.58)

Table 3 describes one-way ANOVA results showing teachers' knowledge concerning civil service ethics and discipline for teachers among schools.

According to the results in Table 3, there were significant differences in teachers' knowledge concerning "Teachers' Civil Service Ethics" (*df*=9, *F*=2.765, *p*<.01), "Work Discipline" (*df*=9, *F*=8.570, *p*<.001) and "Teachers' Overall Knowledge" (*df*=9, *F*=3.079, *p*<.01) in terms of schools.

Table 3 One-way ANOVA Results Showing Teachers' Knowledge towards Civil Service Ethics and Discipline for Teachers among Schools

Variable		Sum of Squares	*df*	Mean Square	*F*	*p*
Teachers' Civil Service Ethics	Between Groups	11.819	9	1.313	2.765	.004**
	Within Groups	154.378	325	.475		
	Total	166.197	334			
Work Discipline	Between Groups	53.675	9	5.964	8.570	.000***
	Within Groups	226.163	325	.696		
	Total	279.839	334			
Personal Discipline	Between Groups	12.550	9	1.394	1.725	n.s
	Within Groups	262.686	325	.808		
	Total	275.236	334			
Teachers' Overall Knowledge	Between Groups	82.297	9	9.144	3.079	.001**
	Within Groups	965.195	325	2.970		
	Total	1047.493	334			

Note: * p<.05, ** p<.01, *** p<.001, n.s = no significance

Post hoc Tukey HSD test was conducted to know multiple comparisons for teachers' knowledge in terms of schools and the result was presented in Table 4.

Table 4 Tukey HSD Result Showing Multiple Comparison for Teachers' Knowledge towards Civil Service Ethics and Discipline for Teachers among Schools

Variable	(I)	(J)	Mean Difference (I-J)	*p*
Teachers' Civil Service Ethics	School 7	School 1	-.51	.021*
		School 2	-.60	.010*
Work Discipline	School 9	School 1	-1.58	.000***
		School 2	-1.72	.000***
		School 3	-1.59	.000***
		School 4	-1.92	.000***
		School 5	-1.69	.000***
		School 6	-1.84	.000***
		School 7	-1.55	.000***
		School 8	-1.87	.000***
		School 10	-1.31	.000***
Teachers' Overall Knowledge	School 9	School 1	-1.81	.006**
		School 2	-1.92	.007**
		School 3	-2.13	.001**
		School 5	-1.99	.017*
		School 6	-1.98	.002**
		School 8	-2.31	.001**

Note: *p<.05, **p<.01, ***p<.001

In Table 4, it could be said that School 7 was significantly different from School 1 and 2 in "Teachers' Civil Service Ethics". School 9 was also significantly different from School 1, 2, 3, 4, 5, 6, 7, 8, and 10 in "Work Discipline". In teachers' overall knowledge, School 9 was significantly different from School 1, 2, 3, 5, 6, and 8. In Table 5, the mean scores which show teachers' application concerning civil service ethics and discipline for teachers are described.

Table 5 Mean Scores Showing Teachers' Application towards Civil Service Ethics and Discipline for Teachers

No.	Variable	Mean	Remark
1	Teachers' Civil Service Ethics	4.66	Always
2	Work Discipline	4.49	Often
3	Personal Discipline	4.66	Always
	Overall Application	**4.60**	**Always**

Scoring Direction:1.00-1.49= never 1.50-2.49= seldom 2.50-3.49= sometimes 3.50-4.49= often 4.50-5.00= always

Table 5 reveals that teachers always applied civil service ethics and discipline for teachers because the overall mean score was 4.60. The description of mean scores and standard deviations of teachers' application towards civil service ethics and discipline for teachers among schools is shown in Table 6.

Table 6   Mean Scores and Standard Deviations of Teachers' Application towards Civil Service Ethics and Discipline for Teachers among Schools

Variable ＼ School	Teachers' Civil Service Ethics M (SD)	Work Discipline M (SD)	Personal Discipline M (SD)	Teachers' Overall Application M (SD)
School 1 (n_1=58)	4.58 (.54)	4.41 (.54)	4.52 (.55)	4.50 (.52)
School 2 (n_2=35)	4.38 (.68)	4.28 (.68)	4.40 (.68)	4.35 (.66)
School 3 (n_3=42)	4.68 (.41)	4.50 (.43)	4.71 (.40)	4.63 (.39)
School 4 (n_4=23)	4.73 (.36)	4.54 (.32)	4.66 (.39)	4.64 (.34)
School 5 (n_5=21)	4.74 (.35)	4.57 (.36)	4.71 (.34)	4.68 (.32)
School 6 (n_6=47)	4.81 (.26)	4.70 (.30)	4.84 (.29)	4.79 (.24)
School 7 (n_7=36)	4.77 (.35)	4.59 (.44)	4.74 (.41)	4.70 (.37)
School 8 (n_8=31)	4.71 (.35)	4.58 (.40)	4.73 (.42)	4.67 (.37)
School 9 (n_9=17)	4.46 (.30)	4.32 (.26)	4.47 (.26)	4.42 (.21)
School 10 (n_{10}=25)	4.70 (.38)	4.41 (.54)	4.73 (.48)	4.61 (.43)

According to Table 6, it could be seen that the teachers from School 6 rated the highest mean score and the teachers from School 2 rated the lowest mean score in their application about "Teachers' Civil Service Ethics", "Work Discipline", "Personal Discipline" and overall application about civil service ethics and discipline for teachers.

Table 7 describes one-way ANOVA results showing teachers' application concerning civil service ethics and discipline for teachers according to schools. According to the results in Table 7, there were significant differences in teachers' application concerning "Teachers' Civil Service Ethics" (df=9, F=3.467, p<.001), "Work Discipline" (df=9, F=2.912, p<.01), "Personal Discipline" (df=9, F=3.352, p<.01) and "Teachers' overall application" (df=9, F=3.500, p<.001) in terms of schools.

Table 7 One-way ANOVA Results Showing Teachers' Application towards Civil Service Ethics and Discipline for Teachers among Schools

Variable		Sum of Squares	*df*	Mean Square	*F*	*p*
Teachers' Civil Service Ethics	Between Groups	5.751	9	.639	3.467	.000***
	Within Groups	59.898	325	.184		
	Total	65.650	334			
Work Discipline	Between Groups	5.514	9	.613	2.912	.002**
	Within Groups	68.386	325	.210		
	Total	73.900	334			
Personal Discipline	Between Groups	6.184	9	.687	3.352	.001**
	Within Groups	66.625	325	.205		
	Total	72.808	334			
Teachers' Overall Application	Between Groups	5.571	9	.619	3.500	.000***
	Within Groups	57.476	325	.177		
	Total	63.046	334			

Note: * $p<.05$, ** $p<.01$, *** $p<.001$, n.s = no significance

Post hoc Tukey HSD test was conducted to know multiple comparisons for teachers' application concerning civil service ethics and discipline for teachers in terms of schools and the result was described in Table 8.

Table 8 Tukey HSD Result Showing Multiple Comparison for Teachers' Application towards Civil Service Ethics and Discipline for Teachers among Schools

Variable	(I)	(J)	Mean Difference (I-J)	*p*
Teachers' Civil Service Ethics	School 2	School 6	-.43	.000***
		School 7	-.39	.005**
Work Discipline	School 6	School 1	.30	.033*
		School 2	.42	.002**
Personal Discipline	School 6	School 1	.32	.015*
		School 2	.44	.001**
Teachers' Overall Application	School 6	School 1	.28	.024*
		School 2	.43	.000***
	School 7	School 2	.35	.020*

Note: * $p<.05$, ** $p<.01$, *** $p<.001$

From the depiction of Tukey HSD results, it could be indicated that School 2 was significantly different from School 6 and 7 in "Teachers' Civil Service Ethics". School 6 was also significantly different from School 1, and 2 in both "Work Discipline" and "Personal Discipline". In teachers' overall application, School 6 was significantly different from School 1, and 2. Similarly, significant difference was also found in overall application concerning civil service ethics and discipline for teachers between School 7 and School 2 as shown in Table 8.

Responses to the Open-ended Questions

The researcher asked two open-ended questions at the end of the questionnaire. In open-ended responses, 235 teachers (70.15%) answered open-ended questions but 100 (29.85%) did not answer them.

The first question asked teachers to express what ethics and discipline should be observed. 235 (70.15%) teachers answered that

- Teachers should observe civil service ethics and discipline enacted by the State.
- Teachers should follow instructions issued by Ministry of Education.
- Teachers should observe school rules and regulations and directions stated by the principal.
- Teachers should conduct responsibilities according to rules and regulations.
- Teachers should keep professional identity.

The second question asked teachers to suggest what principal should do to enhance teachers' observance of civil service ethics and discipline for teachers. 235 (70.15%) teachers answered that

- Leading by example is the most effective way to ensure that teachers are aware of civil service ethics and discipline.
- The principal as head is accountable for providing disciplinary control over the behaviour of teachers.
- The principal should have the ability to use a particular disciplinary strategy at the appropriate time and condition.
- The principal should explain civil service ethics and discipline for teachers at monthly regular meetings and assembly.
- The chart of school rules and regulations should be displayed.
- The principal should organize disciplinary committee in school and solve teachers' misconduct.

Conclusion, Discussion, and Recommendations

Conclusion and Discussion

Based on the research questions, the findings of this study can be summarized as follows.

Research question one investigated the levels of teachers' knowledge towards civil service ethics and discipline for teachers. The analysis of the data in the study showed that knowledge levels of teachers from selected Basic Education High Schools in Sagaing Township towards civil service ethics and discipline for teachers were not below satisfactory level. 4 (1%) of teachers were in satisfactory level and 331 (99%) of teachers were in above satisfactory level. It can be concluded that most of the teachers had above satisfactory level of knowledge about their civil service ethics and discipline. The result of Chirwa's (2014) study is in consonance with the above findings where he found that out of the 67 respondents, the majority (98.1%) were knowledgeable of the Teachers' Code of Conduct. However, in terms of level of knowledge, 53.7% were much knowledgeable of the Teachers' Code of Conduct. On the same, 20.9% were very much knowledgeable of the code of conduct while 23.9% had minimal knowledge of the Teachers' Code of Conduct. A smaller percentage (1.5%) of the respondents had no knowledge of the Teachers' Code of Conduct.

Research question two examined whether there were significant differences in knowledge towards civil service ethics and discipline for teachers among schools. It could be found that there were significant differences in teachers' knowledge concerning "Teachers' Civil Service Ethics", "Work Discipline" and "Teachers' Overall Knowledge" in terms of schools. Based on Tukey HSD multiple comparison analysis, School 7 was significantly different from School 1 and 2 in "Teachers' Civil Service Ethics". School 9 was also significantly different from School 1, 2, 3, 4, 5, 6, 7, 8, and 10 in "Work Discipline". In teachers' overall knowledge, School 9 was significantly different from School 1, 2, 3, 5, 6, and 8. In comparison with mean scores among the schools, school 8 had the highest mean score. Therefore, it can be concluded that teachers from school

8 had the highest knowledge than the other schools. Reinhartz and Beach (2004, as cited in Chirwa, 2014) argued that knowing the code does not ensure ethical practice.

Research question three evaluated teachers' perceptions on their application towards civil service ethics and discipline for teachers. According to teachers' responses, the mean scores regarding "Work Discipline", "Personal Discipline", and "Teachers' Civil Service Ethics" were 4.49, 4.66 and 4.66 respectively. Therefore, it could be concluded that teachers always applied "Teachers' Civil Service Ethics" and "Personal Discipline" and often applied "Work Discipline". The results of this study are similar to the findings of Ayeni's (2018) study. In his study, the level of teachers' compliance with professional ethics was high as reflected in the following percentage points: punctuality (68.9%), good communication skill (63.3%), positive human relations (61.1%), effective time management (66.6%), adequate knowledge of subject matter (67.8%), and good dressing habit (81.2%).

Research question four investigated whether there is any variation of teachers' application towards civil service ethics and discipline for teachers among schools. In analyzing variations of teachers' application according to schools, there were significant differences in teachers' application concerning "Teachers' Civil Service Ethics", "Work Discipline", "Personal Discipline" and "teachers' overall application" in terms of schools. Based on the result of Tukey HSD analysis, it could be interpreted that School 2 was significantly different from School 6 and 7 in "Teachers' Civil Service Ethics". School 6 was also significantly different from School 1, and 2 in both "Work Discipline" and "Personal Discipline". In teachers' overall application, School 6 was significantly different from School 1, and 2. Similarly, significant difference was also found in overall application concerning civil service ethics and discipline for teachers between School 7 and School 2. The result of teachers' responses supports Campbell's (2003) description that the ethical teacher is conscious of students' best interests and holds this maxim as a professional first principle, even in all its complexity, while remaining vigilant against its use to serve other ends of a private or ideological nature.

Recommendations for Further Research

The focus of the study is on what teachers know and how they apply concerning dimensions of civil service ethics and discipline for teachers. This study covered only Basic Education High Schools in Sagaing Township. There is a need to conduct a similar study in other townships to determine if there are similarities with the major findings from this study. As this study covers knowledge and application of teachers, further research should analyze teachers' attitude towards civil service ethics and discipline for teachers.

The teachers in Basic Education High Schools are the products of education colleges and Universities of Education. For this reason, further study should be conducted to teacher educators who are the trainers of teachers. Thus, further research can be analyzed to explore knowledge and application of teacher educators in education colleges and Universities of Education towards civil service ethics and discipline for teachers.

Further research should be conducted to investigate motivating factors affecting application of teachers towards civil service ethics and discipline for teachers. In addition, the role of principal on enhancing teachers' knowledge and application concerning civil service ethics and discipline for teachers should be investigated. This study utilized quantitative research method. Thus, interviews and observations should be conducted to validate the findings of quantitative study in further studies.

Acknowledgements

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A STUDY OF PROFESSIONAL LEARNING COMMUNITIES AND TEACHERS' COLLECTIVE EFFICACY

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Abstract

The main purpose of this study was to study the professional learning communities and teachers' collective efficacy at Basic Education High Schools, Thanlyin Township, Yangon Region. In this study, a total of 224 teachers from Basic Education High Schools, Thanlyin Township were selected to participate by using simple random sampling method. Mixed method (qualitative and quantitative) was used. Two sets of questionnaires: Professional learning communities (PLCs) Questionnaire adapted from Olivier, D.F., Hipp, K.K., & J.B. (2003) and Collective Efficacy (CE) Questionnaire developed by the review of literature were used in this study. The reliability coefficients (Cronbach's alpha) of the instruments were 0.98 for PLCs and 0.96 for CE. For qualitative study, open-ended and interview questions were conducted. Descriptive statistics, Independent Samples *t* Test, One-way ANOVA, and Pearson Product Moment Correlation were used to analyze the data. According to the findings, teachers at Basic Education High Schools, Thanlyin Township practiced professional learning communities at high level. There were no significant differences in teachers' practices on PLCs grouped by their age and teaching service. But, there were significant differences among teachers grouped by their position and educational qualification. Teachers in this study had high level of collective efficacy. Although there was no significant difference in teachers' collective efficacy grouped by their age, there were significant differences among teachers grouped by their teaching service, position and educational qualification. There was a positively moderate correlation between professional learning communities and teachers' collective efficacy (r=.567**, *p*=.000).

Keywords: professional learning communities, collective efficacy

Introduction

With the vision of creating an education system that will generate a learning society capable of facing the challenges of the Knowledge Age, the Myanmar government is implementing long-term and short-term plans of improving the nation's education system. Myanmar Education System has made educational reforms in recent years Ministry of Education Myanmar set the National Education Strategic Plan (2016-2021) with the help of UNICEF and tried to build quality education. Upgrading the quality of teachers in basic education is one of the main tasks of education promotion program in Myanmar. Advance in Education depends largely on the qualification and ability of a teaching professional generally, and on the human, pedagogical and technical qualities of an individual teacher. The environment of a PLC serves as a key factor in enhancing teachers' quality. PLCs provide teachers with opportunities to connect, engage, and collaborate with one another. When all teachers in the school engage intentionally and continuously in the learning process rather than in isolation, the capacity of a school is powerfully enhanced. Developing PLCs appears to hold considerable promise for capacity building for sustainable improvement. Therefore, the best hope for significant school improvement is transforming schools into PLCs.

Similarly, in the 21st century, collaboration has become a major trend. The need in society to think and work together on issues of critical concern has increased, shifting the emphasis from individual to group efforts, from independence to community. One of the major tenets of a learning community in a school setting involves the collaboration among professional educators willing to share responsibilities in an effort to address challenges targeting student learning (DuFour & Eaker,

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1998). Improving student achievement through collaboration networks is a current focus of schools in many countries. The belief that all teachers have the conjoint capacity to accomplish their goals is called collective efficacy. Research has shown that schools that have a high level of collective efficacy also have higher levels of student achievement (Goddard, Hoy, & Hoy, 2000). Collective efficacy and the professional learning community model positively impact student achievement; elements of both can be found in the characteristics of effective schools.

Objectives of the Study

General Objective

- To study professional learning communities and teachers' collective efficacy at Basic Education High Schools, Thanlyin Township

Specific Objectives

- To study the extent of teachers' practices on professional learning communities at Basic Education High Schools
- To find out the variations of teachers' practices on professional learning communities in terms of their personal factors
- To study the level of teachers' collective efficacy rated by themselves
- To investigate the variations in teachers' collective efficacy according to their personal factors
- To study the relationship between professional learning communities and teachers' collective efficacy

Research Questions

- To what extent do the teachers practice professional learning communities at Basic Education High Schools?
- Are there any variations in the teachers' practices on professional learning communities in terms of their personal factors?
- What is the level of teachers' collective efficacy rated by themselves?
- What are the variations of teachers' collective efficacy according to their personal factors?
- Is there any significant relationship between professional learning communities and teachers' collective efficacy?

Limitations of the Study

Due to time constraint, this study was geographically restricted to Thanlyin Township, Yangon Region. This study investigated the teachers' practices on professional learning communities and teacher's collective efficacy at Basic Education High Schools.

Theoretical Framework

The framework for this study developed based on the five dimensions of professional learning communities described by Hord (1997).

Shared and Supportive Leadership: In this dimension, the attributes such as nurturing leadership among teachers; shared power, authority and responsibility; and broad-based decision-making for commitment and accountability are involved.

Shared Values and Vision: Espoused values and norms; focus on students; high expectations; and shared vision are included in this dimension.

Collective Learning and Application of that Learning: Shared information and dialogue; collaboration and problem solving; and application of knowledge, skills and strategies are included in this dimension.

Shared Personal Practice: By sharing personal practice, peer teachers visit to and observe with one another to provide constructive feedback and offer encouragement on instructional practices. In such a way, they can improve student achievement and increase individual and organizational capacity.

Supportive Conditions: This dimension includes relationships and structures. Collegial relationships include trust, respect, and positive and caring relationships among the students, teachers and principal. Structures include size of the school, communication systems, and the time and space for teachers to meet and examine current practices.

The research framework for teachers' collective efficacy developed based on the characteristics described by Megan Tschannen Moran and Marilyn Barr (2004).

School Practices: School practices are integrally related to collective and individual teacher sense of efficacy. School processes promote teacher ownership in school decisions (shared school goals, shared decision making, positively perceived school change history, and empowering principal leadership), provide support to parents and seek them out as partners in the students' education. Collective efficacy was related to teachers' commitment to community partnership by establishing frequent and productive communication between home and schools.

Teacher Behaviors: Schools with high collective efficacy consistently keep student learning at the forefront and as a whole, teachers create mastery instructional strategies for their students and foster their cognitive development. A collective sense of efficacy leads teachers to persist in undertaking challenges which include meeting the needs of all students. Teachers display persistence and resiliency when working with students who are having difficulty improving achievement levels, and help students think critically and foster student creativity. High efficacious teachers will show increased commitment to the organization and are likely to collaborate with their peers to ensure their actions lead to improved outcomes of students.

Principal Leadership Behavior: Leadership is also critical to the development and maintenance of effective schools. In schools with high collective teacher efficacy, principals have the skills to get their teachers to develop a collaborative effort to overcome the difficulties encountered in improving student achievement. Principals are instructional leaders who seek creative ways to improve instructions, listen to teachers, and promote innovative teaching. Supportive principal behaviors such as providing high quality professional development activities and helping teachers set goals to increase the likelihood of mastery experience; can create positive school climate that contributes to increase teacher efficacy.

Definitions of Key Terms

Professional Learning Communities: Professional learning communities (PLCs) refer to the environment created by educators that foster mutual cooperation, emotional support, and personal growth as they work together to achieve what they cannot accomplish alone (Dufour & Eaker, 1998).

Collective Efficacy: Collective efficacy refers to the beliefs that organizational members hold about their work groups' capability to reach desired goals (Goddard &Skrla; Tschannen Moran et al., 1998).

Operational Definitions

Professional Learning Communities (PLCs): Professional learning communities are groups of teachers with a shared commitment to reflect on their teaching practices and to learn collectively about the teaching practices that are the most effective for improving student learning to reach their shared organizational goals. In this study, the practices on PLCs were assessed according to the teachers' practices on five dimensions by Hord (1997).

Teachers' Collective Efficacy: Teachers' Collective Efficacy is the beliefs of teachers in the school that the effort of a faculty as a whole will have a positive effect students. It is about the collective capability of a faculty to influence student achievement.

Methodology

Population and Sample

Out of eleven schools, six Basic Education High Schools were chosen as the sample by simple random sampling method. 224 teachers were considered as a desired sample size for quantitative study. Twelve teachers were chosen to conduct interview questions.

Instrumentation

As a research instrument, two sets questionnaires were utilized to conduct this study. Professional learning communities (PLCs) Questionnaire was adapted from Olivier, D.F., Hipp, K.K., and J.B. (2003). Collective Efficacy Questionnaire was developed by the review of literature. First part of questionnaire consists of (45) items with five dimensions related to PLCs. These items were rated on five-point Likert scales ranging from 1 to 5 (1=Always, 2=Often, 3=Sometimes, 4=Rarely, 5=Never). The second part of the questionnaire included (20) items rated on four-point Likert scale ranging from 1 to 4 (1=Strongly Disagree, 2= Disagree, 3= Agree, 4= Strongly Agree). Five open-ended questions and eight interview questions were also used as part of the study. As the instrument validation, nine expert teachers who are knowledgeable and experienced in this field from the Department of Educational Theory, Yangon University of Education reviewed the instrument. The reliability coefficients (Cronbach α) were 0.98 for professional learning communities and 0.96 for teachers' collective efficacy.

Procedure

First of all, the relevant literature was explored. In order to find out the required data, the instrument was conducted under the guidance of supervisor. Next, the advice and guidance were taken from nine experts. The questionnaire was distributed to the teachers in selected schools. All the questionnaires were collected after two weeks and the response rate was 100%. Interview was conducted on the second week of January, 2020.

Data Analysis

Descriptive Statistics, Independent Samples *t* Test, One-way ANOVA and Pearson Product Moment Correlation were used to analyze the data.

Findings

Findings from Quantitative Study

Finding for research question (1) is presented in Table 1.

Table 1 Mean Values and Standard Deviations of Teachers' Practices on PLCs Rated by Themselves (N=224)

Variables	Mean	SD	Remark
Shared and Supportive Leadership	3.84	0.85	High
Shared Value and Vision	4.18	0.72	High
Collective Learning and Application of that Learning	4.34	0.67	Very High
Shared Personal Practice	4.18	0.71	High
Supportive Conditions	3.93	0.63	High
PLCs practices	4.06	0.58	High

Scoring Direction: 1.00-1.80=Very Low   1.81-2.60=Low   2.61-3.40=Moderate
                3.41-4.20=High   4.21-5.00=Very High

By mean value of PLCs practices, Table 1 showed that teachers at Basic Education High Schools, Thanlyin Township practiced PLCs at high level.

Findings for research question (2) are presented in the following Tables.

Table 2 Mean Values and Standard Deviations of Teachers' Practices on PLCs Grouped by their Age (N=224)

Variables	Age	N	Mean	SD	Remark
PLCs practices	21-30 years	52	3.95	0.51	High
	31-40 years	66	4.13	0.62	High
	41-50 years	42	3.99	0.61	High
	51-60 years	64	4.13	0.56	High

Scoring Direction: 1.00-1.80=Very Low 1.81-2.60=Low   2.61-3.40=Moderate   3.41-4.20=High
                4.21-5.00=Very High

Table 2 indicated that teachers in all years of age groups practiced PLCs at high level.
        Findings for research question (2) are presented in the following Tables.

Table 3 Mean Values and Standard Deviations of Teachers' Practices on PLCs Grouped by their Teaching Service (N=224)

Variables	Teaching Service	N	Mean	SD	Remark
PLCs practices	Less than 3 years	19	3.72	0.50	High
	4-6 years	33	4.10	0.60	High
	7-18 years	78	4.09	0.57	High
	19-30 years	51	4.08	0.64	High
	31-40 years	43	4.11	0.52	High

Scoring Direction: 1.00-1.80=Very Low, 1.81-2.60=Low, 2.61-3.40=Moderate, 3.41-4.20=High   4.21-5.00=Very High

Table 3 revealed that teachers in all years of teaching service practiced PLCs at high level, and among them, teachers with (31-40) years of service had the highest mean value.

Table 4 Mean Values and Standard Deviations of Teachers' Practices on PLCs Grouped by their Position (N=224)

Variables	Position	N	Mean	SD	Remark
PLCs practices	ST	73	3.83	0.56	High
	JT	104	4.22	0.53	Very High
	PT	47	4.08	0.61	High

Scoring Direction: 1.00-1.80=Very Low,   1.81-2.60=Low, 2.61-3.40=Moderate , 3.41-4.20=High   4.21-5.00=Very High

Table 4 indicated that junior teachers practiced PLCs at very high level and then, senior teachers and primary teachers practiced PLCs at high level.

Table 5 ANOVA Results of Teachers' Practices on PLCs Grouped by their Position

Variables		Sum of Squares	df	Mean Square	F	p
PLCs practices	Between Groups	6.713	2	3.356	10.939	.000***
	Within Groups	67.809	221	.307		
	Total	74.522	223			

*p<.05, **p<.01, ***p<0.001, ns= no significance

According to Table 5, there was significant difference in PLCs practices (F (2,221) =10.939, *p*=.000). Therefore, Tukey test was continued to analyze.

Table 6 Tukey HSD of Teachers' Practices on PLCs Grouped by their Position

Variables	(I) Position	(J) Position	Mean Difference (I-J)	P
PLCs practices	Junior Teachers	Senior Teachers	.395*	.000***
	Primary Teachers	Senior Teachers	.248*	.045*

*p<.05, **p<.01, ***p<0.001, ns= no significance

According to Table 6, there were significant differences among senior teachers, junior teachers and primary teachers in PLCs practices.

Table 7 Mean Values and Standard Deviations Teachers' Practices on PLCs Grouped by their Educational Qualification   (N=224)

Variables	Educational Qualification	N	Mean	SD	Remark
PLCs practices	BA, BSc, MA, MSc	149	4.17	0.56	High
	BEd, MEd	75	3.84	0.54	High

Scoring Direction: 1.00-1.80=Very Low, 1.81-2.60=Low, 2.61-3.40=Moderate, 3.41-4.20=High   4.21-5.00=Very High

Table 7 showed that the mean values of BA, BSc, MA, and MSc degree holders were higher than that of BEd, MEd degree holders in PLCs practices, and it was indicated that all the teachers practiced PLCs at high level.

Table 8 Result of Independent Samples *t* Test of Teachers' Practices on PLCs Grouped by their Educational Qualification   (N=224)

Variables	Qualification	N	Mean	SD	t	df	p
PLCs practices	BA,BSc, MA, MSc	149	4.17	.564	4.219	222	.000***
	BEd, MEd	75	3.84	.544			

*p<.05, **p<.01, ***p<0.001, ns= no significance

According to Table 8, there were significant differences (*t*= 4.219, *df*= 222, *p*=.000) in PLCs practices.

Finding for research question (3) is presented in Table 9.

Table 9 Mean Values and Standard Deviations of Teachers' Collective Efficacy Rated by Themselves   (N=224)

Variables	Mean	SD	Remark
School Practices	3.35	0.44	High
Teacher Behaviors	3.53	0.40	High
Principal Leadership Behaviors	3.21	0.64	High
Teachers' Collective Efficacy	**3.39**	**0.39**	**High**

Scoring Direction: 1.00-2.00=Low,   2.01-3.00=Moderate,   3.01-4.00=High

Table 9 indicated that teachers at Basic Education High Schools in Thanlyin Township were at high level of collective efficacy.

Findings for research question (4) are presented in the following Tables.

Table 10 Mean Values and Standard Deviations of Teachers'   Collective Efficacy Grouped by their Age   (N=224)

Variables	Age	N	Mean	SD	Remark
Teachers' Collective Efficacy	21-30 years	52	3.29	0.41	High
	31-40 years	66	3.39	0.41	High
	41-50 years	42	3.38	0.35	High
	51-60 years	64	3.48	0.38	High

Scoring Direction: 1.00-2.00=Low,   2.01-3.00=Moderate,   3.01-4.00=High

Table 10 revealed that teachers' collective efficacy was high for teachers in all age groups.

Table 11 Mean Values and Standard Deviations of Teachers' Collective Efficacy

Grouped by their Teaching Service   (N=224)

Variable	Teaching Service	N	Mean	SD	Remark
Teachers' Collective Efficacy	Less than 3 years	19	3.17	0.36	High
	4-6 years	33	3.36	0.45	High
	7-18 years	78	3.38	0.38	High
	19-30 years	51	3.45	0.38	High
	31-40 years	43	3.48	0.38	High

Scoring Direction: 1.00-2.00=Low,   2.01-3.00=Moderate,   3.01-4.00=High

Table 11 showed that mean values of teachers' overall collective efficacy were high for all groups.

Table12 ANOVA Results of Teachers' Collective Efficacy Grouped by Teaching Service

Variable		Sum of Squares	*df*	Mean Square	F	*P*
Principal Leadership Behaviors	Between Groups	8.667	4	2.167	5.740	.000[***]
	Within Groups	82.677	219	.378		
	Total	91.344	223			
Teachers' Collective Efficacy	Between Groups	1.468	4	.367	2.428	.049[*]
	Within Groups	33.089	219	.151		
	Total	34.557	223			

*p<.05, **p<.01, ***p<0.001, ns= no significance

According to Table 12, there were significant differences in principal leadership behaviors ($F(4,219)=5.740$, $p=.000$) and teachers' collective efficacy ($F(4,219)=2.428$, $p=.049$).

Table 13 Tukey HSD of Teachers' Collective Efficacy Grouped by their Teaching Service

Variable	(I) Teaching Service	(J) Teaching Service	Mean Difference (I-J)	P
Principal Leadership Behaviors	4-6 years	Less than 3 years	.570[*]	.013[*]
	7-18 years	Less than 3 years	.544[*]	.006[**]
	19-30 years	Less than 3 years	.734[*]	.000[***]
	31-40 years	Less than 3 years	.729[*]	.000[***]
Teachers' Collective Efficacy	31-40 years	Less than 3 years	.307[*]	.036[*]

*$p<.05$, **$p<.01$, ***$p<0.001$, ns= no significance

According to Table 13, it was found that there were significant differences between teachers who have teaching service of 31-40 years and less than 3 years in teachers' collective efficacy.

Table 14 Mean Values and Standard Deviations of Teachers' Collective Efficacy Grouped by their Position (N=224)

Variable	Teaching Service	N	Mean	SD	Remark
Teachers' Collective Efficacy	ST	73	3.29	0.44	High
	JT	104	3.47	0.36	High
	PT	47	3.37	0.36	High

Scoring Direction: 1.00-2.00=Low,   2.01-3.00=Moderate,   3.01-4.00=High

In Table 14, it was indicated that teachers in all groups were high in overall collective efficacy.

Table 15 ANOVA Results of Teachers' Collective Efficacy Grouped by their Position

Variable		Sum of Squares	df	Mean Square	F	P
Teachers' Behaviors	Between Groups	.952	2	.476	3.116	.046[*]
	Within Groups	33.767	221	.153		
	Total	34.720	223			
Principal Leadership Behaviors	Between Groups	5.801	2	2.900	7.493	.001[**]
	Within Groups	85.543	221	.387		
	Total	91.344	223			
Teachers' Collective Efficacy	Between Groups	1.550	2	.775	5.189	.006[**]
	Within Groups	33.007	221	.149		
	Total	34.557	223			

*$p<.05$, **$p<.01$, ***$p<0.001$, ns= no significance

According to Table 15, there were significant differences in overall collective efficacy ($F(2,221)=5.189$, $p=.006$).

Table 16 Tukey HSD of Teachers' Collective Efficacy Grouped by their Position

Variable	(I) Position	(J) Position	Mean Difference (I-J)	P
Teachers' Behaviors	JT	ST	.149*	.035*
Principal Leadership Behaviors	JT	ST	.368*	.000***
Teachers' Collective Efficacy	JT	ST	.188*	.005**

*p<.05, **p<.01, ***p<0.001, ns= no significance

According to Table 16, it was found that there were significant differences between senior teachers and junior teachers in overall collective efficacy.

Table 17 Mean Values and Standard Deviations of Teachers' Collective Efficacy Grouped by their Educational Qualification   (N=224)

Variable	Educational Qualification	N	Mean	SD	Remark
Teachers' Collective Efficacy	BA, BSc, MA, MSc	149	3.43	0.36	High
	BEd, MEd	75	3.31	0.45	High

Scoring Direction: 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 17 showed that mean value of BA, BSc, MA, and MSc degree holders was higher than that of BEd, and MEd degree holders. And then, teachers in all groups were high in overall collective efficacy.

Table 18 The Result of Independent Samples *t* Test of Teachers' Collective Efficacy Grouped by their Educational Qualification   (N=224)

Variables	Educational Qualification	N	Mean	SD	t	df	p
Principal Leadership Behaviors	BA,BSc, MA, MSc	149	3.32	.504	3.044	103.480	.003**
	BEd, MEd	75	3.00	.813			
Teachers' Collective Efficacy	BA,BSc, MA, MSc	149	3.43	.359	1.991	123.473	.049*
	BEd, MEd	75	3.31	.447			

*p<.05, ns= no significance

Table 18 revealed that there was significant difference in overall collective efficacy between groups.

Finding for research question (5) is presented in Table 19.

Table 19 Relationship between Professional Learning Communities and Teachers' Collective Efficacy

Variable	Professional Learning Communities	Teachers' Collective Efficacy
Professional Learning Communities	1	.567**
Teachers' Collective Efficacy	.567**	1

**. Correlation is significant at the 0.01 level (2-tailed).

According to the data presented in Table 19, the result showed that professional learning communities and teachers' collective efficacy at Basic Education High Schools, Thanlyin Township were positively moderate correlated (r =.567**, *p* =.000).

Finding from Qualitative Study

Teachers' Responses to Open-ended Questions

Q-1: Describe the principal's actions in creating PLCs at school?

Their principals provided teaching learning materials (n=128), instructed to conduct CPD (n=62), and discussed about teaching difficulties and gave advice for professional Development (n=27).

Q-2: Do you think collaboration is important for improving the professional development of teachers? Why?

Through collaboration, they can share their experience and discuss strength and weakness of teaching (n=145), and positive relationship with their colleagues can increase (n=65).

Q-3: What kinds of values and visions are described in your school?

The school value their vision of focusing on all round development of the students (n=105), teaching students to become good-tempered, well-disciplined and outstanding students (n=95), and creating the effective learning environment for students (n=20).

Q-4: Do you believe teachers in this school have the capabilities to attain their goals? Why?

Teachers showed their professional value and accountable for their work (n=160), are good at teaching (n=45), and communicate each other with trust and respect (n=15)

Q-5: Do you believe teachers in this school can teach the difficult students? How do they do?

They do extra-hour teaching, repeated and remedial teaching (n=125), care about student needs (n=65), and used various teaching strategies to draw their attention (n=18).

Teachers' responses to Interview Questions

The interviewee teachers responded that the most principals at BEHS Thanlyin Township supported to become PLCs at their schools by instructing to conduct continuous professional development activities, discussing teaching difficulties and giving advice for professional growth. They visited our classes, supervised the teaching-learning process and gave feedback to teachers if necessary. They provided old questions, teaching aids, educational journals and other reference books, facilities and learning materials for building a positive learning situation and then encouraged teachers to attend seminars, workshops, beginning teacher assistant programs, etc. for professional development .

Novice teachers observe experienced teachers' teaching. Teachers do peer observation, coaching, and providing feedback to each other. But, accepting constructive criticism is needed. There exists a family-type relationship within school and also with parents and community. They show respect to one another and collaborate for student achievement.

Conclusion, Discussion and Recommendations

Conclusion and Discussion

By total mean value 4.06, teachers at Basic Education High Schools in Thanlyin Township practiced the five dimensions of professional learning communities at high level. In line with the teachers' responses to the test items, collective learning and application of that learning practiced at very high level. As a result of the qualitative research study, teachers from selected schools tried to become as life-long learners, actively involved in CPD activities and subject-wise team discussion, created a quality lesson plan to achieve learning objective, demonstrated their commitment to shared practices, and found the ways to solve problems of students with low academic achievement.

Shared and supportive leadership was practiced at high level. Based on the data analysis and research findings, the researcher concluded that the majority of the teachers felt that leadership, power and authority were shared with them. In making decisions, they discussed with subject leaders and experienced teachers and shared power and authority to their respective actions. Teacher leadership was promoted and nurtured at their schools.

Besides, teachers practiced shared values and vision a high level. Teachers' responses to the questionnaire survey highlighted that the principals and teachers in this study created the school visions together that focused on the success of student learning and used the visions as guideposts in decision making about teaching-learning process in the schools. However, the involvement of stakeholders in creating high expectations of student learning was a bit weakness.

Teachers in this study practiced shared personal practice at high levels. The data analysis of the findings from this study revealed that the teachers actively engaged in professional development activities, shared the results of their instructional practices, and provided with constructive feedback related to instructional practices. However, time just did not allow for teachers to observe each other. So, the school principals should plan time for effective visitation and review of each teacher's classroom behaviors in order to improve school's functioning.

In shaping PLCs, the dimension of supportive conditions is also important. The research findings showed that the majority of teachers contended that positive caring relationships exist among their entire school community. There was a family-type relationship between the principals and teachers, as well as between students. They could build a culture of trust and respect each other and when facing difficulties, they believed that they did their best and overcame with these beliefs.

Teachers from Basic Education High School in Thanlyin Township had high level of collective efficacy. Among them, teacher behaviors dimension had the effect on teachers' collective efficacy at most. Goddard, Hoy & Hoy, 2000 stated that collective efficacy may positively affect numerous teacher behaviors that tend to increase student achievement. In this study, teachers in Basic Education High School, Thanlyin Township tried to know the needs of students, used strategies to draw their attention and to motivate them, and provided extra instruction for students who were not mastering the lessons.

Professional learning communities (PLCs) have moved toward the forefront as a viable process for consideration in addressing school improvement needs. With the help of professional learning communities practices, the principals and teachers should try to enhance the teachers' collective efficacy to get the better result of student achievement.

Recommendations

Every **principal** should

- Try to convince teachers the benefits of PLCs on teachers and learners through modeling in the schooling.

- Foster a culture of collaboration that can build teachers' competencies leading to improve behavioral and social outcomes of students.

- Reduce time constraints, their disagreements with other teachers on teaching methods and strategies, teachers' independence and isolation that can hinder creating PLCs at schools.

- Be provided with opportunities of learning how to create PLCs effectively and efficiently in their schools such as PLCs workshops, seminars and conferences, etc.

- Provide structure and guidance for time to create their schools as professional learning communities.

Every **teacher** should

- Observe other teachers' teaching and provide with positive feedback related to instructional practices.

- Share their teaching experiences and encourage and support diverse approaches to teaching and learning.

The **stakeholders** should

- Be aware of the importance of their role as a coordinator in creating professional learning communities.

- Cooperate and give support to the principal and the teachers for student learning as possible as they can.

Need for Further Study

This study tried to study the teachers' practices on professional learning communities at Basic Education High Schools, Thanlyin Township. Therefore, it cannot be generalized to any wider population. This study should be conducted in other elementary and middle schools or states or regions extensively and deeply. In addition, conducting research on how professional learning communities impact on teaching practices and student learning and relationship between professional learning communities and teacher well-being are necessary to further study the concept.

Acknowledgements

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A STUDY OF DIGITAL LITERACY OF STUDENT TEACHERS IN EDUCATION COLLEGES

Aye Su Su Htwe[1], Su Chan Myae[2], Nwe Thazin Hlaing[3]

Abstract

The main objective of this study is to study digital literacy of student teachers in Education Colleges. Quantitative and qualitative methods were used in this study. The questionnaire included the demographic information, digital literacy knowledge and digital literacy practices. The reliability coefficient (Cronbach's alpha) of student teachers' digital literacy practices was 0.91. Non - Proportional or Equal-sized Stratified sampling was used to analyze the collect data of 320 student teachers from Mawlamyine Education College and Yankin Education College. In qualitative study, interview was conducted. Out of 320, 12 student teachers were selected as participants in qualitative study. The Statistical Package for Social Science (SPSS) software version 22 was used to analyze the collected data. Item Percent Correct (IPC), Descriptive statistics, Independent Sample *t* Test, One-Way ANOVA and Pearson correlation were used to analyze the data in this study. The levels of digital literacy knowledge of student teachers were found to be at satisfactory. The levels of practices of student teachers' digital literacy was also found to be at satisfactory (Mean= 2.9, SD=0.63). There were statistically significant differences in digital literacy knowledge of student teachers grouped by college, year of study and specialization. Similarly, significant differences were found in student teachers' digital literacy practices in grouped by gender, training and specialization. Pearson correlation was found that student teachers' digital literacy knowledge positively and weakly correlated with digital literacy practices. Qualitative study suggested that student teachers need to do practice their presentations and assignments by using PowerPoint application, communicate other people by using digital tools and know about E-safety.

Keywords: digital literacy, student teachers

Introduction

Digital literacy is an essential quality that makes an individual capable of living, learning, working, and participating in a digital society (JISC, 2014). Digital literacy is the ability to find, evaluate, utilize, share, and create content using information technologies and the internet (Murray, 2009). Digital literacy is the ability to make, represent and share meaning in different modes and formats; to create, collaborate and communicate effectively and to understand how and when digital technologies can best be used to support these processes (Hague and Payton, 2010).

Significance of the Study

Around the world, and increasingly in Myanmar, digital technologies are becoming essential to our everyday lives and activities (British Council, 2015). Student teacher should know when and how to use digital tools and other resources to satisfy one's information need, and how to use techniques to find information quickly. Additionally, they should know to evaluate digital information to ensure its quality, currency, relevancy, accuracy, and credibility before creating new information to share with others through different communication channels (Meyers, 2013).

Education must include the skills, knowledge and understanding that will enable them to work successfully with digital technology. Students must now be able to utilize online learning tools and social media platforms. As more and more young people gain access to technology, they will discover new ways to interact with the content that they enjoy. This is yet another reason why schools should focus on defining digital literacy and then figuring out the best way to teach it in

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classrooms. Therefore, the researcher intents to study digital literacy of student teachers in Education Colleges.

General Objective

To study digital literacy of student teachers in Education Colleges

Specific Objectives

1. To investigate the knowledge levels of student teachers concerning digital literacy
2. To investigate the variation of student teachers' knowledge concerning digital literacy according to their personal factors and college they have attended
3. To investigate the levels of practices of student teachers concerning digital literacy
4. To investigate the variation of student teachers' practices concerning digital literacy according to their personal factors and college they have attended
5. To investigate the relationship between student teachers' digital literacy knowledge and practices

Research Questions

1. What are the knowledge levels of student teachers concerning digital literacy?
2. Is there any variation of student teachers' knowledge concerning digital literacy according to their personal factors and college they have attended?
3. What are the levels of practices of student teachers concerning digital literacy?
4. Is there any variation of student teachers' practices concerning digital literacy according to their personal factors and college they have attended?
5. Is there any relationship between student teachers' digital literacy knowledge and practices?

Limitations of the Study

The participants are first year and second year student teachers from Yankin Education College and Mawlamyine Education College. This study designs to develop the digital literacy among student teachers from Education Colleges.

Theoretical Framework

This research work was guided by following theoretical framework. In this study digital literacy was investigated with three dimensions based on Digital Literacy Model (Ng, 2012). These three dimensions are technical, cognitive and social-emotional dimensions.

(1) Technical dimension

The technical dimension means possessing the technical and operational skills to use ICT for learning and in everyday activities. This dimension involves understanding how to connect and use input and peripheral devices, understanding file structures, knowing how to operate technologies adequately and understanding tabs and their relationships to content. It also includes connecting and using input and peripheral devices.

The technical dimension involves finding, downloading and installing applications and also using mobile devices and digital devices. In addition, this dimension includes setting up and using communication and social networking tools and also updating/changing user account information on the internet and sending email and knowing how to use computer.

(2) Cognitive dimension

The cognitive dimension involves thinking critically in the search, evaluate and create cycle of handling digital information. This dimension includes evaluating and selecting appropriate software programs to learn with or to do a specific task and also finding and analyzing information and creating a new thing. This dimension of digital literacy requires the individual to be knowledgeable with the ethical, moral and legal issues associated with online trading and content reproduction that make use of digitally-based resources. This dimension includes decoding information and multimedia resources and also navigating intelligently through hypermedia environments to construct knowledge. Moreover, this dimension involves synthesizing new understandings using appropriate online or offline tools that will convey the meanings in the best sense.

(3) Social-emotional dimension

The social-emotional dimension involves using the internet responsibly for communicating, socializing and learning. This dimension includes observing 'netiquette' through the application of similar rules as in face-to-face communication such as respect using appropriate language and words to avoid misinterpretation and misunderstanding. This dimension involves protecting individual safety and privacy by keeping personal information as private as possible and not disclosing any more personal information than is necessary and recognize when (s) he is being threatened and knowing how to deal with it for example whether to ignore, report or respond to the threat. This dimension includes studying and learning effectively in technology rich-environments, formal and informal. Moreover, this dimension involves understanding how to communicate media work and share idea and thoughts and also collaborating with others to be successful.

Definition of Key Terms

Digital literacy: is the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills (Heitin, 2016).

Digital tools: are programs, websites or online resources that can make tasks easier to complete (Department of Health and Social Care, 2012).

Operational Definition

Digital literacy: is the ability to use ICT to find, collect, evaluate, create, communicate and share digital information at home, at school, at work and in society. In this study, digital literacy consists of three dimensions such as technical, cognitive and social-emotional dimensions.

Methodology

Quantitative methodology

(i) Sample

In this study, Student teachers from Mawlamyine Education College and Yankin Education College were included. The target population and sample was selected from 320 student teachers in Mawlamyine Education College and Yankin Education College by non-proportional stratified sampling method.

(ii) Instrumentation

In this study, we used to investigate student teacher digital literacy knowledge and practices. The questionnaire consists of three parts. The first one was to collect the demographic information regarding gender, age, year of study, specialization, college, the year when the student

teachers started using computer, the year when the student teachers started using mobile phone, the year when the student teachers started using internet, and training experiences. The second was the questionnaire of student teachers' digital literacy knowledge. It consists of totally 28 items: 10 items concerned with student teachers' digital literacy knowledge in technical dimension, 10 items concerned with student teachers' digital literacy knowledge in cognitive dimension and 8 items concerned with student teachers' digital literacy knowledge in social emotional dimension.

The third was the questionnaire of student teachers' digital literacy practices. There are 41 items in student teachers' digital literacy practices: 13 items concerned with student teachers' digital literacy practices in technical dimension,14 items concerned with student teachers' digital literacy practices in cognitive dimension and 14 items concerned with student teachers' digital literacy practices in social emotional dimension. The student teachers were asked to respond to the questionnaire items through the use of five points Likert-type scale (1= never, 2= seldom, 3= sometimes, 4= often and 5= always).

Instrument Validity: The questionnaire was examined by eight experienced teachers from the Department of Educational Theory, Yangon University of Education. The modified instrument was used to find out the reliability in the pilot study. To test the reliability of these questionnaires, the Cronbach's alpha was used.

Instrument Reliability: The internal consistency (Cronbach's alpha) of student teachers' digital literacy practices in technical dimension was 0.76. The internal consistency (Cronbach's alpha) of student teachers' digital literacy practices in cognitive dimension was 0.80. The internal consistency (Cronbach's alpha) of student teachers' digital literacy practices in social emotional dimension was 0.87. The internal consistency (Cronbach's alpha) of overall questionnaires was 0.91.

(iii) Procedure

After obtaining the permission from Department of Educational Theory to do research in Mawlamyine Education College and Yankin Education College, the questionnaires were distributed to the 50 student teachers from Thingunkyun Education College for a pilot study. In September, 2019, the revised questionnaires were distributed to the 320 student teachers from Mawlamyine Education College and Yankin Education College. The respondent rate was 100%.

(iv) Data Analysis

Descriptive Statistics, Independent Samples *t* test, One-way ANOVA, Post Hoc Tukey HSD and Pearson correlation were used to analyze the data.

Qualitative Methodology

A qualitative study of interview was conducted to collect information about the information concerning digital literacy.

(i) Sample

To obtain the necessary qualitative data, 6 student teachers from Mawlamyine Education College and 6 student teachers Yankin Education College were randomly selected.

(ii) Instrumentation

As an instrument, interview and documentation were used to obtain the require data. Informal conversation was also used to get information for qualitative study.

(iii) Procedure

Interview was held by the researcher about two weeks.

(iv) Data Analysis

In qualitative analysis, the interview questionnaires were analyzed to check their content, interpreted and presented in the paper.

Findings

Quantitative Findings

Findings for research question (1) are presented in Table 1.

Table 1 Numbers and Percentages of Student Teachers Showing the Levels of Digital Literacy Knowledge   (N=320)

Scoring Range	No. of Students	Remark
<50%	107 (33%)	Below Satisfactory Level
50%-74%	213 (67%)	Satisfactory Level
≥75%	0	Above Satisfactory Level

Scoring range: <50%= Below Satisfactory   50%-74% =Satisfactory   ≥75%= Above Satisfactor**y**

Findings for research question (2) are presented in Table 2.

Table 2 Mean Scores and Standard Deviations of Student Teachers' Digital Literacy Knowledge Grouped by Gender   (N=320)

Variable	Gender	Number of Student Teachers	Mean	SD
Digital Literacy Knowledge	Male	160	14.97	2.99
	Female	160	14.66	2.62

Table 3 Mean Scores and Standard Deviations of Student Teachers' Digital Literacy Knowledge Grouped by College   (N=320)

Variable	College	No. of Student Teachers	Mean	SD
Digital Literacy Knowledge	College A	160	13.94	2.86
	College B	160	15.69	2.48

Table 4 Mean Scores and Standard Deviations of Student Teachers' Digital Literacy Knowledge Grouped by Year of   Study   (N=320)

Variable	Year of study	No. of Student Teachers	Mean	SD
Digital Literacy Knowledge	1st year	160	14.27	2.71
	2nd year	160	15.36	2.82

Table 5 Mean Scores and Standard Deviations of Student Teachers' Digital Literacy Knowledge Grouped by Training Experiences   (N=320)

Variable	Training Experiences	No. of Student Teachers	Mean	SD
Digital Literacy Knowledge	Without Training	216	14.74	2.71
	With Training	104	14.97	3.02

Table 6 Mean Scores and Standard Deviations of Student Teachers' Digital Literacy Knowledge Grouped by Specialization

Variable	Specialization	Mean	SD
Digital Literacy Knowledge	Physics-Bio	15.95	2.19
	Physics-Chemistry	14.91	3.01
	Chemistry-Bio	14.79	3.22
	History-Eco	14.52	2.83
	Geography-Eco	14.66	2.39
	Geography-History	13.94	2.93

Table 7 One-way ANOVA Result Showing Student Teachers' Digital Literacy Knowledge Grouped by Specialization.

Variable		Sum of Squares	*df*	Mean Square	*F*	*P*
Digital Literacy Knowledge	Between Groups	115.464	5	23.093	3.010	.011*
	Within Groups	2408.658	314	7.671		
	Total	2524.122	319			

*p<.05

Table 8 Tukey HSD Result Showing Student Teachers' Digital Literacy   Knowledge Grouped by Specialization

Variable	(I)Specialization	(J)Specialization	Mean Difference	*P*
Digital Literacy Practices	Physics-Bio	Geography-History	2.00	.004**

**p<.001

Findings for research question (3) are presented in Table 3.

Table 9 Mean Values and Standard Deviations of Student Teachers' Digital Literacy Practices

No.	Variable	Mean	SD
1	Technical Dimension	2.83	0.71
2	Cognitive Dimension	2.66	0.72
3	Social-Emotional Dimension	3.23	0.80
	Average	**2.9**	**0.63**

Scoring Direction: 1.00-1.80=Never   1.81-2.60=Seldom   2.61-3.40=Sometimes
                                    3.41-4.20=Often   4.21-5.00=Always

Remark: 1-2.33= Below Satisfactory   2.34-3.67= Satisfactory   3.67-5.00= Above Satisfactory

Findings for research question (4) are presented in Table 4.

Table 10 Mean Values and Standard Deviations of Student Teachers' Digital Literacy Practices Grouped by Gender

Variable	Gender	No: of Student Teachers	Mean	SD
Total Digital Literacy Practices	Male	160	2.99	0.68
	Female	160	2.83	0.05

Table 11 Mean Values and Standard Deviations of Student Teachers' Digital Literacy Grouped by College

Variable	College	Number of Student Teachers	Mean	SD
Total Digital Literacy Practices	College A	160	2.97	0.64
	College B	160	2.85	0.62

Table 12 Mean Values and Standard Deviations of Student Teachers' Digital Literacy Practices Grouped by Year of Study

Variable	Year of Study	Number of Student Teachers	Mean	SD
Total Digital Literacy Practices	1st year	160	2.88	0.70
	2nd year	160	2.94	0.56

Table 13 Mean Values and Standard Deviations of Student Teachers' Digital Literacy Grouped by Training Experiences

Variable	Training Experiences	Number of Student Teachers	Mean	SD
Total Digital Literacy Practices	Without Training	216	2.83	0.04
	With Training	104	3.08	0.06

Table 14 Mean Values and Standard Deviations of Student Teachers' Digital Literacy Practices Grouped by Specialization

Variable	Specialization	Mean	SD
Total Digital Literacy Practices	Physics-Bio	2.97	0.56
	Physics-Chemistry	3.08	0.55
	Chemistry-Bio	2.96	0.74
	History-Eco	2.98	0.60
	Geography-Eco	2.76	0.58
	Geography-History	2.69	0.71

Table 15 One-way ANOVA Result Showing Student Teachers' Digital Literacy Practices Grouped by Specialization

Variable	Specialization	Sum of Squares	df	Mean Square	F	P
Total Digital Literacy Practices	Between Groups	5.850	5	1.170	3.004	.012*
	Within Groups	122.284	314	.389		
	Total	128.134	319			

$**p<.01*p<.05$, Note: ns = no significance

Table 16 Tukey HSD Result Showing Student Teachers' Digital Literacy Practices Grouped by Specialization

Variable	(I)Specialization	(J)Specialization	Mean Difference	P
Digital literacy practices	Physics-Chemistry	Geography-History	.39	.018*

$*p<.05$

Findings for research question (5) are presented in Table 17.

Table 17 Pearson Correlation between Digital Literacy Knowledge and Digital Literacy Practices   (N=320)

Two Groups	Digital Literacy Knowledge	Digital Literacy Practices
Digital Literacy Knowledge	1	.116[*]
Digital Literacy Practices	.116[*]	1

*. Correlation is significant at the 0.05 level (2-tailed).

Qualitative Findings

Q.1 Using ICT

Six student teachers from Group I and six student teachers from Group II responded that the teacher taught the lesson by using ICT in their college. Six student teachers from Group I responded that the teachers who taught Myanmar, English, Science and Educational Theory subjects were using ICT in their teaching. Six student teachers from Group II said that the teachers who taught English, Bio, Science and Chemistry subjects were using ICT in their teaching.

Three student teachers from Group I and two student teachers from Group II stated that students were interested in the lesson, gained knowledge, concentrated in the lesson, and created teaching aid in using ICT for teaching. Three student teachers from Group I and four student teachers from Group II responded that teacher explained clearly and students learned quickly by using ICT.

Q.2 Difficulties (using internet)

Two student teachers from Group I and four student teachers from Group II responded that someone can hack their accounts if someone knows their accounts and hence, they cannot be safe. They would be cyberbullied and abused in online.

Four student teachers from Group I and two student teachers from Group II stated that they bought the goods more from online shopping and faced the problem of health by using over screen time.

Q.3 Supporting

Six student teachers from Group I and six student teachers from Group II stated that they studied ICT course such as power point, excel, word, drawing, painting, typing, internet, data base and basic computer. Computer class opened in their College was supported by KMD and two Education Colleges had E-library and free Wi-Fi for the development of digital literacy.

Q.4 Power Point presentation

Six student teachers from Group I and six student teachers from Group II stated that students made power point presentation in group work. Two student teachers from Group I and three student teachers from Group II responded that they were more interested in the lesson when the teacher used color, audio, design and picture in PowerPoint presentation and they also collaborated with each other for making power point in group work.

Four student teachers from Group I and three student teachers from Group II responded that students gained knowledge and recognized it for a long time. And then they developed their presentation skill and can made power point on their own and they did not do more practices in

Excel application and did not use SPSS application. First year student teachers from Group I and II stated that they did not make power point presentation for teaching and learning.

Q.5 Using electronic teaching aid for teaching and learning

Six student teachers from Group I stated that the competition of electronic teaching aid was held in their College. They competed the electronic teaching aid competition team by team, class by class and year by year. Six student teachers from Group II stated that the electronic teaching aid competition was held in their College, but they competed the competition department by department only.

Three student teachers from Group I and two student teachers from Group II said that students were more interested in the lesson and could realize it. Three student teachers from Group I and four student teachers from Group II stated that they could actively participate in teaching and learning and could recognize for a long time.

Q.6 Using internet Wi-Fi

Six student teachers from Group I and six student teachers from Group II stated that the internet Wi-Fi was allowed to use in their colleges. Two student teachers from Group I and three student teachers from Group II stated that they searched data in google to write assignment, downloaded video and English song for English Language Teaching.

Four student teachers from Group I and three student teachers from Group II said that students found meaning and pictures by using mobile phone, students played online game, watched video in YouTube and sent message, picture and video with each other.

Q.7 Finding data

Three student teachers from Group I and four student teachers from Group II stated that students searched data in Google, Chrome, YouTube, Twitter, Browser, dictionary and Wikipedia to write assignment.

Three student teachers from Group I and two student teachers from Group II said that they searched the data in Library. Six student teachers from Group I and six student teachers from Group II stated that their teachers gave them the link for finding data and name of books and journals.

Q.8 Difficulties (using computer or mobile phone for teaching and learning)

Two student teachers from Group I and two student teachers from Group II stated that student used other applications, played online game and spent more time in using computer and mobile phone.

Two student teachers from Group II said that they used a computer only for two or more student teachers. Four student teachers from Group I and two student teachers from Group II stated that male student teachers had more computer experience and used computer more frequently them female student teachers. They also had a higher computer ability. Most of them had their own computers.

Q.9 Developing digital literacy skill

Two student teachers from Group II stated that their college opened computer training with the support of KMD. Two student teachers from Group I and two student teachers from Group II said that digital literacy and ICT talk was held by Computer Professionals Association in their college.

Four student teachers from Group I and two student teachers from Group II responded that they wanted to study 3 periods per week for computer class, did a big project for computer course and wanted to know about E-safety.

The Result of Documentation

Digital literacy of student teachers was observed from Yankin Education College and Mawlamyine Education College. It was found that there were student teachers' time-table, information and communication technology subject, student teachers' assignment and student teachers' teaching learning materials with ICT. There were two computer rooms and two computer teachers in their college. The college was held ICT talk by Computer Professionals Association and computer training. There are three Wi-Fi access in their college donated by The United Nations Educational, Scientific and Cultural Organization (UNESCO).

Discussion

Finding from analyzing the levels of digital literacy knowledge of student teachers indicated that 67% of the participant student teachers were at satisfactory level and 33% of those were at below satisfactory level of digital literacy knowledge. The qualitative finding revealed that most of student teachers find out data in Google, Chrome, YouTube, Twitter, Browser, dictionary and Wikipedia to write assignment. Thus, student teachers need to know how to search and which is secure website to find out information. McGuinness (2019) indicated that it was not excellent in digital literacy and experience of online learning. According to personal factors of student teachers, there was significantly differences in student teachers' digital literacy knowledge between Mawlamyine Education College and Yankin Education College. The qualitative finding also revealed that student teachers from Group II compete the competition of electronic teaching aid in department by department. Digital literacy and ICT talk held by Computer Professionals Association in Group II. Student teachers from Group II attend computer class that was supported by KMD. According to Joint Information Systems Committee (JISC) model (2014), Digital literacy on learning skills is to study and learn effectively in technology-rich environments, formal and informal.

According to research finding, it was found that student teachers seldom participated in making a specific list by using Excel, SPSS and making an effective presentation by using PowerPoint application. The qualitative finding revealed that student teachers make power point presentation for teaching and learning in group work. First year student teacher didn't make power point presentation for teaching and learning in Group I and II. They didn't more practices in Excel application and didn't use SPSS application. Ng (2015) stated that cognitive skills include the ability to evaluate and choose appropriate software with which to learn, the ability to critically search, evaluate, and ethically and legally use digital information and resources, and the ability to create and use multimodal content and information.

According to research finding, there was significant difference in student teachers' digital literacy knowledge between male and female. The qualitative finding also revealed that male students had more computer experience and use computer more frequently. Dhindsa and Shahrizal-Emran (2011) found that females are less confident in using technology and more anxious to use it for learning. According to research findings, Pearson correlation analyses expressed that student teachers' digital literacy knowledge is positively and weakly correlated with digital literacy practices.

Recommendations

1. Student teachers should get access to Wi-Fi connection in the entire college campus.
2. Student teachers should be encouraged to make PowerPoint presentation as assignment in first year.
3. Student teachers should be encouraged to use excel application in order that they can apply their knowledge in school when they are appointed as a teacher.
4. Student teachers should be encouraged to make electronic teaching aids one by one.
5. Student teachers should be given the knowledge about e-safety because they can share their knowledge with their pupils.
6. Student teachers should be provided with digital resources.
7. Student teachers should be encouraged to make project by using ICT.
8. Student teachers should be encouraged to use digital tools in communicating with each other.
9. Teacher educators should use digital tools in finding data, sharing knowledge and communicating with student teachers in teaching learning and everyday activities.
10. Teacher educators should integrate ICT with teaching subject and use digital tool in teaching and learning.
11. The principal should hold the ICT exhibition of student teachers' teaching learning materials and their activities.
12. ICT subject should be involved two or more periods per week and the course should be upgraded.
13. Student teachers should be encouraged to attend computer training which can support their teaching and learning activities.

Needs for Future Study

This study mainly analyzed student teachers' digital literacy knowledge and practices in education colleges. Further research should be designed for digital literacy knowledge and practices in teacher educators from education colleges and teacher educators' professional development activities using digital tools.

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A STUDY OF COLLABORATIVE SCHOOL CULTURE AND STUDENT ACHIEVEMENT

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Abstract

This research aimed to study collaborative school culture and student achievement in Basic Education High Schools, Thanphyuzayet Township, Mon State. The sample of the present study was composed of 230 teachers from eight different high schools from Thanphyuzayet Township, Mon State. For the data collection, the only instrument, collaborative school culture questionnaire was used. Quantitative and qualitative research method was used in this study. Collaborative school culture at Basic Education High Schools in this study was moderately strong according to the mean scores responses on the questionnaire items (mean=3.17, SD=.24). According to the results of One-way ANOVA, there were significant differences among schools in all six dimensions (F=3.44, $p<.01$, F=3.75, $p<.01$, F=8.81, $p<.001$, F=7.40, $p<.001$, F=8.22, $p<.001$, F=3.03, $p<.01$). According to the results of the Independent Samples *t* Test, there were significant differences in all six dimensions in terms of student achievement (*t*=-2.40, $p<.05$, *t*=-3.82, $p<.001$, *t*=-3.27, $p<.01$, *t*=-3.95, $p<.001$, *t*=-2.86, $p<.01$, *t*=-3.77, $p<.001$). Pearson product-moment correlation coefficient indicated that collaborative school culture was correlated with student academic achievement at (r=.309, $p<.01$).

Keyword: collaborative school culture, student achievement

Introduction

One of the strands of educational reform movements in the last two decades has been the call for greater collaborative efforts, both among educators as well as with parents, students and the surrounding community (Hargreaves, 1994, as cited in Horton Jr, 2018). The new wave of change in Myanmar led to creating the education system that shifts from the traditional teaching style to styles and behaviors that support collaborative cultures. In a school community, every member needs to strive for success and nurture a good work atmosphere where everyone cares and supports each other. School culture is based on the norms, values, and beliefs that are embraced by school members. When a school adopts a traditional culture, people lean toward isolation and refrain from working together collaboratively. Collaborative school cultures encourage teachers to work together and help them to learn from each other. A culture that supports continuous inquiry and shared practices to be positive for learning. As teachers are engaged in purposeful dialogue about student learning and school achievement within professional learning communities, a collaborative school culture may develop. Newmann and Wehlage (1995, as cited in Alqarqaz, 2014) assume that student achievement increases in a collaborative school culture which promotes a professional learning community among staff. In order to have a collaborative culture, schools should be guided by clear "visions and missions" (Maslowski, 2001, as cited in Alqarqaz, 2014). Schools with collaborative culture also foster relationships with parents and community members. Furthermore, collaborative school culture supports and emphasizes trusting relationships between teachers and parents (Gruenert, 2005).

Significance of the Study

Today's educators have more and more responsibility that goes beyond the classroom. Principals are encouraged to provide support for creating a caring culture, collaborative culture,

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and a more relaxing and stress-free school environment. School leaders should understand the concept of within each of the six collaborative school culture elements (collaborative leadership, teacher collaboration, professional development, collegial support, learning partnership, unity of purpose) and the importance of focusing on fostering an overall collaborative school culture. This wonderful resource will help school leaders learn how to understand, assess, and transform their school culture for ongoing success. While collaborative culture is currently being viewed as significant in leading the work of administrators, teachers, and students in school. This study attempts to investigate and describe the extent of the collaborative culture in government schools. In addition, it will be useful for school principals to understand their role in leading schools toward more positive, culture- collaborative schools. The findings of this study are important for all stakeholders, including policymakers in creating and improving collaborative culture in schools. Consequently, the findings and data could be used by schools to improve their culture for better achievement of students. This study will also review the benefits of a collaborative school culture, including reduced teacher isolation, social and emotional support, opportunities for professional development and learning, and closer ties with significant stakeholders, such as families and community organizations.

Aims of the Research

The main aim of this research is to study collaborative school culture and student achievement in Basic Education High Schools, Thanphyuzayet Township, Mon State.

Research Questions

This research deals with the following questions regarding the collaborative school culture and student achievement.

(1) To what extent does collaborative school culture exist at Basic Education High Schools in Thanphyuzayet Township, Mon State?

(2) What are the differences of collaborative school culture among schools?

(3) How does collaborative school culture differ at Basic Education High Schools in terms of student achievement?

(4) Is there any relationship between collaborative school culture and student achievement at Basic Education High Schools in Thanphyuzayet Township, Mon State?

Definition of Key Terms

- **Collaborative School Culture** - Collaborative school culture is characterized by teachers and administrators working together toward a common purpose. Members of the school community are actively engaged in collaboration activity, and collectively accepted the responsibility for student learning (Gruenert, 2005).

- **Student Achievement** – Student achievement refers to students scoring at or above the minimum level of proficiency as defined by a standardized test. It is a measure of knowledge gained in formal education usually indicated by test scores, grade point average and degrees (Bennett, 2001).

Operational Definitions

Collaborative school culture (CSC)

Collaborative school culture refers to a school environment created by a "leadership model that serves as the foundation for the coalition through whether principals valued teachers' ideas and involved them in decision-making that fosters an ethic of empowerment in the

organization and promotes mutual respect, trust, and innovative thinking". Teachers share strong educational values, work together to pursue professional development, and are committed to improve their work. It also includes members of the school community who work together effectively, and are guided by a common purpose.

Student Achievement

In this study, student achievement refers to the average pass rate in matriculation examination Grade 10 for three academic years of (2017-2019) in Thanphyuzayet Township. The average pass rate for three years (2017-2019) in Thanphyuzayet Township was 45.32%. The above average group included schools above 45.32% and below average group included schools below 45.32%.

Limitation of the Study

This study is limited to the selection of a sample of 230 teachers from eight schools as the scope of the study. Due to time constraints, this study is geographically limited to Thanphyuzayet Township, Mon State. This study does not cover the role of other stakeholders such as principals, teachers and parents in students' academic achievement because of time constraints.

Review of Related Literature

Definitions and Concepts of Collaborative School Culture

Collaborative school culture encourages school staff to share things voluntarily. Collaborative school culture is, in fact, a collective responsibility, which is also termed as "teachers' professional culture". In a collaborative school culture, members of the school concentrate on the collective interest for the sake of institution. It is the extent to which the teachers have a sense of responsibility to educate their students. Teachers have high expectations for students' learning and their own performance and professional development. In addition, members of the school are keeping shared beliefs about teaching and learning in the school environment (Alqarqaz, 2014).

Peter and Waterman (1982, as cited in Kelley, 2008) described collaborative school culture as an environment that helps to fulfill three basic human needs: elements of control, meaning in situation, and support. It results in high morale, commitment to teaching, and continuous professional development. It also strengthens the bonds between the school and other stakeholders of the school such as communities and teachers become less isolated.

Sanders and Epstein (2005) observed that the success of schools is heavily influenced by connections between school, family and community. They stated that 'students who receive support from home, family and community are triply benefitted, and are more likely to be academically successful than those who do not'. In collaborative school culture, teachers spontaneously choose and volunteer to work together without external force (Bland, 2012). In fact, a school without a collaborative culture would not accomplish high levels of student learning.

Importance of Collaborative School Culture

Collaboration plays an important role in the school change process. Education literature and studies provide crucial findings related to the vital role of collaboration in the school change process. A studied initiative was to improve student literacy using team (Richardson, 1996; Irwin & Farr, 2004, as cited in Alqarqaz, 2014). In yet another studied initiative, professional literature studied the increase of student achievement through collaborative teacher learning and professional development (Englert & Tarrant, 1995; Dufour et al., 2006, as cited in Alqarqaz, 2014). In each of

these categories of studies, successful school change was impossible without a high level of collaboration.

One of the reasons that researchers such as Hargreaves (1994, as cited in Horton Jr, 2018) encourages collaborative efforts among teachers is to reduce teacher isolation levels so that teachers can share professional practices and have occasion to observe each other in the classroom or discuss their work. The collaborative school culture is important and supports the notion that it helps develop relations among teachers, especially collegial support and trust, instructional improvement, improved student learning, and teacher satisfaction.

Deal and Peterson (1990, as cited in Alqarqaz, 2014) note that a collaborative school as a professional collaborative community. In this community, the school will have a clear vision. Teachers will value the interchange of ideas with colleagues. Strong values exist that support a safe and secure environment. In such an environment, teachers pursue a clear, shared purpose, engage in collaborative activity, and accept a collective responsibility for student learning. There are high expectations of everyone including teachers. There is a strong, however not rigid leadership. This culture also encourages teachers to work collaboratively with each other and with the administration to teach students, so they learn more.

A collaborative school environment was the best setting to improve student achievement. In addition, collaborative school culture helps students reach better achievement and skills and understanding than traditionally organized schools. Collaborative culture and collaborative leadership play important roles in raising teacher satisfaction, as they provide professional stimulation (Telford, 1996).

Characteristics of Collaborative School Culture

Blankstein (2004) states that school cultures that supported collaboration had the following characteristics in common:

- The staff is committed to a shared mission, vision, values, and goals, and recognizes its responsibility to work together to accomplish them
- The functioning of teams is frequently discussed and reassessed
- A plan is developed to provide meaningful time for teams to meet
- Each team has clear purposes and goals
- Educators acquire and share training in effective teamwork strategies
- Strong leaders engage teachers in meaningful collaboration and support their activities and decisions
- The school is characterized by a culture of trust and respect that permits open and willing sharing of ideas and respect for different approaches and teaching styles
- The staff has real authority to make decisions about teaching and learning
- Meetings are well managed and truly democratic, following established protocols for setting the agenda and making decisions

Professional Learning Communities and Collaborative School Culture

In almost all schools, collaborative school culture elements can be found in two main collaboration forms. These are formal and informal collaboration. It can be generalized that any school has specific elements from both forms. One of the structured forms is called Professional Learning community (PLC) model. PLC is one structured model for creating collaborative school culture. Since the PLC model creates collaborative school culture, providing sufficient time for

teachers to collaborate is essential for creating collaborative school culture (Alqarqaz, 2014). One of the characteristics of PLC is reflective dialogue that leads to "extensive and continuing conversations among teachers about curriculum, instruction, and student development." PLC can have an extended learning opportunity to foster collaborative learning among colleagues within a particular work environment (Newmann et al., 1996, as cited in Vescio, Ross & Adams, 2006).

PLCs also provides understandings about the situation-specific setting in which principals' and teachers' work. PLCs offer promise by providing a structure that strategically unifies people, time and resources. PLCs can also build overall capacity and engender trust among participants. Interaction among educators can also lead to collaborative efforts of a special kind, known as 'professional learning communities' or 'teacher learning communities' McLaughlin and Talbert (2001, as cited in Dickerson, 2011)

The implementation of professional learning communities allowed for sufficient time for teachers to collaborate. McLaughlin and Talbert (2001, as cited in Dickerson, 2011, p. 26) claimed that "teachers' joint efforts to generate new knowledge of practice and their mutual support of each other professional growth". Eaker et al., (2002) assert that teacher isolation is replaced with collaborative processes that are deeply embedded into the daily life of the school. Teachers are now working together for the instructional good of the organization.

Changing School Culture

Schools, like other organizations, strongly resist changes to the deeply held beliefs, practices and norms that determine 'the way we do things around here' (Deal & Kennedy, 1982; Schein, 2004, as cited in Dickerson, 2011).

Needless to say, transforming the culture of a school involves more than the introduction of a new program or structure. Teachers and support staff may become anxious about their ability to adapt to new practices and learn new skills. There are no simple answers regarding how a school develops a collaborative culture. Moreover, it is likely that the particulars regarding such change vary depending on the context of a given school (Waldron & Mcleskey, 2010). Thus, school leaders seeking to shape school culture must first have a firm grasp of the current culture and its core values, including understanding the environmental context and its stage of development. They must provide the resources and structures necessary to support the desired culture, as well as 'fashion a positive context' for change.

The outcomes of re-culturing are demonstrated through new forms of interaction and professionalism surrounding activities such as joint problem solving, data sharing and analysis, shared decision making, and distributed leadership. These collaborative activities result in added value by generating multiple solutions to complex problems and by providing opportunities to learn from others as school professionals express and share expertise. When these endeavors are part of a school change initiative, research has revealed that such a collaborative culture or community leads to higher levels of trust and respect among colleagues, improved professional satisfaction, change that is maintained over time (Waldron & Mcleskey, 2010).

Methodology

Research design

In this study, a descriptive research design was used. Data were collected through questionnaire. A questionnaire survey was used in quantitative method, and open-ended questions and interviews were also used in qualitative method to study collaborative school culture and student achievement.

Sample

In order to obtain a representative sample, public high schools were selected using a simple random sampling method. Participants were 230 teachers, comprising primary teachers, junior teachers and senior teachers from selected eight Basic Education High Schools, for quantitative study. For the interview questions, 20 teachers from the highest and lowest mean value schools were selected to know the difference between these two schools of collaborative practices, and 8 principals were selected to respond to the open-ended questions for qualitative study.

Research Instrument

A set of questionnaire to collect the required data was developed and made necessary changes based on a modified version of the School Culture Survey- Teacher Form (SCS-TF) - survey instrument developed by Gruenert (2005). It was composed of six dimensions: collaborative leadership, teacher collaboration, professional development, collegial support, unity of purpose and learning partnership. It contains 23 items for collaborative leadership, 8 items for teacher collaboration, 10 items for professional development, 8 items for collegial support, 7 items for unity of purpose and 9 items for learning partnership. All the 65 items included in this questionnaire were rated in four point Likert scale ranging from 1 = strongly disagree, 2 = disagree, 3 = agree and 4 = strongly agree. The opened-ended questions were also included in this questionnaire.

Validity and Reliability

The questionnaire was developed under the advice and guidance of the supervisor. For the validation of the research instrument, it was reviewed by twelve experts who have special knowledge and experience in the field of this study from Department of Educational Theory, Yangon University of Education. Modifications were made under the supervision of the supervisor.

Cronbach's alpha was used to measure the reliability of the questionnaire. The total reliability coefficient for collaborative school culture is 0.86.

Procedure

First, the relevant literature was explored. Next, to find out the required data, the instrument was conducted under the guidance of the supervisor and co-supervisor. After modifying the instrument, pilot testing was conducted with a sample of 60 teachers from No (2) Basic Education High School, Mudon Township, Mon State in the 2nd week of September 2019. After testing the pilot, the necessary changes were made under the guidance of the supervisor. The modified questionnaire was then distributed to eight selected Basic Education High Schools in Thanphyuzayet Township in September 25, 2019. The required data were collected after two weeks. The valid response rate was 100%.

Data Analysis

The data collected from the questionnaires were systematically analyzed by using SPSS (Statistical Package for the Social Science) software version 25. Descriptive analysis was used to compute means and standard deviations of collaborative school culture. Independent samples *t* Test was used to compare means and to find out whether there is any difference between teachers' perceptions on collaborative school culture in terms of student achievement such as above average group and below average group. ANOVA was used to compare the means between schools. In order to know whether there is any difference between schools, Games-Howell post hoc test was

used. Finally, Pearson correlation was used to identify whether there were significant relationships between collaborative school culture and student achievement.

In qualitative analysis, the required data was obtained by answering open-ended questions and interview questions to compare the quantitative analysis that focuses on numbers and qualitative analysis that focuses on words. The answers to open-ended questions and interview procedures were analyzed using knowledge from reviewing related literature, preparing and reading line by line, coding the importance categories, and categorizing and organizing the data. Finally, the interpretation and summarization of the findings were also conducted to draw the conclusions.

Findings

Quantitative Findings

1. Findings for Teachers' Perceptions of Collaborative School Culture

The descriptive results of teachers were shown in the following tables for each dimension in Basic Education High Schools in Thanphyuzayet Township, Mon State.

Generally, the mean value of collaborative school culture (3.17) indicates that teachers' perceptions of collaborative school culture were moderately strong.

Table 1 Mean Values and Standard Deviations of Teachers' Perceptions of Collaborative School Culture   (N=230)

No.	Dimensions	Mean	SD
1	Collaborative Leadership	3.20	0.25
2	Teacher Collaboration	3.09	0.27
3	Professional Development	3.22	0.30
4	Collegial Support	3.24	0.37
5	Unity of Purpose	3.16	0.34
6	Learning Partnership	3.08	0.26
	Overall Collaborative School Culture	3.17	0.24

2. Findings for Collaborative School Culture Among Schools

Table 2 Comparison of Overall Mean Values and Standard Deviations of Teacher's Perceptions of Collaborative School Culture Among Schools

No.	Schools	N	Mean	SD
1	School A	43	**3.32**	0.29
2	School B	11	3.22	0.23
3	School C	29	3.16	0.16
4	School D	25	3.12	0.13
5	School E	68	3.10	0.24
6	School F	18	**3.34**	0.21
7	School G	21	3.07	0.13
8	School H	15	3.08	0.14

According to Table 2, the results revealed that the extent of collaborative school culture was the highest in school F while the lowest in the school G. Among eight schools, the collaborative school culture of school A and school F was found that strong culture and other schools such as school B, C, D, E, G and H were moderately strong.

Table 3 The ANOVA Results of Teachers' Perceptions of Collaborative School Culture Among Schools   (N=230)

No.	Dimensions		Sum of Squares	*df*	Mean Square	F	*p*
1	Collaborative Leadership	Between Groups	1.44	2	.21	3.44	.002**
		Within Groups	13.29	227	.06		
		Total	14.73	229			
2	Teacher Collaboration	Between Groups	1.72	2	.25	3.75	.001**
		Within Groups	14.55	227	.07		
		Total	16.27	229			
3	Professional Development	Between Groups	4.44	2	.63	8.81	.000***
		Within Groups	15.99	227	.07		
		Total	20.43	229			
4	Collegial Support	Between Groups	6.08	2	.87	7.40	.000***
		Within Groups	26.06	227	.12		
		Total	32.14	229			
5	Unity of Purpose	Between Groups	5.49	2	.79	8.22	.000***
		Within Groups	21.20	227	.10		
		Total	26.69	229			
6	Learning Partnership	Between Groups	1.32	2	.19	3.03	.005**
		Within Groups	13.83	227	.06		
		Total	15.15	229			
	Overall	Between Groups	2.18	7	.31	6.53	.000***
		Within Groups	10.57	222	.05		
		Total	12.75	229			

*$p< .05$,**$p< .01$,***$p< .001$ at significant level

Table 3 shows the ANOVA results for the collaborative school culture among schools. According to Table 3, there were significant differences between all dimensions among eight schools.

In order to know which specific means are different from which other ones, Games- Howell post hoc test was used as suggested by Field (2013), as the assumption of homogeneity of variances was violated.

**Table 4   Games-Howell Results of Teachers' Perceptions of Collaborative School Culture
Among Schools**   **(N=230)**

No.	Dimensions	(I) Schools	(J) Schools	Mean Difference (I-J)	p
1	Collaborative Leadership	School A	School G	0.25*	.001**
			School H	0.20*	.010*
		School F	School G	0.21*	.001**
			School H	0.16*	.011*
2	Teacher Collaboration	School F	School D	0.18*	.009**
			School E	0.18*	.010*
3	Professional Development	School A	School D	0.21*	.025*
			School E	0.24*	.004**
			School G	0.23*	.010*
			School H	0.27*	.015*
		School F	School C	0.36*	.016*
			School D	0.39*	.005**
			School E	0.42*	.002**
			School G	0.42*	.003**
			School H	0.46*	.002**
4	Collegial Support	School A	School C	0.29*	.014*
			School D	0.27*	.047*
			School E	0.38*	.000***
			School G	0.32*	.020*
			School H	0.39*	.001**
5	Unity of Purpose	School A	School C	0.31*	.001**
			School D	0.33*	.002**
			School E	0.30*	.001**
			School G	0.37*	.000***
			School H	0.28*	.018*
		School F	School G	0.48*	.030*
	Overall	School A	School D	0.20*	.006**
			School E	0.22*	.003**
			School G	0.24*	.001**
			School H	0.24*	.003**
		School F	School D	0.22*	.013*
			School E	0.24*	.007**
			School G	0.26*	.002**
			School H	0.26*	.006**

*$p<$ .05,**$p<$ .01,***$p<$ .001 at significant level

Games-Howell post hoc test indicates that there were significant differences in collaborative leadership, teacher collaboration, professional development, collegial support, and unity of purpose. However, no significant differences were found in only one dimension as "learning partnership" among the schools.

3. Findings for Collaborative School Culture in terms of Student Achievement

To measure the collaborative school culture in terms of student achievement, the average matriculation pass rate of three consecutive years in the selected eight Basic Education High Schools of Thanphyuzayet Township were classified into two groups in which the schools with

above average group included School A, B and C, and the schools with below average group included School D, E, F, G and H according to the average pass rates in Thanphyuzayet Township.

Table 5 Mean Values and Standard Deviations of Teachers' Perceptions of Collaborative School Culture in terms of Student Achievement

No.	Dimensions	(Mean/SD)	
		Above average group (N=83)	Below average group (N=147)
1	Collaborative Leadership	3.25 (0.28)	3.17 (0.24)
2	Teacher Collaboration	3.17 (0.32)	3.04 (0.21)
3	Professional Development	3.30 (0.31)	3.17 (0.28)
4	Collegial Support	3.36 (0.41)	3.17 (0.34)
5	Unity of Purpose	3.24 (0.35)	3.11 (0.33)
6	Learning Partnership	3.16 (0.33)	3.03 (0.19)
	Overall	3.25 (0.25)	3.13 (0.22)

*$p < .05$, **$p < .01$,***$p < .001$ at significant level

According to Table 5, the higher academic achieving schools had more collaborative school culture than the lower academic achieving schools.

4. Findings for the Relationship between Collaborative School Culture and Student Achievement

The main aim of this study is to examine the relationship between collaborative school culture and student achievement. The correlation between collaborative school culture and student achievement is shown in Table 6.

According to Table 6, it can be interpreted that there was a low positive relationship between collaborative school culture and student achievement ($r = .309$, $p < .01$) for this study.

Table 6 Correlation between Collaborative School Culture and Student Achievement

Dimensions		Collaborative School Culture	Student Achievement
Collaborative School Culture	Correlation Coefficient Sig. (2-tailed)	1	.309** .000
Student Achievement	Correlation Coefficient Sig. (2-tailed)	.309** .000	1

Summary of Qualitative Findings

As the qualitative research findings result, the principal facilitates collaboration rather than leading every group and takes teachers' opinions about school activities and processes. However, most of the teachers, especially the teachers from both the highest mean value school and the lowest mean value school, got more opportunities to participate in the decision-making process so the principals should be given an equal chance for it. Furthermore, the school vision stated very clearly how the purpose should be implemented but some other teachers are not well aware of the purpose of the school. These teachers need to be told how to go about implementing the school vision.

Concerning creating opportunities for professional growth of the teachers, the principals give the opportunities to teachers to plan together, observe one another and re-plan for further improvements. It was observed that teachers from the lowest mean value school in school-based

programs do not have any opportunities to improve their teaching performances through their colleagues. In their school, there is only the Continuous Professional Development (CPD) program organized by Department of Basic Education under the Ministry of Education and it has been implemented at the beginning of this academic year (2019-2020).

It was also found that the senior teachers from both schools less focused on collaboration to exchange their experiences and ultimately contribute to the overall success of teachers in their teaching. However, other almost all teachers in the whole school regularly collaborate and conduct the organizational learning of the school for their professional development. Similarly, all teachers always support each other in planning the lesson, sharing resources and giving necessary advice on a daily basis, but they take place in informally. In fact, some teachers had excellent attitude toward school development.

Furthermore, the relationship between principals, teachers, parents and community members is still needed for improving the success of the school because of the parents and community members from low achieving school do not want to come to school at the time of parent's meeting. Moreover, there are many reasons for that such as lack of time from the parent side to follow up on their children's education because most households came from migrant families and the Government salt scheme, and then the education level of the parents. Likewise, in high achieving schools, the principals and teachers encourage the parents to support their children but the involvement of the parents' side needed to be more. It has been found that this relationship depends on the parents' attitudes and their educational levels and their socioeconomic status. Nevertheless, in our study, these factors are not considered.

Discussion and Conclusion

Based on the analysis of the survey, the following discussion and conclusion were drawn to be more effective collaborative school culture and to improve student academic achievement in Basic Education High Schools in Thanphyuzayet Township, Mon State.

According to the descriptive analysis, it was observed that there is an agreement among teachers that collaborative school culture dimensions such as collaborative leadership, teacher collaboration, professional development, collegial support, unity of purpose and learning partnership which are available in their schools to a moderately high degree. So, it can be concluded that those schools had collaborative school culture that supported teacher, parent, and student relationships and supported all parties to work together to improve school performance and student achievement. However, this study reveals that collaboration among teachers in all schools was at its highest rate, especially within the same subject. According to the quantitative and qualitative research finding, it can be concluded that collaboration among teachers is neither isolated nor they work as a whole-school, but they collaborated within smaller groups. Schools need to be making teams from different subjects to encourage cross-curricular collaboration

When analyzing, there were significant differences between schools on collaborative culture, especially School A and School F are the most significant differences in collaborative school culture. By the overall mean values, the results also revealed that the extent of collaborative school culture is the highest in School A and School F. The fundamental idea here is that different collaborative tasks include different extents of collaboration (Hu, 2006). Thus, the influence of the principal could be the main factor behind the differing measurements of collaborative school culture between schools. Furthermore, principals can establish collaborative relationships with teachers; teachers exchange their experiences, challenges and solutions and ensure that all the students are actively engaged in classroom activities.

The selected schools from Thanphyuzayet Township were divided into two groups based on the matriculation average pass rate of the previous three years of 2017 to 2019. According to the total mean values for teachers' perceptions on collaborative school culture in terms of student achievement, the high achieving schools whose pass rate were above average matriculation pass rate have higher mean values (mean= 3.25) than low achieving schools whose pass rate were below average matriculation pass rate (mean= 3.13) in collaborative school culture. It can be interpreted that the teachers from the first group perceived that their schools possessed more collaborative school culture, meaning high achieving schools have a more collaborative school culture. The results of independent samples *t* Test analysis indicated that there were significant differences of collaborative school culture between schools in each respective group. It can be concluded that all schools of teachers' perceptions toward collaborative school culture may differ. Teachers who are engaged and have a high degree of collaboration have greater student achievement in their schools (Goddard et al., 2007; Goddard et al., 2010, as cited in Horton Jr, 2018). All principals should always encourage the teachers to collaborate with their colleagues to be continued effective student achievement in schools.

There was a significantly positive correlation between collaborative school culture and student achievement. This finding is consistent with those of earlier studies by Gruenert (2005) that concludes that collaborative school cultures are the best setting for high levels of student achievement. Similarly, the study conducted by Horton Jr (2018) suggests that principals can enhance the achievement of the student indirectly and directly through creating a strong positive school culture. The literature has suggested that the six dimensions of collaborative school culture were important. Teachers cannot be responsive to all of the students' needs without the assistance and support of their colleagues, administrators, and community. A collaborative school culture provides a platform for teachers and principals that is conducive to sharing and learning together.

Recommendations

Teachers should have mutual respect, collaborative and supportive attitudes in relationship with principals, colleagues, parents, and students. Parent involvement can be an important factor for improving student achievement. Partnerships with parents should be improved through various methods. First, regular meetings with parents can help identify the concept of collaboration, discuss the role of parents and encourage parents to work with the school, especially teachers. Second, the media should be involved in raising the awareness of the important role of parents and to encourage parents to participate in the school affairs through an awareness program.

Teachers also should have mutual trust and friendly relationship with their colleagues. Schools should provide enough time for teachers to plan together, observe and discuss teaching practices designed to improve student performance, create applicable teaching materials; to establish monthly meetings between teachers to collaborate and make teams from different subjects to encourage cross-curricular collaboration. Finally, principals should create conditions that enhance the operation of collaborative school culture such as trust, openness, and involving teachers in decision-making, especially in teaching practices. Principals need to set up the master schedule and reflect collaborative planning time for teachers. This collaborative planning time needs to focus on what needs to be done in order to increase student achievement. Principals need to assess the current state of school culture prior to making any major changes. The prominent role of the principal is to stimulate colleagues' professional learning communities and create working teams to improve the quality of the student and the school. In addition, continued professional development activities should be provided to help principals to update their knowledge of collaborative school culture.

Suggestions for Future Research

- Further research could be conducted to assess collaborative school culture, taking all stakeholders' viewpoints into account, and especially parents' perspective.

- Leadership styles are very important for collaborative school culture. Principals' leadership styles that could facilitate or hinder building collaborative school culture should be investigated.

- A study could be conducted to link the collaborative school culture with teachers' job satisfaction.

- A study should be conducted about teachers' feeling of changing school culture and their willingness to create collaborative school culture.

- Other studies could be conducted to consider how the collaborative school culture is affected by some factors such as teachers' experiences, teachers' educational backgrounds, parents' educational levels, etc.

- Finally, since the research included only 8 schools for analysis, further research should be conducted with a larger, more diverse sample to improve the generalizability of the results.

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RELATIONSHIP BETWEEN TEACHERS' WORK-AUTONOMY AND THEIR PROFESSIONAL COMPETENCES

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Abstract

The focus of this study is to study the relationship between teachers' work-autonomy and their professional competences at Basic Education High Schools in Tamwe Township, Yangon Region. The specific aims are to investigate teachers' work-autonomy, to investigate their professional competences and to study the relationship between teachers' work-autonomy and their professional competences. Quantitative and qualitative methods were used in this study. The participants of this study consisted of 150 teachers. Instrument was reviewed by a panel of experts. The Cronbach's alpha of the whole scale of teachers' work-autonomy and their professional competences was 0.82. Descriptive statistics, one-way ANOVA and independent samples t test were used to analyze the data in this study. The result found mean value of teachers' work-autonomy was 2.99. So, the level of teachers' work-autonomy was moderate level. Mean value of their professional competences was 3.04. The level of their professional competences was moderate level. Therewere strong correlation between teachers' work-autonomy and their professional competences r=.649. It was found that there were statistically significant and positive relationship teachers' work-autonomy and their professional competences. This research suggests that one way to increase teachers' level of professional competences by enhancing teachers' degree of autonomy at schools. School principals should consider decentralizing the power of decision making at school and accommodate teachers to participate autonomously in school activities both in the classroom area and the school wide area.

Keywords: Teachers' professional competences (TPC), Teachers' work-autonomy (TWA)

Introduction

Education can shape the attitudes, behavior and values of citizens and can offer opportunities for change that will improve equity and quality of education. The highest quality of education requires the teachers having the highest quality and skills in teaching. Teachers' competences have been broadening with respect to reform studies in education, development of teacher education, scientific results of educational science and other fields (Friedman, 1999). Teachers' work-autonomy (TWA) means to bring the bright future to the school. By increasing teachers' work-autonomy (TWA), teachers will feel very passionate in working as the result; they will work very creatively and independently (Blasé and Kirby, 2009). A teacher has two works in school; academic and administrative (Bjork, 2004). When teacher possesses the power to make decision in schools, teachers will make a decision that directly contributes to students' needs in solving their difficultly and improving their ability. Teacher competence indicates the quality of education in a country. Teacher competences deal with pedagogical skill, personal skill and professional skill (Blasé and Kirby, 2009). Teachers must have to work with others learners and teachers, work with knowledge, technology and information and work with and in society (Caena, 2011). This study will investigate teachers' work-autonomy (TWA) and teachers' professional competences (TPC) to provide information for school communities related to teachers' personal and professional aspects, building, understanding and awareness of promoting decentralization in school academic and administrative activities. Moreover, it aims to support the cooperation between school administrators and teachers in developing efficient school activities.

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Aims of the Study

The main aim of the study is to study the relationship between teachers' work- autonomy (TWA) and their   professional competences (TPC). The specific aims of the study are to investigate the levels of teachers' work-autonomy (TWA) in Basic Education High Schools in Tamwe Township, to investigate the levels of teachers' work-autonomy (TWA) according to principals' current services in school and teachers' personal factors, to investigate the extent of teachers' professional competences (TPC) in Basic Education High Schools in Tamwe Township, to investigate the extent of teachers' professional competences (TPC) according to principals' current services in school and teachers' personal factors and to study the relationship between teachers' work- autonomy (TWA) and their professional competences (TPC) in Basic Education High Schools in Tamwe Township.

Research Questions

This study seeks to answer the following questions:

1. What are the levels of teachers' work-autonomy (TWA) in Basic Education High Schools in Tamwe Township?
2. What are the levels of teachers' work-autonomy (TWA) according to principals' current services in school and teachers' personal factors?
3. To what extent do teachers possess professional competences (TPC) in Basic Education High Schools in Tamwe Township?
4. To what extent do teachers possess professional competences (TPC) according to principals' current services in school and teachers' personal factors?
5. Are there any relationship between teachers' work-autonomy (TWA) and their professional competences (TPC)?

Limitation of the Study

The total participants for this study are selected teachers currently employed by basic education high schools in Tamwe Township, Yangon Region.

Theoretical Framework

This implies that teachers' work-autonomy and their professional competences are important phenomenon for all schools in any country. The following theoretical framework leads to the research work.

Teachers' Work-Autonomy (TWA)

Friedman (1999) indicated that four areas of functioning were pertinent to teachers' sense of autonomy at work (1) class teaching (2) school mode of operating (3) staff development and (4) curriculum development. According to Strong (2012) and Fachrurrazi (2017) stated that there are four variables of teachers' work-autonomy (TWA). They are (1) curriculum development (2) professional development (3) school mode of operating and (4) teaching and assessment. Therefore, this study is implied the following theoretical framework leads to the teachers' work-autonomy (TWA).

Curriculum Development

According to Strong (2012), teachers have autonomy in developing the curriculum in order to fit teachers' and students' need in a study planning. Teachers have to control the curriculum. Teachers may take decisions based on an individual's consideration or a discussion with students

in deciding how to develop the curriculum. Teachers may add extra curriculum activities to a standard curriculum to fit student and teacher need. Teachers also may modify and make some innovations into the curriculum by initiating new enrichments or cultural activities onto the curriculum. Teachers may have liberty in delivering a curriculum and have a knack for how they communicate with parents.

Teachers can play an effective role in defining and implementing the curriculum. This entails understanding and participating in the curriculum development process, taking on new roles as advisors, facilitators and curriculum developers. Teachers know their students better than others involved in the curriculum process. Teachers from multiple grade levels may collaborate to identify skills that students need at each level and ensure that the curriculum adequately prepares students to advance to the next grade-level.

According to Rudolph (2006), teachers are leaders in charge when discussing and making decision in the curriculum. Teachers may develop the new curriculum by adding an old element of curriculum that they think significant to be implemented. Teachers may compose new materials for their students in future classroom activities. Teachers may add or delete any teaching subject from the official curriculum.

Staff Development

According to Luthfi (1984, cited in Fachrurrani, 2017), teachers have an exclusive expertise which is different from other professions; teachers' skills are obtained by special training. Teachers' works are based on educational theories and standard operational procedure of the profession. The professional development undertaken by teachers most commonly consisted of informal dialogue to improve teaching, specified courses and workshops, and reading professional literature (OECD, 2009).

Friedman (1999) indicates that teachers decide on the location and timetable for their in-service training courses and determine their own enrichment general education.

Conners (1990) investigates the professional development is defined as process and activities designed to enhance the professional knowledge, skill, and attitudes of educators so that might, in turn, improve the learning of students.

Fullan (1991) expands the definition to include "the sum total of formal and informal learning experiences throughout one's career from pre-service teacher education to retirement."

New Jersey department of education (2013) indicated professional development shall be comprised of professional learning opportunities aligned with student learning and educator development needs and school, district, and / or state improvement goals.

Professional development shall have as its primary focus the improvement of teachers' and school leaders' effectiveness in assisting all students. Professional development shall include the work of established collaborative teams of teachers, school leaders, and other administrative, instructional, and educational services staff members who commit to working together to accomplish common goals and who are engaged in a continuous cycle of professional improvement focusing on: evaluating student learning needs through ongoing reviews of data on student performance and defining a clear set of educator learning goals based on the analysis of these data.

School Mode of Operating

Friedman (1999) stated that teachers have performed several tasks indicates to their greater involvement in organizational activity of school. Teachers' tasks deal with issues such budget,

finance and inadequate activity of school. Teachers and staffs have a power to make decisions to discuss budgets, to think about school resources to influence financial issues.

Strong (2012) stated that students' behavior is an area of teacher autonomy where teachers actually have a power to arrange students' behaviors. Teachers will initiate a standard norm and behavior to be implemented in daily classroom activities. All classrooms members should obey the whole standard classroom operating. Teachers may have lack of restrictions in applying classrooms operation.

Elmore (1987) stated the classroom behavior is area of teacher autonomy where teacher can choose appropriate attitudes to be applied in classrooms. Teachers will choose and decide how to behave in classrooms for teachers and students. Teachers will take responsibility if any unwanted situation emerges. They are trained to be experts of classrooms procedures and should possess the decision making ability related to what they can do best.

Eidelman (2015) stated in Mosaica Education, the ultimate goal and the foundation for everything must do in educational excellence. They are financial services, marketing, public relations and communications, human resources, facilities and technology.

Teaching and Assessment

Strong (2012) stated teachers understood students' personal, psychological and scholastic necessity due to teacher mains responsibility to enhance students' capacity building. Teachers achieve thoughtful understanding of students' personal, psychological and scholastic needs. Teachers create a good relationship between teachers and students and between students and students in order to meet students' psychological achievements. Teachers apply standardized teaching method to optimizing students' capacity. They counsel an assessment technique in order to solve problems related to students' discipline and inappropriate manners. Teachers know how to motivate students. Teachers are really creative with the projects they contrive for their students. Others are fantastic at getting their students to engage in thoughtful conversations. Teachers are able to select and decide materials for classrooms' teaching learning process. They take decision related to classrooms' physical environment. They can decide without any personal consent to reward students who has an individual improvement and achievements. Teachers will decide on classrooms' procedure.

According to Tamir (1986 cited in Strong, 2012), all the curriculum is implemented by teachers and depends on the quality of teaching and learning strategies, learning materials and assessment. A teacher can provide insight into the types of materials, activities and specific skills that need to be included in implementing the curriculum. Teachers own interest, ability and competence to teach the curriculum i.e. confidence in teaching, attitudes and freeness to teach the subject.

Teachers described desire for more autonomy in their curriculum, assessment and the pace or schedule of curricular content. Teachers appear to have comprehensive freedom once their classroom doors are closed, have demanded additional autonomy over the classroom aspects as instructional decisions and student activities (Blasé and Kirby, 2009).

Friedman (1999) stated that assessment is an area of autonomy for teachers. Teachers can choose an appropriate way of assessment in assessing students' achievement. They will decide some practical technique for students' progress assessment. Teachers will decide on testing and scoring criteria of students' assessment process.

Luthfi (1984 cited in Friedman, 2012) stated that with a skill of diagnostic, teachers are able to identify problems to the students and provide a best solution. Teachers can provide thousand

solutions for thousands of students. A teacher is a profession with a special gift in helping the need by providing the best way out.

Teachers' Professional Competences (TPC)

Niemi (2012) indicated that five areas of functioning were pertinent to teachers' professional competences (1) cooperation (2) diversity of pupils and preparing them for future (3) teachers' own professional learning (4) designing own instruction (5) ethical commitment in teaching profession. Therefore, this study is implied the following theoretical framework leads to the teacher's professional competences (TPC).

Cooperation

Niemi (2012) stated that teachers have to work with others learners and teachers, work with knowledge, technology and information and work with in society. Teacher can manage the classroom interaction, the evaluating grading of student, management of tasks outside of classroom, working with school community and cooperating with students. When teachers collaborate, the interests, backgrounds and strengths of each teacher can contribute to a project. Teachers draw support from each another and delegate tasks that allow each teacher to feel effective. Collaboration between teachers contributes to school improvement and student success.

Brown (2016) stated teachers demonstrate how to work together with others to reach a common purpose and share age-appropriate responsibilities enables children to learn how to work together to reach a goal. Teachers play games to encourage teamwork (activities like playing games together in teams), teachers clean up together, or simply building puzzles together enables children to learn how to work together. Teachers teach them how to problem solve and learn how to overcome challenges together. Teachers help children to learn how to identify a problem and think about different ways to solve that problem. And encourage them to try out solutions. Teachers recognize that cooperation is working together to reach a common goal. Parents must allow some choice in the matter while still working with the children to meet the end goal. Teachers use specific praise when observing the children cooperating. Teachers praise them for working together. Teachers try to be as specific as possible explain how the child demonstrated cooperation.

Diversity of Pupils and Preparing them for Future

Luthfi (1984 cited in Friedman, 2012) stated that teachers own diagnostic skills that allow them to apply very applicative theories based on needs of students. Specific students have typical problems with a skill of diagnostic teachers are able to identify specific problems to the students and provide a best solution accordingly. Teachers can provide thousands of solutions for thousands of students.

Strong (2012) stated that teachers' power in developing professionalism of students and in building teachers' personal professionalism. Teachers can select a location and a schedule for their in service trainings. Teachers can choose topic and subjects for the training and able to appoint instructors for their capacity building sessions.

Niemi (2012) stated that teachers have different kinds of teaching, provide and prepare readiness for students for their daily life, promote equity of sexes, comfort the multiculturalism, ready for media education and develop applications of modern information technology.

Teachers' Own Professional Learning

The European Commission (2007) has emphasized that teachers' trust have competence to work multicultural settings including an understanding of the value of diversity and respect for differences. Teachers have a responsibility to develop new knowledge about education and

training. In the context of autonomous lifelong learning, their professional development implies the teachers. They are teachers continue to reflect on their practices in a systematic way. They undertake classroom-based research. They incorporate the results of classroom and academic research into their teaching. They evaluate the effectiveness of their teaching strategies and amend them accordingly and they assess their training needs themselves.

Niemi (2012) stated that teachers try to develop school curriculum and work as a change agent in a society. Teachers try to cooperative action research and revise students' learning environments. Teachers have self-regulated learning and research for their own work.

Bray (2007) stated the personal professional learning plans, educator competences, coaching and make own playlist are the most important for teachers' own professional learning.

Designing Own Instruction

Niemi (2012) stated teachers use teaching method and self-evaluating of own-teaching. They can design instruction. They can independent management of teachers' tasks. They have mastered their academic contents of curriculum.

According to Gustafson (1996 cited in Fachrurrazi, 2017), instructional design is analyzing what is to be taught/learned; determining how it is to be taught/learned; conducting tryout and revision; and assessing whether learners do learn.

Reiser and Dick (1996 cited in Fachrurrazi, 2017) stated that effective instruction that enables students to acquire specified skills, knowledge, and attitudes. According to Fachrurrazi (2017) stated teachers begin the planning process by clearly identifying the general goals and specific objectives students will be expected to attain, they plan instructional activities that are intended to help students attain those objectives, they develop assessment instruments that measure attainment of those objectives and they revise instruction in light of student performance on each objective and student attitudes towards instructional activities.

Barile (2011) proved student-centered discussions, making connections, increased autonomy, building relationships and a focus on literacy to be extremely effective in classroom for teachers.

Ethical Commitments in Teaching Profession

Niemi (2012) stated education of a student's whole personality. Teachers have the development of own educational philosophy. They can confront changing circumstances of a school. They commit teaching profession. They have lifelong growth and they support a learner's individual growth. The three main obligations of the teaching learning process are obligations towards students, obligations towards parents, community and society, obligations towards the profession and colleagues.

Teacher treats all students with love and affection, respects the value of being just and impartial to all students irrespective of their religion, sex, economic status, disability, language and place of birth, facilitates students' physical, social, intellectual, emotional, and moral development, makes planned and systematic efforts to facilitate the child to actualize her potential and talent. Teacher establishes a relationship of trust with parents/guardians in the interest of all round development of students.

Teacher creates a culture that encourages purposeful collaboration and dialogue among colleagues and stakeholders, takes pride in the teaching profession and treats other members of the profession with respect and dignity, refrains from accepting any gift, or favor that might impair or

appear to influence professional decisions or actions, respects the professional standing and opinions of her colleagues.

Key Terms

Teachers' professional competences(TPC): Teachers' professional competences (TPC) are designing own instruction, cooperation_ teachers working with others, ethical commitment in teaching profession, diversity of pupils and preparing them for future and teachers' own professional learning. (Niemi, 2012).

Teachers' work-autonomy (TWA): Teachers' work-autonomy means a power of teacher to act and work independently, free from any external forces (Friedman, 1999).

Methodology

This study was conducted with descriptive research design. Questionnaires survey was used quantitative study and open-ended questions were also used in qualitative study to engage full, meaningful answers and to get more objective responses. Simple random sampling method was used.

Quantitative Research Method

The sample comprised five schools at Basic Education High Schools in Tamwe Township. One hundred and fifty teachers from those schools were selected by using the simple random sampling method. The respondent rate was 100%. This study is intended to study the relationship between teachers' work-autonomy and their professional competences. The questionnaire consists of two parts. Part (A) included (28) items based on the dimension of teachers' work-autonomy (TWA) that were developed by Friedman (1999). Part (B) included (35) items based on the dimension of Niemi (2012). Similarly, there were (35) items Part B concerned with teachers' professional competences (TPC). In order to obtain the content validity for teachers' work-autonomy (TWA) and teachers' professional competences (TPC) questionnaires, an expert review was conducted by (13) experienced educators who have special knowledge and close relationship with this area, from the Department of Educational Theory. According to the test of pilot study, the reliability coefficient (Cronbach's alpha, α) were (0.904) for teachers' work-autonomy (TWA) questionnaires and (0.719) for teachers' professional competences (TPC) questionnaires. The reliability coefficient (Cronbach's alpha, α) of overall questionnaires was (0.828). First and foremost, the related literature was explored. Next, the questionnaires were developed under the guidance of the supervisor in order to get the required data. Before piloting, all experienced teachers from the Department of Educational Theory examined the questionnaire for item clarity, grammar and usage for the validation of questionnaires. After, the researcher received the advice and guidance concerning the questionnaires from the experiences teachers, the use of words and content of items were modified. Then, as a pilot study, questionnaires for teachers were distributed to (40) teachers at No. (2), Basic Education High School, in Yankin Township on September 10, 2019. Distributed questionnaires were collected again by the researcher after one week later. The respondent rate was 100%.

Data Analysis

After the questionnaires were returned, the data were put into the computer data file and were analyzed by using the Statistical Package for the Social Science (SPSS) version 25. The descriptive statistics were used to tabulate mean values and standard deviations of individual item and group of item in the questionnaires. In classifying the teachers' work-autonomy, the overall mean values and the standard deviations were used. Teachers' professional competences were conducted in the same way. One-way ANOVA and independent samples *t* test were used to describe the teachers'

work-autonomy (TWA) and their professional competences (TPC) by total teaching services, position, qualification and total services of principals. Pearson correlation was used to find the relationship between teachers' work-autonomy (TWA) and their professional competences (TPC).

Qualitative Research Method

Among the selected schools, two schools were chosen from Tamwe Township, based on the results of the lowest mean value and the highest mean value. Therefore, the school C got the highest mean value and the school D got the lowest mean value. These two schools were chosen for asking the interview questions. Interviews were conducted to study teachers' work-autonomy (TWA) and their professional competences (TPC). In addition to questionnaire survey, instruments for qualitative study such as interview questions were developed based on two dimensions of teachers' work-autonomy (TWA) and their professional competences (TPC). Interview questions were conducted with selected teachers to obtain necessary reliable sound information of teachers' work-autonomy (TWA) and their professional competences (TPC) from December 4, 2019 to December 6, 2019. Interviewer could explore and probe participants' responses to gather more in-depth data about their experiences and feelings (Gay, 2016). Interview questions were formulated from these data. In order to obtain in-depth information of teachers' work-autonomy (TWA) and their professional competences (TPC), the interview items to overall teachers' work-autonomy (TWA) and their professional competences (TPC) were asked. The researcher wrote detailed notes and used phone-records during the interview or after each interview.

Data Analysis

As the supplementary to the quantitative findings, qualitative study, the interview was conducted. After the data had been collected from the participants, their answers were thoroughly studied to categorize the similar ideas and to identify the main theme. Data analysis was based on categorizing and interpreting the recordings and interview questions. To give out the qualitative findings on teachers' work-autonomy (TWA) and their professional competences (TPC), the interpreting and synthesizing the organized data were made. Information from teachers' interview questions was complementary to each other.

Findings

Research findings are presented by using descriptive statistics: mean and standard deviations, One-Way ANOVA and Pearson correlation. Teachers' responses to open-ended questions are also presented.

Quantitative Findings

Table 1 Mean Values and Standard Deviations of Teachers' Work-Autonomy

No.	Dimensions	Mean	SD
1	Curriculum development	2.88	.61
2	Staff development	3.02	.56
3	School mode of operating	2.90	.57
4	Teaching and assessment	3.15	.48
	Teachers' Work-Autonomy	2.99	.69

Scoring direction: 1.00 - 2.00 = Low   2.01- 3.00 = Moderate   3.01 - 4.00= High

In Table 1, it was found that teachers' work-autonomy is at the moderate level.

Table 2 Comparison of Mean Values of Teachers' Work-Autonomy (TWA) according to Levels of School

No.	Schools	CD	SD	SMO	TA	TWA
1	A	2.91	3.13	2.86	3.12	3.00
2	B	2.89	3.15	2.91	3.19	3.03
3	C	3.00	3.06	3.00	3.21	3.06
4	D	2.77	2.91	2.84	3.05	2.89
5	E	2.89	2.92	2.93	3.41	3.03

Scoring directions: 1.00- 2.00 = Low   2.01- 3.00 = Moderate   3.01 - 4.00 = High

The comparisons of mean values of the four dimensions of teachers' work-autonomy in the selected schools are presented in Table 2. The level of teachers' work-autonomy of all of the schools is moderate.

Table 3 One-Way ANOVA Results for Teachers' Work-Autonomy (TWA) Grouped by Schools

Dimension		Sum of Squares	*df*	Mean Square	*F*	*p*
Teachers' Work-Autonomy (TWA)	Between Group	.76	4	.19		
	Within Group	15.94	145	.11	1.74	ns
	Total	16.71	149			

*$p<.05$, **$p<.01$, ***$p<.001$ at significant level, ns=not significant

There was no significant difference in teachers' work autonomy according to levels of schools.

Table 4 Independent Samples *t* Test Results of Teachers' Work-Autonomy Grouped by Qualification

Dimensions	Group of Qualification	N	Mean (SD)	*t*	*df*	*p*
Curriculum Development	BEd, MEd	61	2.92 (.30)	1.38	135	ns
	BA, BSc and Others	89	2.83 (.47)			
Staff Development	BEd, MEd	61	3.10 (.28)	3.68	135	ns
	BA, BSc and Others	89	2.88 (.42)			
School Mode of Operating	BEd, MEd	61	2.96 (.33)	2.42	135	ns
	BA, BSc and Others	89	2.79 (.44)			
Teaching and Assessment	BEd, MEd	61	3.16 (.34)	.315	135	ns
	BA, BSc and Others	89	3.13 (.70)			
Teachers' Work-Autonomy(TWA)	BEd, MEd	61	3.04 (.25)	2.25	135	ns
	BA, BSc and Others	89	2.91 (.40)			

*$p<.05$, **$p<.01$, ***$p<.001$ at significant level and ns=not significant

According to Table 4, there was no significant difference in the levels of teachers' work-autonomy according to their qualifications. The level of work-autonomy of teachers who get BEd and MEd degrees is higher than those who get BA, BSc and other degrees. Table 5 shows

independent samples *t* test results of teachers' work-autonomy grouped by total services of principals at current schools.

Table 5 Independent Samples *t* Test Results of Teachers' Work-Autonomy Grouped by Total Services of Principals at Current Schools

Dimensions	Services of Principals	N	Mean(SD)	*t*	*df*	*p*
Curriculum Development	Above 3 years	85	2.82(.37)	-2.21	148	.03**
	3 years and below	65	2.96(.40)			
Staff Development	Above 3 years	85	2.98(.36)	-1.80	148	ns
	3 years and below	65	3.09(.37)			
School Mode of Operating	Above 3 years	85	2.87(.42)	-1.08	148	ns
	3 years and below	65	2.95(.36)			
Teaching and Assessment	Above 3 years	85	3.15(.60)	-.28	148	ns
	3 years and below	65	3.18(.37)			
Teachers' Work-Autonomy(TWA)	Above 3 years	85	2.96(.35)	-1.57	148	ns
	3 years and below	65	3.04(.31)			

*$p<.05$, **$p<.01$, ***$p<.001$ at significant level and ns=not significant

There was a significant difference in curriculum development of teachers' work- autonomy according to the total services of principals in current schools in Table 5.

Table 6   Mean Values and Standard Deviations for Teachers' Professional Competences

No.	Dimensions	Mean	SD
1	Cooperation	3.02	.53
2	Diversity of pupils and preparing them for future	3.18	.46
3	Teachers' own professional learning	3.13	.48
4	Designing own instruction	3.11	.48
5	Ethical Commitments	3.22	.48
	Teachers' Professional Competences	3.04	.49

Scoring directions: 1.00- 2.00 = Low   2.01- 3.00 = Moderate   3.01 - 4.00 = High

According to Table 6, the level of teachers' professional competencies is high.

Table 7 Comparison of Mean Values of Teachers' Professional Competences according to Levels of School

No.	Schools	CO	DPP	TOP	DOI	EC	TPC
1	A	3.09	3.20	3.19	3.14	3.26	3.17
2	B	3.03	3.20	3.21	3.19	3.35	3.19
3	C	3.05	3.23	3.21	3.19	3.31	3.19
4	D	2.97	3.13	3.07	3.04	3.12	3.06
5	E	3.04	3.23	3.00	2.99	3.03	3.05

Scoring direction: 1.00- 2.00 = Low   2.01- 3.00 = Moderate   3.01 - 4.00 = High

The comparisons of mean values of the five dimensions of teachers' professional competencies in the selected schools are presented in Table 7. Teachers' professional competencies in School D is only at the moderate level except other schools.

Table 8 One-Way ANOVA Results for Teachers' Professional Competences (TPC) Grouped by Schools

Dimension		Sum of Squares	df	Mean Square	F	p
Teachers' Professional Competences (TPC)	Between Group	.572	4	.14	1.54	ns
	Within Group	13.38	145	.09		
	Total	13.95	149			

*p<.05, **p<.01, ***p<.001 at significant level, ns=not significant

Table 8 presents one-Way ANOVA results for teachers' professional competences (TPC) grouped by schools. There was no significant difference in teachers' professional competences (TPC) grouped by schools.

Table 9 Independent Samples *t* Test Results of Teachers' Professional Competences Grouped by Qualification

Dimensions	Qualification	N	Mean(SD)	t	df	p
Cooperation	BEd, MEd	61	3.05(.25)	1.85	135	ns
	BA, BSc and Others	89	2.95(.31)			
Diversity of Pupils and Preparing them for Future	BEd, MEd	61	3.19(.33)	.79	135	ns
	BA, BSc and Others	89	3.14(.37)			
Teachers' Own Professional Learning	BEd, MEd	61	3.17(.30)	2.01	135	ns
	BA, BSc and Others	89	3.05(.38)			
Designing Own Instruction	BEd, MEd	61	3.14(.31)	1.45	135	ns
	BA, BSc and Others	89	3.05(.38)			
Ethical Commitments	BEd, MEd	61	3.23(.34)	.59	135	ns
	BA, BSc and Others	89	3.19(.44)			
Teachers' Professional Competences	BEd, MEd	61	3.16(.26)	1.50	135	ns
	BA, BSc and Others	89	3.08(.34)			

*p<.05, **p<.01, ***p<.001 at significant level and ns=not significant

Independent samples *t* test results of teachers' professional competences grouped by qualification at shown in Table 9. The level of professional competencies of teachers who get BEd and MEd degrees is higher than those who get BA, BSc and other degrees. But, there was no significant difference in teachers' professional competencies according to their qualifications.

Table 10 Relationship between Teachers' Work-Autonomy and Their Professional Competences of Tamwe Township

	Teachers' Work-Autonomy (TWA)	Teachers' Professional Competences (TPC)
Teachers' Work-Autonomy(TWA)	1	.65**
Teachers' Professional Competences (TPC)	.65**	1

**Correlation is significant at the 0.01 level (2-tailed).

Table 10 showed that there was relationship between teachers' work-autonomy and their professional competences.

Qualitative Findings

The interview question (1) is "Do you satisfy the opportunities you get in curriculum development, teaching and assessment and school mode of operating on your workplace with regard to current work?" Teacher A, B and C from School C stated that they didn't get the autonomy in curriculum development. They were permitted to teach regular teaching to cover the course. They don't have the power to make decision in school. Teacher D, E and F from School D stated that they didn't get the autonomy in curriculum development. Principal managed for teachers to attend the class in full time. They got the opportunities to make decision in teaching and assessment in their classrooms.

The interview question (2) is "Do you take a lot of responsibilities in teaching, school mode of operating and financial sectors? Give your reasons if you do." Teacher A, B and C from School C answered they didn't do school management and they did only teaching. They determined teaching and assessment and they didn't want to do paper work load. Teacher D, E and F from School D answered they could decide student's individual improvement. According to their expression, they take activities according to the decision made by the principals.

The interview question (3) is "Do you have stress with respect to the autonomy in your workplace? Give your reasons." Teacher A, B and C from School C stated that they had stress because they didn't have private time. They wanted to do teaching only. Teacher C from School C and teacher E and F from School D said that they had stress in writing paper work. They wanted to do teaching only.

The interview question (4) is "Do you have the opportunity to teach the subject you are expert in?" All the teachers from Schools C and D answered they had to teach the subject according to their specialization.

The interview question (5) is "How do you cooperate with your students, colleagues, parents and community to become effective school?" Teacher A, B and C from School C said that parents have always little interest in school. They cooperate with students and principal in school health activities. Teacher D, E and F stated that they encouraged students, colleagues and principal to participate to reach their common goals in school.

The interview question (6) is "How would you study continually to improve your professional competences?" Teacher B from School C answered she wanted to attend the BEd correspondence course if she had a chance. Most of the teachers from school C and D answered that they were unwilling to study continually. Teacher E and F from School D said that she wanted to attend refresher course concerning her specialization subject.

Discussion

Arising from the findings of this study, the following discussions are made. In all items of teachers' work-autonomy in curriculum development; teachers should have autonomy to compose new learning materials for their students. But, they didn't understand and participate in curriculum development process, taking new roles as advisors, facilitators and curriculum developers. Firestone & Wilson, 1985 suggested that when teacher is making decisions about his or her classroom environment, the sense of shared purpose and goals in a school can lead to role ambiguity and when teachers gained control determining the curriculum, developing the methods to teach the curriculum, selecting materials, establishing the daily schedules and enforcing the classroom management system, they perceived themselves as having efficacy. Therefore, Teachers

should have autonomy in developing the curriculum in order to fit teachers' and students' needs such as vocational training and local curriculum. They also should use to combine new and old curricula for their students' needs.

In staff development of work-autonomy, teachers participated in informal dialogue for improving teaching, specific courses, workshop and reading professional literature. But, they didn't have autonomy concerning on the location and timetable for their in-service-training courses and they are not allowed to decide and their own enrichment in education. According to interview questions, some teachers said that they didn't want to teach anymore and some said they wanted to attend refresher courses. Katz (1968) stated that the greater the degree of specialized knowledge and skills required of the occupant of a position, the greater the degree of autonomy that accrues to the position. Therefore, teachers should have autonomy for their in service training and professional development programs.

In school mode of operating, teachers have power in an area of their' work-autonomy where teachers have to arrange students' behaviors. They will set standard norms and behaviors for student to be implemented in daily classroom activities. Teachers don't have power to make decisions concerning school budget. According to interview questions, most of the teacher said that they didn't involve in other school administration. Raelin (1989) explored three distinct sections strategic autonomy, administrative autonomy and operational autonomy. Strategic autonomy is defined as the vision, mission and broad goals determined by the school broad, superintendent and central office staff. Administrative autonomy is the management of school system's unit by the principal placed in the managerial role. Operational autonomy describes the freedom teachers have to solve problems and control their work environment within organizational constraints while being accountable to the school administration. So, they should have autonomy to decide several tasks that indicate to their greater involvement in organizational activities of school.

In teaching and assessment, teachers have autonomy in grading for students' achievement, the quality of teaching and learning strategies, learning materials and assessment. According to interview questions, teachers said that they always worked under the control of the principals. Jones and jones (1986) stated that seven main sections. They are (1) coping with students' psychological needs (2) dealing with students' scholastic needs (3) motivating students and reducing unruly behavior by establishing favorable interpersonal relations within the classroom (4) working with parents in all matters concerning their children (5) designing efficient teaching timetables and ensuring class functioning as a social unit (6) creating effective teaching methods to enhance learning and (7) establishing working ground rules within the classroom and the school as a whole. So, teachers should have autonomy to create a lot of academic projects for their students.

In the item of teachers' professional competences of cooperation, teachers use specific praise when observing the childrens' cooperation, but they don't have any opportunities to manage the tasks outside classroom; (For example, keep on eyes on students during recess, school festivals and trips). Lee. Dedrick and Smith (1991) suggested that fostering cooperative environment and allowing teachers reasonable autonomy in their classroom practices are more likely to foster the efficacy and satisfaction of teachers. Teachers should model good behaviors themselves to let student cooperate activity in their activities.

In diversity of pupils and preparing them for future, teachers have intercultural education and promoting equity of sexes and they can support students to understand the new curriculum. They are not ready for media education. Most of the teachers said that they encouraged students to participate to reach their success in their daily life. Muijs. D & Reynolds, D (2005) highlighted those five main elements of students' learning such as intellectual skills, verbal skills, cognitive

strategies, attitudes and motor skills. Pupils' learning could be greatly affected by the relationship with the teacher and the learning situations. So, teachers should be ready to provide for students to understand their lesson and prepare them for future society. Teachers should keep in mind to analyse the strengths and needs of students and they need to bring content objects as well as the design of lessons that promote content learning.

In teachers' own professional learning, teachers have critical assessment concerning their professional development and they don't have access to integrate research and classroom practices. Forrest W.P (2013 cited in Medley, 1977) stated that successful teachers are those who are good relationship not only with pupils but other staff, parents and colleagues, school principal and other members of community. So, they should evaluate the effectiveness of their teaching strategies and assess their training needs by themselves.

In designing own instruction, teachers can design of instruction for their teaching but they don't use teaching methods effectively and efficiently. The European Commission (2007) has emphasized that teachers must have competence to work in multicultural setting (including an understanding of the value of diversity and respect for difference) and teachers have responsibility to develop new knowledge about education and training, undertake classroom- based research, in cooperate the results of classroom and academic research into their teaching and evaluate the effectiveness of their teaching strategies. Therefore, teachers should make discussions and make connections between theory and practice to be effective in classroom.

In ethical commitments, teachers can change circumstances of school especially all round development of students and school improvement. Most of the teachers cooperate with others in improvement plans of school. Gulcan. N.Y (2009 cited in Medley, 1977) stated that there are four principles in ethical commitments. They are honesty, confidentiality, conflict of interest and responsibility. They should support students' individual growth and be obligated for students, parents and community.

In all dimensions of teachers' work-autonomy and their professional competences, they receive autonomy in teaching and assessment and their ethical commitment is the highest level in Tamwe Township. These dimensions measured that teachers decide on classroom procedures, determine norms and rules for students' behavior, decide on testing and scoring criteria for students' achievement and assessment procedure, select teaching materials, use specific instruction, make critical reflection of their own work, do self-regulated learning and have flexibility according to their changing circumstances of their school. This study found that teachers have autonomy in their teaching and assessment. They showed that their ethical commitment for their professional competences is the highest level.

Teachers from school A and B occupied moderate level in all teachers' work-autonomy and their professional competences. School C occupied the highest level in work-autonomy in teaching and assessment dimension. School E occupied the highest level in teaching and assessment and diversity of pupils and preparing them for future dimensions. Teachers' awareness of their responsibilities and self-improvement in all professional aspects must be enhanced so that they can try harder to enroll in training courses and attend professional meetings and participate discussions with colleagues to acquire knowledge, skills, attitudes and values. Teachers from school C are well qualified but teachers from school D are low qualified. According to interview questions and their results, they should be more practically trained by giving time and taught how to apply techniques and skills to specific situation in summer every year and in-service training courses should be given. There was no significant difference of teachers' work-autonomy and their professional competences concerning their total teaching services and position.

In order to relationship between teachers' work-autonomy and their professional competences, this study claims that there is strong and positive correlation both school B and E. There is also moderate and positive correlation at schools A, B and D. It can be seen that there is strong and positive correlation in overall relationship between teachers' work-autonomy and their professional competences. This result indicates that the more the level of teachers' autonomy, the more the level of their professional competences. The less the level of autonomy, the lower level of their professional competences is. Blasé & Kirby (2009) claimed that the most essential conditions of teachers' professionalism is that they have autonomy in fulfilling the job obligation.

Therefore, teachers should get more appropriate ways to increase their incomes in order to retain well qualified teachers. The salary for teachers at present is very low in comparing with other employees in other fields. So, they have to do extra jobs without caring about their own professional improvement. Pre-services and in-service teachers' education and training must be provided for teachers with good teaching approaches and new ways to evaluate teachers themselves and students' achievement.

Teachers should have closer contact with parents, students and administrators and then listen to them, understand their aspiration, wishes and adopt what is good and suitable in their ideas pertaining of teachers; practical teaching and educational conditions to improve efficiency and effectiveness in teaching.

Recommendations

Arising from the findings of this study, the recommendations are made. Teachers should support the cooperation between school and community and should contact with parents, students and community. Teachers should participate in curriculum development process and accept the implementation of teachers' and principals' effectiveness in assisting all students. Teachers should make decisions on budget planning and should decide on students' demographic class-composition. They should have autonomy in students' achievement evaluation criteria and should determine norms and rules for students. They should work with other learners and teachers with knowledge, technology and information and should make student-centered discussions, making connections increased autonomy, building relationship and focus on literacy to be extremely effective in classroom. School principals should cooperate with teachers both in classroom operation and in school wide operations to develop an efficient and effective school organization. Government and school principals should provide autonomy for teachers' roles and encourage teachers to boost their competences by themselves in gaining more autonomy. Teachers should have professional expertise and be ready to bring the students to keep abreast of 21st century education.

Need for Further Studies

Further research should investigate deeper into the influence of culture, race and politics that will affect the score of teachers' work-autonomy and their professional competences. Further research should be conducted in other areas such as different levels at schools, universities and townships, states and regions.

Acknowledgement

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A STUDY OF TEACHERS' INVOLVEMENT IN DECISION-MAKING

Nwe Ni Win[1], Pyae Phyo Khin[2] and Nu Nu Htwe[3]

Abstract

The objectives of this research are to study the extent of teachers' involvement in decision-making, to investigate the differences of teachers' involvement in decision-making according to their personal factors, to study the level of teachers' satisfaction on their involvement in decision-making and to examine the variations on teachers' involvement and their satisfaction on decision-making. In this study, both quantitative and qualitative methods were used. By using proportional stratified sampling method, two hundred and one teachers were selected as sample from eight Basic Education High Schools in Shwepyithar Township, Yangon Region. For quantitative study, questionnaire for teachers' involvement in decision-making was used. Open-ended questions and interviews questions were used for qualitative study. The internal consistency (Cronbach's $\propto$) of teachers' involvement in decision-making and their satisfaction on involvement in decision-making were 0.94 and 0.93 respectively. In this study, the descriptive statistics, One-Way ANOVA, Tukey HSD test and Paired samples *t*-test were utilized. According to the findings, the extent of teachers' involvement in decision-making was moderate ($\overline{X}$=2.92, SD=0.45). There were no statistically significant differences in teachers' involvement in decision-making grouped by age, service and academic qualification. There was statistically significant difference in teachers' involvement in decision-making grouped by their position. The level of teachers' satisfaction on their involvement in decision-making was moderate level in all areas of decision-making. There was a significant difference between the teachers' involvement and their satisfaction on decision-making.

Keywords: Teacher' Involvement, Decision-Making

Introduction

Education is the foundation stone of nation's intellectual power which shapes the power profile of a nation in the community of words nations. The progress of nations depends upon the quality of its education. Education encompasses various decision-making processes concerning different issues and educational problems (Louis et al, 1996). In fact, decision-making is one of the most important duties of the school administrator because there are elements of decision-making in every administrative act, whether it concerns students, programmes, staff, services or resources. In which, if teachers involve in decision-making process, better decision could be made. Leithwood & Steinbach (1993) state that principals need to develop a positive school climate; ensure opportunity for teacher's collaboration and joint planning through a greater involvement in decision-making. The success or failure of an organization such as the school lies considerably on effective decision making (Nwachuku, 2004). UNESCO (2005) writes that "without the participation of teachers, changes in education are impossible". This preposition stated that teachers are the corner-stone of school activities. The involvement of teacher in decision-making is likely motivating to exert their mental and emotional involvement in group situation that may contribute to groups goals and shared responsibilities (Gemechu, 2014). In the school system, decisions are made towards solving immediate and remote problems all aimed at achieving set goals and objectives effectively and efficiently. School must understand that entire system will benefit when teachers play an active role in controlling their working environment (Pashiardis, 1994). Smylie (1996) discussed that participation improves teachers' opportunities in acquiring knowledge and insights. These opportunities increase instructional implementation and students'

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outcomes. Teachers' participation in decision-making can get better decisions, and then teachers' abilities would improve. So, it is important to study the teachers' involvement in decision-making.

Objectives of the Study

General Objective

- To study the teachers' involvement in decision-making at Basic Education High Schools, Shwepyithar Township

Specific Objectives

- To study the extent of teachers' involvement in decision-making at Basic Education High Schools, Shwepyithar Township

- To investigate the differences of teachers' involvement in decision-making according to their personal factors at Basic Education High Schools, Shwepyithar Township

- To study the level of teachers' satisfaction on their involvement in decision-making at Basic Education High Schools, Shwepyithar Township

- To examine the variations on teachers' involvement and their satisfaction on decision-making at Basic Education High Schools, Shwepyithar Township

Research Questions

- To what extent do teachers involve in decision-making at Basic Education High Schools, Shwepyithar Township?

- Are there any significant differences in involving in decision-making according to personal factors at Basic Education High Schools, Shwepyithar Township?

- What are the levels of teachers' satisfaction on their involvement in decision-making at Basic Education High Schools, Shwepyithar Township?

- What are the variations on teachers' involvement and their satisfaction on decision-making at Basic Education High Schools, Shwepyithar Township?

Theoretical Framework

For this study, teachers' involvement in decision-making was investigated with six areas based on the teachers' involvement in decision-making developed by Desalegn Gemechu (2014).

School Planning

School planning is essentially a process in which policy and plans develop from ever-changing and developing needs of the school community. The collaborative effort and co-operation is an important dimension in this process of planning that takes place between the principal and teachers. School planning deals with total curriculum and school's resources including staff, space, facilities, equipment, time and finance and the school's mechanisms for reviewing progress and taking corrective action where necessary. The principals should facilitate the conditions that takes part in the determining the mechanism for controlling and supervising plan implementation, planning the school examination, and planning school development

Curriculum and Instruction

Curriculum refers to the knowledge and practices in subject matter areas that teachers teach and that students are supposed to learn. Instruction refers to the methods of teaching and the

learning activities used to help students master the content and objectives specified by a curriculum. Curriculum and instruction is a field within education that seeks to research, develop and implement curriculum changes that increase student achievement within and outside schools. The field focuses on how students learn and best ways to educate. Curriculum and instruction that teachers involve in decision making issues such as setting learning objectives, developing teaching methodologies and procedures for assessing student achievement, developing creative and innovation ideas and using instructional materials for teaching.

School Policies, Rules and Regulations

Policies are the aims and objectives of an organization that provide a framework for the management to take decisions accordingly. Rules basically get derived from these policies but are dependent upon situation and get changed. School decision policy represent the joint agreement of all personnel to carry out the necessary tasks on continuous bases. This area includes determining the administrative and organizational structure, establishing a program for community service and deciding on rules or procedures to be followed in evaluating school performance.

School Budget and Income Generation

Budget preparation is not only the sole responsibility of school principals but also it needs teachers and staff preparation. Income generation should be managed together by teachers and principal. It includes the issues such as sharing budget for the department, determining school expenditure priorities, determining means of income generation and deciding budget allocation for instructional materials.

Students' Affairs and School Discipline

Students are the very reason for the establishment and existence of the school. A crucial aspect of human resource management is students' personnel management. Schools were created for the purpose of ensuring the education of students. Students can be affected by peers and real situation in and out of school environment. This area includes determining students' right and welfare, participating in solving students' problem with parents, and determining disciplinary measures on students with misconduct.

School Building

School building is another area of decision-making that teachers should take part. All stakeholders involve in the planning, design use, construction, operation and maintenance of the facility must fully understand the issue and concerns of all the parties and interact closely throughout all phase of the project. This involves expansion of school building, maintenance of buildings and assigning classroom for the students, teachers and other facilities.

Definitions of Key Terms

Decision-making

Decision-making is the act of making up on one's mind about something, or position or opinion or judgment reached after consideration. It is the thinking process with a lots of mental activity involved in choosing between alternatives (Mekuria, 2009)

Teachers' Involvement

Teacher involvement is a participative process that uses the entire capacity of teachers and design to encourage increased commitment to organization's success (Pashiardis 1994).

Methodology

Research Method

For this study, both quantitative and qualitative methods were applied to study the teachers' involvement in decision-making at Basic Education High Schools in Shwepyithar Township.

Sample

In quantitative study, eight Basic Education High schools from Shwepyithar Township were selected in order to obtain representative sample. To get the required sample, 201 teachers were selected by using the proportional stratified sampling method. For qualitative study, required data were obtained through open-ended and interview questions. 201 teachers were given questionnaire with open-ended questions and six teachers were chosen by purposive sampling to conduct the interview.

Instrumentation

Decision-making areas developed by Desalegn Gemechu (2014) was used to collect on teachers' involvement in decision-making. Questionnaire was composed of 43 items that relating with teachers' involvement in decision-making: item 1 to 9 that related to school planning, item 10 to 18 that related to curriculum and instruction, item 19 to 27 that related to school policies, rules and regulations, item 28 to 33 that related to school budget and income generation. item 34 to 38 that related to students' affairs and school discipline, and item 39 to 43 that related to school building. These 43 items were developed as Five-point Likert scale ranging from very low to very high (1=very low, 2=low, 3=medium, 4=high, 5=very high) to measure the level of teachers' involvement in decision-making. In this study, questionnaire survey was used to collect the quantitative data for teachers' involvement in decision-making. After reviewing the related literature thoroughly, a set of questionnaire was developed based on by using the advices and guidance of the supervisor.

On the other hand, there were 43 items in the questionnaire concerned with teachers' satisfaction on their involvement in decision-making. Five-point Likert scale ranging from very dissatisfied to very satisfied (1= very dissatisfied, 2= dissatisfied, 3= neutral, 4= satisfied, 5= very satisfied) to measure the level of teachers' satisfaction was used in those questionnaire for teachers' involvement in decision-making.

For qualitative study, open-ended questions and interview questions were developed and used to get the information concerning teachers' involvement in decision-making. Four open-ended questions and six interview questions were used to obtain the depth information.

Data Analysis

In quantitative study, Descriptive Statistics, One Way of Analysis of Variance (ANOVA), Tukey HSD test and Paired sample *t*-test were used to analyze the data by using the Statistical Package for the Social Science (SPSS) software version 25. For qualitative study, after collecting the data, the similar data were categorized and identify the state of the teachers' involvement in decision-making. Data analysis was based on categorizing and interpreting.

Procedures

In quantitative study, the set of questionnaire was developed after reviewing the related literature according to the guidance of the supervisor. For the validity of that questionnaire, the advice and guidance were taken from ten expert educators from Department of Educational Theory, Yangon University of Education. Moreover, the pilot testing was conducted with forty teachers in No.4 Basic Education High School, Insein, Yangon Region 1st week of September 2019. Then, the modified questionnaires were distributed to eight Basic Education High Schools in Shwepyithar

Township on 21st November, 2019. For qualitative study, four open-ended questions and six interview questions were conducted in order to obtain in depth information about teachers' involvement in decision-making.

Findings

Quantitative Findings

Table 1 Mean Values and Standard Deviation of Teachers' Involvement in Decision-Making at Basic Education High Schools   (N=201)

Dimensions of Teachers' Involvement in Decision-Making	Mean	SD	Remark
School Planning	3.07	.58	Moderate
Curriculum and Instruction	3.47	.73	Moderate
School Policies, Rules and Regulations	2.97	.72	Moderate
School Budget and Income Generation	2.35	.97	Moderate
Students Affairs and School Discipline	3.25	.78	Moderate
School Building	2.39	1.04	Moderate
Teachers' Involvement in Decision-Making	**2.92**	**.61**	**Moderate**

Scoring Direction: 1.00-2.33=Low   2.34-3.67=Moderate   3.68-5.00=High

According to Table 1, the level of teachers' involvement in decision-making on school planning, curriculum and instruction, school policies, rules and regulations, school budget and income generation, students' affairs and school discipline, and school building was moderate. Then, teachers' involvement in decision-making at Basic Education High Schools in Shwepyithar Township was at moderate level.

Table 2 ANNOVA Results of Teachers' Involvement in Decision-making Grouped by Age (N=201)

Variables	Groups	Mean	SD	*F*	*p*
School Planning	20-29 years	2.94	.68	1.241	ns
	30-39 years	3.04	.54		
	40-49 years	3.20	.66		
	50 years and above	3.09	.50		
Curriculum and Instruction	20-29 years	3.59	.78	2.483	ns
	30-39 years	3.26	.74		
	40-49 years	3.61	.76		
	50 years and above	3.51	.66		
School Policies, Rules and Regulations	20-29 years	2.93	.70	2.027	ns
	30-39 years	2.82	.62		
	40-49 years	3.19	.86		
	50 years and above	2.98	.72		
School Budget and Income Generation	20-29 years	2.38	1.15	.695	ns
	30-39 years	2.45	.97		
	40-49 years	2.44	.95		
	50 years and above	2.22	.91		
Students' Affairs and School Discipline	20-29 years	2.35	.97	1.629	ns
	30-39 years	3.16	.83		
	40-49 years	3.09	.67		
	50 years and above	3.34	.93		

Variables	Groups	Mean	SD	*F*	*p*
School Building	20-29 years	2.43	1.14	.780	ns
	30-39 years	2.31	1.10		
	40-49 years	2.62	1.09		
	50 years and above	2.32	.93		
Teachers' Involvement in Decision-Making	20-29 years	2.91	.71	1.221	ns
	30-39 years	2.83	.49		
	40-49 years	3.07	.74		
	50 years and above	2.92	.58		

Scoring Directions: 1.00-2.33= Low   2.34-3.67= Moderate   3.68-5.00= High
ns = no significance, **p<0.05, **p<0.01, ***p<0.001*

According to Table 2, there was no significant difference in teachers' involvement in decision-making grouped by age.

Table 3 ANOVA Results of Teachers' Involvement in Decision-Making Grouped by Teaching Service   (N=201)

Variables	Service	Mean	SD	*F*	*p*
School Planning	1-10 years	2.92	.61	1.743	ns
	11-20 years	3.17	.53		
	21-30 years	3.06	.65		
	31 years and above	3.07	.48		
Curriculum and Instruction	1-10 years	3.46	.68	.302	ns
	11-20 years	3.42	.72		
	21-30 years	3.50	.84		
	31 years and above	3.55	.67		
School Policies, Rules and Regulations	1-10 years	2.87	.68	.415	ns
	11-20 years	2.98	.67		
	21-30 years	3.04	.83		
	31 years and above	2.96	.74		
School Budget and Income Generation	1-10 years	2.31	1.06	1.465	ns
	11-20 years	2.51	.96		
	21-30 years	2.34	.94		
	31 years and above	2.10	.92		
Students' Affairs and School Discipline	1-10 years	3.15	.78	1.577	ns
	11-20 years	3.17	.72		
	21-30 years	3.30	.87		
	31 years and above	3.47	.75		
School Building	1-10 years	2.28	1.11	.572	ns
	11-20 years	2.49	1.10		
	21-30 years	2.45	1.01		
	31 years and above	2.28	.92		
Teachers' Involvement in Decision-Making	1-10 years	2.83	.64	.420	ns
	11-20 years	2.96	.54		
	21-30 years	2.95	.71		
	31 years and above	2.90	.59		

Scoring Directions: 1.00-2.33= Low   2.34-3.67= Moderate   3.68-5.00= High ns = no significance

*p<0.05, **p<0.01, ***p<0.001

According to Table 3, there was no significant difference in teachers' involvement in decision-making grouped by teaching service.

Table 4   ANOVA Results of Teachers' Involvement in Decision-Making Grouped by   Their Position   (N=201)

Variables	Position	Mean	SD	*F*	*p*
School Planning	PT	2.86	.69	1.931	ns
	JT	3.05	.56		
	ST	3.16	.57		
Curriculum and Instruction	PT	3.45	1.15	0.34	ns
	JT	3.46	.72		
	ST	3.49	.65		
School Policies, Rules and Regulations	PT	2.64	.76	1.817	ns
	JT	2.97	.76		
	ST	3.03	.65		
	JT	2.34	.96		
School Budget and Income Generation	PT	2.22	1.14	.175	ns
	JT	2.34	.96		
	ST	2.39	.98		
Students' Affairs and School Discipline	PT	2.69	.86	4.686	0.10*
	JT	3.26	.81		
	ST	3.36	.67		
School Building	PT	2.20	1.30	.278	ns
	JT	2.40	.99		
	ST	2.42	1.08		
Teachers' Involvement in Decision-Making	PT	2.68	.59	1.450	ns
	JT	2.91	.62		
	ST	2.97	.61		

Scoring Directions: 1.00-2.33= Low   2.34-3.67= Moderate   3.68-5.00= High

Note: PT=Primary Teachers   JT= Junior Teachers   ST=Senior Teachers

ns = no significance, *$p<0.05$, **$p<0.01$, ***$p<0.001$

In Table 4, out of six areas of teachers' involvement in decision-making, there was significant differences in "Students' Affairs and School Discipline", F (2,198) = 4.686, $p<0.05$ among three groups of teachers. However, there were no statistically significant in other areas. In overall results, there was no significant difference for teachers' involvement in decision-making grouped by their position.

Table 5 Tukey HSD Results of Teachers' Involvement in Decision-Making Grouped by Their Position   (N=201)

Dependent Variables	(I) Position	(J) Position	Mean Differences (I-J)	*p*
Students' Affairs and School Discipline	PT	JT	-.56406*	.022*
		ST	-.66723*	.007**

ns = no significance, *$p<0.05$, **$p<0.01$, ***$p<0.001$

Note: PT= Primary Teachers   JT= Junior Teachers   ST= Senior Teachers

In Table 5, the result of Tukey HSD indicated that the group of primary teachers was significantly different from the group of junior teachers and the group of senior teachers in students' affairs and school discipline.

Table 6 ANOVA Results of Teachers' Involvement in Decision-Making grouped by   Their Academic Qualification   (N=201)

Variables	Qualification	Mean	SD	*F*	*p*
School Planning	BA, BSc	3.04	.59	.797	ns
	MA, MSc	2.86	.17		
	BEd, MEd	3.13	.57		
Curriculum and Instruction	BA, BSc	3.46	.78	.131	ns
	MA, MSc	3.36	.69		
	BEd, MEd	3.50	.63		
School Policies, Rules and Regulations	BA, BSc	2.91	.76	1.052	ns
	MA, MSc	2.94	.68		
	BEd, MEd	3.07	.64		
School Budget and Income Generation	BA, BSc	2.33	.99	1.065	ns
	MA, MSc	1.71	.48		
	BEd, MEd	2.42	.97		
Students' Affairs and School Discipline	BA, BSc	3.17	.84	2.031	ns
	MA, MSc	3.20	.40		
	BEd, MEd	3.40	.67		
School Building	BA, BSc	2.40	1.04	1.501	ns
	MA, MSc	1.50	.58		
	BEd, MEd	2.42	1.06		
Teachers' Involvement in Decision-Making	BA, BSc	2.89	.63	1.221	ns
	MA, MSc	2.60	.20		
	BEd, MEd	2.99	.60		

Scoring Directions: 1.00-2.33= Low   2.34-3.67= Moderate   3.68-5.00= High ns = no significance,
         *p<0.05, **p<0.01, ***p<0.001

According to Table 6, there was no significant difference in teachers' involvement in decision-making grouped by their academic qualification.

Table 7   Mean Values and Standard Deviations Showing the Level of Teachers' Satisfaction on Their Involvement in Decision-Making at Schools   (N=201)

Variables	Means	SD	Remark
School Planning	3.74	.66	High
Curriculum and Instruction	3.79	.67	High
School Policies, Rules and Regulations	3.69	.65	High
School Budget and Income Generation	3.80	.64	High
Students' Affairs and School Discipline	3.58	.74	Moderate
School Building	3.63	.74	Moderate
Teachers' Involvement in Decision-making	**3.71**	**.62**	**High**

Scoring Directions: 1.00-2.33=Low   2.34-3.67=Moderate   3.68-5.00=High

According to Table 7, the level of teachers' satisfaction on their involvement in decision-making at schools was high level.

Table 8   Comparison between the Teachers' Involvement and Their Satisfaction on Decision-Making   (N=201)

Areas of Decision-Making	No. of Items	Involvement Mean (SD)	Satisfaction Mean (SD)	*t*	*df*	*p*
School Planning	9	3.07 (0.58)	3.74 (0.66)	-11.793	200	ns
Curriculum and Instruction	9	3.47 (0.73)	3.80 (0.67)	-6.540	200	0.000***
School Policies, Rules and regulations	9	2.97 (0.73)	3.40 (0.65)	-12.384	200	0.000***
School Budget and Income Generation	6	2.35 (0.97)	3.59 (0.74)	-14.584	200	ns
Student Affairs and School Discipline	5	3.25 (0.78)	3.80 (0.64)	-10.033	200	0.000***
School Building	5	2.39 (1.04)	3.62 (0.74)	-13.690	200	ns
Teachers' Involvement in Decision-Making	39	2.99 (0.61)	3.71 (0.62)	-14.284	200	0.006**

ns = no significance, **$p<0.01$, ***$p<0.001$

As shown in Table 8, based on the paired sample *t*-test analysis, it was found that the mean values of the level of satisfaction were higher than the level of teachers' involvement in decision-making (t (200) = -14.284, p = 0.006**).

Qualitative Findings

In addition to the quantitative results, the results of the qualitative findings were presented. In this, open-ended and interview questions were used. The results of open-ended questions were as follows.

In what areas of the school can teachers involve for decision-making? For this, are you willing to participate? According to teachers' responses, 37% of teachers (n=64) stated that they involved in maintaining school discipline; and in teaching and assessing of students learning. 27% of teachers (n=54) stated that they could involve in the role of school development. 31% of teachers (n=62) discussed that they involved only in relating to classroom activities and teaching. 3% of teachers (n=7) stated that they made discussion with parents for students. 2% of teachers (n=2) answered that they made decision concerning for the school library and the school health. All the teachers answered that they were willing to participate in decision-making because they had the responsibilities in designing the school to be the role model.

What kind of conditions are created for teachers' involvement in decision-making in school-related issues? For this, 38% of teachers (n=77) stated that principals made the respective groups for making decision such as the board of study, the school council and the subject group, etc. 32% of teachers (n= 65) answered that they had conditions for decision-making with a chance of providing meetings in monthly, weekly and as necessary. 21% of teachers (n=43) stated that they were given the responsibilities by individual. They can involve in given conditions because of the improvement of their students and schools.

Are they satisfied with their involvement in decision-making at school? Why? They all answered that they were satisfied in their involvement in decision-making. They could express their opinions about school freely.

The results of the teachers' interview findings for involvement in decision-making were presented. According to interview results, in school planning, 100% of teachers could involve in all school activities that were assigned by the principal. They were sometimes assigned with the duties for individual planning.

For curriculum and instruction, 80% of teachers said that they taught all lessons to be finished according to the already assigned timetable. They have decision about the using of teaching aids for their lessons. 20% of teachers said that the teachers did the decisions about the instruction according to the assigned curriculum from the guidance of subject deans.

66% of the teachers said that their school policies, rules and regulations are assigned with all the teachers' and stakeholders' agreement to be effective school. 17% of teachers had nothing chance to decide relating to the school policies but they had only to make decision concerning with their classrooms. Besides, 17% of teachers discussed occasionally to offer decision related to school with all the stakeholders about school policies, rules and regulations.

Concerning school budget, 100% of teachers said that they had no opportunities dealing with school budget. 50% of teachers answered that they made decisions about the students' uniform, hair style and their attendance. Next 50% of teachers said that as a class teacher, they called the parents to discuss about the students' absence. 83% of teachers answered that there was no chance for teachers to involve in relating to school buildings.

Conclusion

Conclusion and Discussion

In studying the extent of teachers' involvement in decision-making at Basic Education High Schools in Shwepyithar Township, the level of teachers' involvement was moderate. There was no significant difference on teachers' involvement in decision-making according to the age, teaching service, position and academic qualification. There was a significant difference in the area of student affairs and school discipline of teachers' involvement in decision-making between primary teachers and junior and teachers grouped by position. The level of teachers' satisfaction on involvement in decision-making was high. There were significant differences between the teachers' involvement in decision-making and their satisfaction on decision-making.

Teachers participation in decision-making has become a dominant theme in current educational reforms (Conley, 1991 & Johnson, 1990). Gregory and Ricky (1998) pointed out that employees' (teachers') involvement in school decision-making brings about increased teacher satisfaction, reduced group conflict and satisfied high order needs. Findings indicated that teachers' involvement in decision-making on school planning was moderate. According to the result of interview indicated that most of the teachers had little chance to involve in decision-making on school planning. In schools, teachers could perform the duties that were assigned by the principal. Therefore, the principal should establish the plan for the teachers to decide in order to get the best planning for the school.

The finding in this study indicated the level of teachers' involvement in decision-making on curriculum and instruction was moderate. The teachers could mostly make decision on deciding the form of lesson plan. According to qualitative findings, teachers answered that they could make decision on their teaching and they followed the assigned monthly curriculum. According to Agebure (2013), the teachers involved in curriculum and instructional decisions by planning their lessons alone and deciding the teaching and learning support materials to be used for such lessons. Therefore, it is necessary to give the chance for teachers to decide about their instruction.

From the quantitative finding obtained in this study, it was found that teachers dominate in decision-making in the school policies, rules and regulations at moderate. According to qualitative findings, teachers could slightly involve in those areas because the principal and the representative persons set the rules and policies for school. Thus, teachers should have the opportunities to involve in deciding school policies, rules and regulations.

In this study, the level of teachers' involvement in decision-making on school budget and income generation was at moderate level. According to interview result, teachers did not involve concerning school budget and income generation but there was the group that decided the budget. The teachers said that there were no ways to get the income generation for school.

As the result of quantitative findings, the teachers could make the decision concerning students' affairs and school discipline at moderate. As the result of interview, teachers make the decision related to students' attendance, exam results and discipline. Therefore, teachers are important to make the decision concerning students' affair and school discipline and teachers should be provided the opportunities to be able to make decision.

From quantitative findings, the teachers' involvement in decision-making concerning school buildings was moderate. As the results of interview, teachers could not involve in decision-making concerning school buildings and they could maintain the school buildings by assigning the methods to follow. So, teachers should be given the opportunities to involve in decision-making on school buildings.

In addition, findings of this study also highlighted that there was significant difference on teachers' involvement in decision-making across their position. Therefore, it would be important to involve teachers in making the decision. Also, teachers' satisfaction on involvement in decision-making was at high level. Therefore, teachers should be created the opportunities for involvement.

Recommendations

The following recommendations are based on the analyses of the research findings

- School principals ought to provide proper orientation on the rights, duties and responsibilities of individual teachers in each areas of school decision-making.
- Since teachers' involvement in decision-making depends on school leaders' ability, school leaders should focus on shared leadership when they conduct school decision-making.
- Principals should establish a collaborative relationship among teachers in which they can share their ideas and learn from each other about their professions.
- To get the best decision, principals should assign the responsible duties to the right person.
- Teachers should be given the equal opportunities to involve in the dimensions of school planning; curriculum and instruction; school policies, rules and regulations; school budget and income generation; students' affairs and school discipline; and school buildings, especially in the planning of school budget and instruction of new buildings.
- Since the teachers are the sole person in making the school discipline, it is necessary to promote the teachers' roles in determining students' rights and welfare.
- Teachers should be given the equal opportunities for making a decision in budget allocation.

Need for Further Research

This study focused on the teachers' perception of teachers' involvement in decision-making at Basic Education High School in Shwepyithar Township. A study may be conducted to examine the principals' perception of teachers' involvement in decision-making. This study was conducted in Basic Education High Schools. Moreover, the same study may be conducted in Basic Education Primary schools and Basic Education Middle Schools. This study focused only in Shwepyithar Township, Yangon Region. It would be helpful if further study to be conducted in other Townships of Yangon Region or other states or regions.

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A STUDY OF TEACHERS' CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD) PRACTICES AT THE BASIC EDUCATION SCHOOLS IN GYOBINGAUK TOWNSHIP

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Abstract

The main aim of this study is to study the continuous professional development (CPD) practices of teachers at the Basic Education Schools in Gyobingauk Township. Quantitative and qualitative methods were used. Two hundred and ninety four teachers were selected by using simple random sampling method. The questionnaire was developed by researcher based on the literature. The reliability coefficient was 0.9. Descriptive statistics was used to analyze the quantitative data. Teachers' practices are moderately high on the continuous professional development according to the mean values. There were significant differences in the continuous professional development practices of teachers grouped by gender and type of school. But there were no significant differences in the continuous professional development practices of teachers according to age, position, teaching service and qualification.

Keyword: Continuous Professional Development (CPD)

Introduction

Teacher professional development refers to a long term, context-based process that involves opportunities and experiences for promoting the growth and development of teachers (Little, 1994). Quality education by itself largely depends on the magnitude of teachers' continuous professional development in improving learners' achievement (Kokebe, 2013). Continuous professional development is a lifelong education in which teachers not only learn themselves but also teach each other to update and add value to their profession. The teachers' effective participation in the CPD program causes the changes of teachers in teaching, learning and professional ethics. Qualified teacher development does not take place by an accident. It needs well planned and continuous implementation of teachers' professional enhancement (Fraser, 2005). Continuous professional development is crucial for organizational growth and school improvement (Bubb & Earley, 2004). In our country, the responsible persons poorly practiced the clear, transparent and self-monitoring CPD structure at the various levels. So, there can be the absence of clearly defined objectives, shared vision and common understanding among partners on CPD. This created ambiguity for teachers' practices on CPD. There should be needed collaboration in monitoring CPD and evaluation system. Also, teachers should have the adequate awareness for CPD.

Continuous professional development aims at conveying an activity that should be thought of as an ongoing process instead of someone's achievement. It entails that peopleor individuals develop themselves (Gulston, 2010). The development is also likely to affect attitudes and approaches and they can contribute to the development of the quality of the teaching-learning process (Day & Sachs, 2004). Teaching is a dynamic profession with ever changing and emerging knowledge. In order to cope with the ever changing environment, progressively improving and updating teachers' professional skill and knowledge is needed with the rising technology (Hayes, 1999). Without trying to develop continuously, teachers would not keep up with the new curriculum reform. The concept of continuing professional development (CPD) in education is often ill-defined, with the separate notions of formal training and on-the job learning. Continuous

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professional development encompasses all behaviors which are intended to make change and improvement in the classroom. Professional development consists of all individuals, groups or school and which can contribute to the improvement of quality education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to acquire and improve the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues throughout their teaching lives (Day, 1999). Teachers' perceptions of what activities constitute continuous professional development is frequently limited to attend courses and conferences, often to meet national requirements. Effective continuous professional development far removed from the commonly-held perceptions of continuous professional development as one-off events.

So, in this study, the kind and level of the continuous professional development practices that the teachers performed are examined. The result of this study may help all responsible persons such as teachers and principals to be aware of the extent to which continuous professional development is being implemented. It might contribute to one's understanding of what educators experienced in terms of continuous professional development. It is also hoped that this study may contribute to quality education improvement. Finally, this study may provide valuable information to the national and local policy makers and program designers in order that they will further revise and develop appropriate programs.

Objectives

General Objective

To study the continuous professional development (CPD) practices of teachers at the Basic Education Schools in Gyobingauk Township

Specific Objectives

- To study the levels of continuous professional development practices of teachers
- To study the variations of continuous professional development practices of teachers according to their personal factors
- To study the variations of continuous professional development practices of teachers according to type of school

Research Questions

This research deals with the following questions concerning the continuous professional development practices of teachers. This research questions guided the study.

- What are the levels of continuous professional development practices of teachers?
- Are there any significant differences in the continuous professional development practices of teachers according to their personal factors?
- Are there any significant differences in the continuous professional development practices of teachers according to type of school?

Theoretical Framework

This research work was guided by following theoretical framework. According to Alwan (2000), David (2006) and TALIS (the OECD Teaching and Learning International Survey, 2009), this study scoped CPD practices as follows.

- Courses/workshops on subject matter, methods and/or other education-related topics;

- Education conferences or seminar at which teachers and researchers present their research results and discuss current education problems;

- Qualification programme, e.g. a degree program;

- Participation in a network of teachers formed especially for the professional development of teachers;

- Collaborative research on a topic of professional interest;

- Mentoring, peer observation and coaching, as part of a formal school arrangement;

- Induction;

- Building professional learning teams;

- Engaging in informal dialogue with peers on how to improve teaching;

- Observation visits to other schools;

- Individual research on a topic of professional interest;

- Developing teachers' professional portfolios;

- Conducting action research;

- Reading professional literature such as journals, evidence-based papers, thesis papers; and

- Online professional development, keeping journal and self-appraisal activities.

Teachers can be given three categories of CPD such as Transmission, Transition and Transformation for their continuous improvement. In the first **Transmission** method, the activities that have the training, award bearing, deficit and cascade nature are involved. It is delivered to the teacher by an expert, supports a high degree of central control and teachers have little opportunity to take control on their own learning. So, the teachers' practices in courses or workshops, education conferences or seminars and qualification programs are concerned with this method.

The second method, **Transition** has the nature of standard based, coaching/mentoring and community of practice. These activities make easier for teachers to engage in dialogue about their professional practice. It has both the characteristics of one-to-one relationship between two teachers and relationship among more than two people. These relationships can be collegiate where the collective knowledge of dominant members of the group shapes other individual members' understanding of the community and their roles. Thus, the teachers' practices in participation in a network of teachers, collaborative research on a topic of professional interest, mentoring and/or peer observation and coaching, induction, building professional learning teams, engaging in informal dialogue with peers on how to improve teaching and observation visits to other schools are included in this method.

The last **Transformation** method involves the activities that give the teachers an increasing capacity for professional autonomy, and also provide the teachers the power to determine their own learning pathways. This method prefers more active and practical styles of learning. So, the teachers' practices in individual research on a topic of professional interest, developing professional portfolios, conducting action research, reading professional literature, online professional development, keeping journal and self-appraisal activities are involved in this method.

Definition of Key Term

In order to understand the concept clearly, important term is carefully defined for readers as follows.

Continuous Professional Development (CPD) is a lifelong learning process that has the nature of individuals' aim for continuous improvement in their skills and knowledge, in addition to the basic training that are initially required to carry out the job (Gray, 2005).

Operational Definition

Continuous Professional Development refers to updating of teachers' knowledge and skills throughout their teaching life. In this study, teachers' continuous professional development practices are determined by mean value responses to the questionnaire items and variables of continuous professional development practices. The greater mean values indicate the higher level of teachers' practices in continuous professional development.

Methodology

Both the quantitative and qualitative research methods were used in this study. Questionnaire was used to collect the quantitative data and this questionnaire was developed by the researcher based on the related literature of this study and it included demographic information such as gender, age, teaching service, qualification, position and type of school. There were altogether 31 items to collect data on the continuous professional development practices of teachers based on three variable; Transmission, Transition and Transformation. These items were rated on four-point Likert scales (1=never, 2=sometimes, 3=often, 4=always). The reliability coefficient (Cronbach α) was 0.9.

Two hundred and ninety four teachers from sixteen Basic Education Schools of Gyobingauk Township were selected as sample by using simple random sampling method. The descriptive statistics was used to analyze the quantitative data. The level of continuous professional development practices of teachers were determined by mean values and standard deviations. Moreover, Independent Sample *t* Test, One-Way ANOVA and Tukey HSD multiple comparison test were also used to find the significant differences between personal factors and type of school. In continuous professional development practices of teachers, the mean values were assigned as: 1.00-1.75= low, 1.76-2.50= moderately low, 2.51-3.25= moderately high and 3.26-4.00= high. Qualitative data obtained from open-ended questions and interviews were analyzed according to the knowledge obtained from the related literature by categorizing the similar ideas and contents.

Findings

Quantitative Findings

Findings for research question (1) are described in the following Tables.

Table 1   Mean Values and Standard Deviations of Continuous Professional Development Practices of Teachers in terms of Transmission   (N=294)

No.	Transmission Items	Mean (SD)
1.	I attend workshops to improve my teaching skills.	2.56 (0.61)
2.	I attend workshops that are related to education.	2.51 (0.64)
3.	I attend teaching subject professional development courses held by MOE.	2.68 (0.79)
4.	I attend courses which assist to my teaching.	2.65 (0.89)
5.	I attend education conferences or seminars.	**1.39 (0.61)**
6.	I attend conferences or seminars that discuss education problems.	1.50 (0.69)
7.	I apply the knowledge that are obtained from the workshops and seminars.	**2.85 (1.00)**
8.	I attend post-graduate degree program and diploma program offered by Universities or College.	1.40 (0.78)
9.	I attend teaching certificate classes on holidays.	1.66 (0.72)
	Overall	**2.13 (0.42)**

Scoring Direction: 1.00-1.75=Low   1.76-2.50=Moderately Low   2.51-3.25=Moderately High   3.26-4.00=High

According to the Table 1, the mean value for the item "I apply the knowledge that are obtained from the workshops and seminars" was highest (2.85) and teachers' practices are moderately high on this item. The mean value of the item "I attend education conferences or seminars" was lowest (1.39). Thus, teachers' practices on this item is low. And then the overall mean value for the continuous professional development practices of teachers in terms of Transmission was 2.13. So, teachers' practices are moderately low on Transmission.

Table 2   Mean Values and Standard Deviations of Continuous Professional Development Practices of Teachers in terms of Transition   (N=294)

No.	Transition Items	Mean (SD)
1.	I participate in a network of teachers.	3.09 (0.64)
2.	I participate in a collaborative research on a topic of professional interest.	2.09 (0.82)
3.	I obey the guidance and direction of more experienced teachers.	**3.45 (0.66)**
4.	I give the teaching advice to the less experienced teachers and peers.	3.00 (0.80)
5.	I discuss with the peers and expert teachers to solve the difficulties in my teaching.	3.17 (0.82)
6.	I exchange experiences, solve problems and learn together with my peers.	3.14 (0.81)
7.	I observe the other teachers' teaching.	2.41 (0.73)
8.	I facilitate the new teachers in their adaptation with new situation.	3.27 (0.79)
9.	I guide the new teachers on the school's procedures, responsibilities and rights.	3.12 (0.85)
10.	I participate in professional learning teams.	3.04 (0.70)
11.	I engage in informal dialogue with peers on how to improve teaching.	2.84 (0.72)
12.	I visit to other schools on the content of discipline and teaching strategies.	**1.87 (0.65)**
	Overall	**2.87 (0.48)**

Scoring Direction: 1.00-1.75=Low   1.76-2.50=Moderately Low   2.51-3.25=Moderately High   3.26-4.00=High

In Table 2, the item "I obey the guidance and direction of more experienced teachers" has the highest mean value (3.45). So, teachers' practices are high on this item. And the item "I visit to other schools on the content of discipline and teaching strategies" had the lowest mean value (1.87). Therefore, teachers' practices are moderately low on this item. The overall mean value for

the continuous professional development practices of teachers in terms of Transition was 2.87. Thus, teachers' practices are moderately high on Transition.

Table 3 Mean Values and Standard Deviations of Continuous Professional Development Practices of Teachers in terms of Transformation   (N=294)

No.	Transformation Items	Mean (SD)
1.	I conduct a research on a topic of professional interest.	2.22 (0.97)
2.	I keep the record of the portfolios for any professional development plan.	2.74 (0.97)
3.	I keep the record of the portfolios for any professional development activities.	3.03 (0.82)
4.	I do action research on the effectiveness of already used or newly adopted teaching techniques.	3.08 (0.74)
5.	I do action research on searching for solutions to every problem rising in classrooms.	**3.20 (0.76)**
6.	I read the thesis papers regarding the professional development of teachers.	2.19 (0.88)
7.	I read professional literatures such as journals and evidence-based papers.	2.90 (0.78)
8.	I study professional development programmes from online forums and websites.	2.20 (0.90)
9.	I do journal writing based on my teaching experience.	**1.33 (0.77)**
10.	I do self-assessment by using self-appraisal checklist.	3.13 (0.80)
	Overall	**2.60 (0.53)**

Scoring Direction: 1.00-1.75=Low   1.76-2.50=Moderately Low   2.51-3.25=Moderately High   3.26-4.00=High

According to the Table 3, the item "I do action research on searching for solutions to every problem rising in classrooms" had the highest mean value of 3.20. So, teachers' practices are moderately high on this item. And the item "I do journal writing based on my teaching experience" had the lowest mean value of 1.33. So, teachers' practices on this item is low. And then, the overall mean value for the continuous professional development practices of teachers in terms of Transformation was 2.60. Thus, teachers' practices are moderately high on Transformation.

Table 4 Mean Values and Standard Deviations of Continuous Professional Development Practices of Teachers at the Basic Education Schools   (N=294)

No.	Variables	Mean (SD)
1.	Transmission	2.13 (0.42)
2.	Transition	2.87 (0.48)
3.	Transformation	2.60 (0.53)
	Continuous Professional Development Practices	**2.57 (0.39)**

Scoring Direction: 1.00-1.75=Low   1.76-2.50=Moderately Low   2.51-3.25=Moderately High   3.26-4.00=High

According to the results, the mean value for the overall area of continuous professional development practices was 2.57. So, it was found that all participant teachers' practices are moderately high on the continuous professional development.

Findings for research question (2) are presented in the following Tables.

Table 5 The Results of Independent Sample *t* Test for Continuous Professional Development Practices of Teachers Grouped by Gender

Variable	Mean (SD)		*t*	*df*	*p*
	Male	**Female**			
Transmission	2.00 (0.38)	2.15 (0.42)	-2.178	292	0.03*
Transition	2.75 (0.51)	2.89 (0.47)	-1.763	292	ns
Transformation	2.47 (0.50)	2.62 (0.53)	-1.734	292	ns
CPD Practices	**2.44 (0.38)**	**2.59 (0.38)**	**-2.292**	**292**	**0.02***

Note: *$p<0.05$

Significant differences was found at *p*<0.05 level in the area of Transmission and overall continuous professional development practices. Moreover, no significant differences were found in the area of Transition and Transformation.

Table 6 One-Way ANOVA Results of Continuous Professional Development Practices of Teachers Grouped by Position

Variable	Mean (SD)			*F*	*p*
	ST	JT	PT		
Transmission	2.12 (0.36)	2.12 (0.42)	2.16 (0.47)	0.29	ns
Transition	2.93 (0.52)	2.83 (0.43)	2.86 (0.48)	1.05	ns
Transformation	2.65 (0.53)	2.52 (0.46)	2.65 (0.57)	2.04	ns
CPD Practices	**2.60 (0.40)**	**2.53 (0.34)**	**2.59 (0.41)**	**1.12**	**ns**

Note: ns=no significance

According to the ANOVA results in Table 4.8, there were no significant difference for the continuous professional development practices of teachers among their position.

Table 7 One-Way ANOVA Results of Continuous Professional Development Practices of Teachers Grouped by Age

Variable	Mean (SD)				*F*	*p*
	20-30 years	31-40 years	41-50 years	51 years and above		
Transmission	2.06 (0.39)	2.11 (0.37)	2.18 (0.42)	2.15 (0.46)	0.9	ns
Transition	2.89 (0.47)	2.87 (0.46)	2.95 (0.48)	2.84 (0.49)	1	ns
Transformation	2.61 (0.49)	2.50 (0.49)	2.69 (0.57)	2.62 (0.53)	1.7	ns
CPD Practices	**2.56 (0.38)**	**2.52 (0.36)**	**2.64 (0.40)**	**2.57 (0.40)**	**1.3**	**ns**

Note: ns=no significance

As shown in Table 7, the continuous professional development practices of teachers among four groups of age were not significantly different.

Table 8 One-Way ANOVA Results of Continuous Professional Development Practices of Teachers Grouped by Teaching Service

Variable	Mean (SD)				*F*	*p*
	<10 years	10-20 years	21-30 years	31 years and above		
Transmission	2.06 (0.39)	2.13 (0.35)	2.16 (0.43)	2.17 (0.49)	0.97	ns
Transition	2.92 (0.45)	2.86 (0.49)	2.92 (0.49)	2.82 (0.48)	0.72	ns
Transformation	2.58 (0.50)	2.57 (0.50)	2.70 (0.60)	2.60 (0.53)	0.77	ns
CPD Practices	**2.56 (0.38)**	**2.56 (0.37)**	**2.63 (0.42)**	**2.56 (0.39)**	**0.48**	**ns**

Note: ns=no significance

As presented in Table 8, there were no significant differences for the continuous professional development practices of teachers among the four groups of their teaching service.

Table 9 The Results of Independent Sample *t* Test for Continuous Professional Development Practices of Teachers Grouped by Qualification

Variable	Mean (SD)		*t*	*df*	*p*
	Educational Qualification	Other Qualification			
Transmission	2.13 (0.36)	2.14 (0.44)	-.212	195.747	ns
Transition	2.93 (0.53)	2.85 (0.45)	1.445	292	ns
Transformation	2.65 (0.52)	2.58 (0.53)	.982	292	ns
CPD Practices	**2.61 (0.40)**	**2.56 (0.38)**	**1.058**	**292**	**ns**

Findings for research question (3) are presented in the following Tables.

Table 10 One-Way ANOVA Results of Continuous Professional Development Practices of Teachers Grouped by Type of School

Variable	Mean (SD)			F	p
	High School	Middle School	Primary School		
Transmission	2.11 (0.41)	2.32 (0.41)	2.18 (0.46)	3.85	0.022*
Transition	2.87 (0.48)	3.00 (0.47)	2.62 (0.40)	3.60	0.028*
Transformation	2.56 (0.50)	2.79 (0.65)	2.80 (0.58)	4.05	0.018*
CPD Practices	**2.55 (0.38)**	**2.73 (0.44)**	**2.55 (0.27)**	**3.29**	**0.039***

Note:*$p < 0.05$

Table 11 The Results of Tukey HSD Multiple Comparisons for Continuous Professional Development Practices of Teachers Grouped by Type of School

Variable	(I) School	(J) School	Mean Difference (I-J)	p
Transmission	High School	Middle School	-.213*	.018*
Transition	Middle School	Primary School	.380*	.021*
CPD Practices	High School	Middle School	-.184*	.030*

Note:*$p< 0.05$

According to the above Table 7, it could be analyzed that there were significant differences between high school and middle school in Transmission and overall continuous professional development practices. And it could also be found that there were significant difference between middle school and primary school in Transition.

Qualitative Findings

(i) Open-ended Questions

- The most prioritized practices was Transformation. (n=124, 42.18%)

- The teachers' feelings in performing the continuous professional development practices are enthusiastic, enjoy, satisfied, happy, active and proud. (n=133, 45.23%)

- The common challenges encountered in participating and collaborating the continuous professional development activities with principals and colleagues together are no enough time (n=92, 31.29%) and no available resources (time, places for discussion, classrooms, teaching aids, real objects and illustrations) (n=69, 23.47%).

- The continuous professional development activities that were performed in their schools were helpful to improve their teaching skills (n=261, 88.78%).

- The continuous professional development activities were needed to be done (n=270, 91.83%).

(ii) Interview Questions

When the teachers were interviewed about **the difficulties or challenges they encounter to do continuous professional development practices concerned with teacher associated challenges,** all teachers said that teacher-pupil ratio and teacher-classroom ratio were not balanced. So, they could not do action research and innovative changes in their classroom and they can't give enough time for professional development activities. They had no skill to use the technology well. So, they were not able to study the professional development activities from online forums and websites. They can sometimes surf internet for professional development because of insufficient time, heavy workload, deficiency in eye health and poor internet connection. Although they had

the commitment and will to improve their teaching skills by attending English and computer classes, they could not give enough time because of their so many difficulties (socioeconomic, family and transportation). In the case of CPD recording, two teachers said that they had some difficulty. Therefore, they needed to obey the guidance of more experienced teachers and discussed with expert teachers. But they could rarely have chances to discuss with peer and expert teachers due to heavy workload and time constraints.

When the teachers were interviewed about **the difficulties or challenges they encountered to do continuous professional development activities with respect to the support of leaders,** five teachers said that since the professional development training were mostly derived, the trainers' delivery of teaching were not effective as intended. The trainers were skillful but the training periods were short and they could not teach completely and carefully. According to the timetable, they could give one teaching period for one subject. Only one teacher said that the trainers perceived that the teachers were already skillful and they did not train carefully. So, there were some difficulties in practice teaching of some subjects such as music. One teacher said that the training periods were enough and convenient for her. In primary school and middle school, the principal sometimes participated in subject discussions because of their heavy workload and time constraints. In high school, the principal participated in subject discussions regularly in his free time such as lunch time. Two teachers said that the principals did not give directions intentionally on teachers' professional development because of workload. But the principals provided only if the teachers asked for something necessary. All teachers said that the principals' visit to classrooms were rare. The school principal did not have the opportunities to organize the school visit program because of heavy workload. Resources for professional development (budget, teaching aids, textbooks and journals) were not sufficiently provided. Two teachers said that the Township Education Officers gave directions and suggestions on teachers' needs only when they came to schools. Three teachers said that responsible persons did not organize for teachers to attend conferences and seminars.

When the teachers were interviewed about **the difficulties or challenges they encounter to do continuous professional development practices according to the school system**, four teachers from middle school and high school said that the school systems were ineffective in building the sense of collective capacity. Two teachers from primary school said that their school system was effective in building the sense of collective capacity. In their school systems, teachers conceptualized staff development activities well. All teachers said that the schools' professional development activities met the teachers' needs to improve teaching skill. A teacher said that only teachers who were not in good health could not participate in professional development activities.

When the teachers were interviewed **about the suggestions in order to be more effective in the current continuous professional development activities**, all teachers said that they might study and learn more seriously, read more and learn more such as books and online forums. If more time could be given, the professional development activities could be more effective. The books that could be benefit for them should be provided sufficiently. It could be more effective if much more teachers would collaborate actively in professional development activities. Training should be given more times and should take more training periods for teachers to understand completely. It could be more effective if the trainers explained all chapters that were contained in one subject as a summarized pattern. Colleagues should be cooperated more flexibly in a group work to be more effective. During a training period, the lodging for teachers should be provided.

Summary of Research Findings

This research aimed to investigate the continuous professional development practices of teachers in Gyobingauk Township. Continuous professional development practices were examined according to the personal factors such as gender, position, age, teaching service and qualification and type of school.

There were 294 teachers were included as samples in this study. In this study, teachers' continuous professional development practices were determined according to the mean values of teachers' responses to the questionnaire items by using the Statistical Package for Social Science (SPSS) version 22. The Independent Samples *t* Test was used to find the significant differences between teachers grouped by gender and qualification. And also, One-Way Analysis of Variance (ANOVA) and Tukey Post-Hoc test were used to examine the differences of continuous professional development practices of teachers according to their age, teaching service, position and type of school. Findings could be summarized as follows.

- Regarding to the continuous professional development practices of teachers, the mean values for the overall continuous professional development of teachers was 2.57. So, it could be found that teachers' practices are moderately high on continuous professional development. The mean values for three variables such as Transmission, Transition, and Transformation were 2.13, 2.87 and 2.60 respectively. Therefore, it could be said that teachers' practices are moderately low on Transmission and moderately high on Transition and Transformation.

- With regard to the gender, the mean value of male teachers for the continuous professional development was 2.44 and that of female teachers was 2.59. So, it could be concluded that male teachers' practices are moderately low on continuous professional development and female teachers' practices are moderately high on continuous professional development. The result of Independent Samples *t* Test showed that there were significant differences in the area of Transmission and overall continuous professional development practices.

- Regarding to their positions, three groups of teachers (senior teacher, junior teacher and primary teachers) practiced continuous professional development in a moderately high level. And also, it was found that there were no significant differences among three groups of teachers.

- Regarding to their age groups (20-30 years, 31-40 years, 41-50 years and 51 years and above), all the four groups of teachers practiced continuous professional development in a moderately high level. The result of ANOVA showed that there were no significant differences among four groups of age.

- With regard to their teaching service, there were no significant differences in performing continuous professional development practices among four groups such as less than 10 years, 10-20 years, 21-30 years and 31 years and above and all groups of teachers practiced continuous professional development in a moderately high level.

- Regarding to type of school, all three types of school (high school, middle school and primary school) practiced continuous professional development in a moderately high level. The ANOVA results showed that significant differences were found among three types of schools in all three variables and overall continuous professional development practices. Tukey results showed that mean values of middle schools were high in the area of Transmission, Transition and overall continuous professional development practices.

- With regard to the qualification, educational qualification group had higher mean value than other qualification group and these two groups practiced continuous professional

development in a moderately high level. And also there were no significant differences were found between these two groups.

- As the result of the qualitative study, some important findings from open-ended questions and interview questions were noted and summarized. In open-ended responses, teachers who practiced Transformation is the most. Most teachers felt very satisfied in practicing continuous professional development and expressed that these programs were helpful for them and needed to be done. They also mentioned that the inadequate resources (time, places, classrooms, teaching aids) in their schools to perform continuous professional development practices. There were no enough time for principals in participating continuous professional development practices of teachers. Some teachers expressed that there were some difficulties in negotiation. In interview results, the common challenges encountered by teachers to perform continuous professional development practices were lack of skill, insufficient time and over workload of teachers and principals and inadequate resources.

- To sum up, according to the quantitative and qualitative results, it could be concluded that teachers' continuous professional development practices depended on the challenges encountered and also be notable that teachers' continuous professional development practices differed depending on the opportunities that the teachers' could have.

Discussion

Continuous professional development encompasses the formal and informal learning that make individuals to enhance their own performances. Teachers' abilities could be improved by participating in formal experiences such as attending workshops, courses, professional meetings, mentoring, etc. as well as by performing informal activities such as reading professional publications, watching television related to their respective disciplines, studying the academic online forums and websites etc., (Villegas-Reimers, 2003). In these ways, teachers can improve their instructional abilities continuously by applying transmission methods, by transiting their own abilities each other and by having strong awareness of themselves in their abilities and autonomously perform to improve their abilities. In this study, the teachers' continuous professional development practices are not the same because of their various background situations such as their personal factors, school factors, opportunities and challenges encountered.

According to the results, teachers' practices are moderately low on the Transmission. The mean values of teachers' practices in attending conferences or seminars, post-graduate degree programs and holiday classes were lowest and their practices are low on these items. And the mean values of attending courses and workshops were high and they practiced moderately high on this item. Bell and Day (2001) stated that courses are the most common and widely accepted approach to the development of educators. The result findings of OECD 2009 mentioned that the least common type of professional development was "Qualification programmes" and the most frequently performed activity was "Courses and workshops". They also mentioned that qualification program was least performed because this program is the most time-intensive program. And also, the qualitative findings investigated that teachers could not give enough time to attend qualification programs and holiday classes and they also had no opportunities to attend conferences or seminars. But they attended teaching subject professional development courses held by MOE and applied knowledge that are obtained from these workshops and courses. So, findings of this study was consistent with the above findings of OECD.

In the dimension of Transition, the teachers' practices are moderately high on this. Hord (1997) pointed out that effective teachers can be fostered by grounding professional development in collaborative learning communities that appear teachers' mutual engagement in action, make

them feel valued, and encourage them to talk about their different experiences and understandings. The results of the study indicated that the teachers' practices in mentoring, coaching, induction and engaging in informal dialogue with peers were high and that of collaborative research, peer observation and school visits were low. In the findings of OECD (2009), it was found that teachers' participation in collaborative research, peer observation and school visit programs were less. They mentioned that collaborative research is the activity that require more time than other activities. Seo (2009) noted that classrooms are very isolated places and there is resistance from teachers against having peers in their classroom. Thus, peer observation is rarely practiced. Little (1982) stated that collegial relationships is important in collaborative teacher learning. But, in open-ended findings, there were some misconceptions and arguments in subject discussions. The interview results also indicated that the principals did not have opportunities to arrange school visit programs because of their time constraints and heavy workload. Thus, principals and colleagues need to nurture collegial learning culture for improving teachers' abilities through collaborative learning communities.

According to the mean values, teachers' practices are moderately high on Transformation. Mujis et al., 2004 stated that an awareness of less formal and traditional forms of CPD is slowly growing, which calls for teachers to become more creative in their approaches to their own professional development, and move away from more traditional transmission-based methods. But, in this study, it was found that they could not conduct individual research for their benefits and could not do journal writing on their teaching experiences according to the mean values. And also they could not study professional development programmes from online forums and websites and rarely had chances to read thesis papers and journals. The finding of OECD stated that individual research is the more time taken activity that is the teachers least participated. In the qualitative study of this research, it was found that teachers had not enough time and journals and the supportive papers were not easily available in their schools. This result support the finding of OECD.

Finding from analyzing the three elements of teachers' continuous professional development practices, teachers' practices are moderately low on Transmission and moderately high on Transition and Transformation. According the mean values, Transition was the most practiced. This finding supports the finding of Van Eekelen et al., (2005), in their study of teacher learning, revealed that learning in interaction and learning by doing was the most important factor in professional development. But, the open-ended finding of this study investigated that Transformation is the most practiced activity for professional development. So, the result of quantitative finding does not consistent with the qualitative results. The researcher is aware of the fact that professional learning is not viewed as an isolated individual journey, but an ongoing process which involves other members of the professional community. Therefore, it could be interpreted that teachers practice not only Transition but also Transformation.

So, in this study, teachers' practices are moderately high on the continuous professional development. Based on the quantitative and qualitative findings of this study, it can be concluded that teachers' continuous professional development practices varies according to the challenges or difficulties they encountered.

Recommendations

Based on the quantitative and qualitative findings of this study, the following suggestions can be given.

- Teachers should get the opportunities to attend conferences or seminars.
- Thesis paper and other supportive journals that are concerned with the professional development of teachers should be available.
- Teachers should set aside time for their own professional development.
- Teachers should learn to improve technological skills to keep up with the changing world and to study for improving their abilities on their own.
- It should be reduced non-instructional workload of teachers and principals that are not related to improving skills.
- Teacher-pupil ratios and teacher-classroom ratios should be balanced.
- Professional development training should include skillful trainers, adequate summarized explanations, enough times and should be held frequently within one year.
- Peer and principal collaboration for professional development should be flexible.
- Principals should arrange the school visiting programs for teachers to observe other teachers' experiences.
- Professional training should emphasize on the needs of the teachers to overcome the barriers in their teaching.
- Adequate resources such as time and budget should be provided for teachers' professional development.

Need for Further Study

This study was conducted to investigate the continuous professional development practices of teachers in Gyobingauk Township. Therefore, further study should be conducted in another township. And also, in this study, the practices were investigated in three areas in general. So, it should also be needed to study detail in teachers' role of continuous professional development with regard to school based CPD, leadership and supportive role in implementing continuous professional development and the contributions of school based continuous professional development practices for the staff development and school improvement.

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ASSESSING ORGANIZATIONAL HEALTH OF BASIC EDUCATION SCHOOLS

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Abstract

The main aim of this study is to study the organizational health of Basic Education Schools in Hlegu Township. Both quantitative and qualitative methods were used in this study. by using the proportionate stratified sampling method, (307) teachers nested in fifteen schools were selected as sample from three strata – senior teachers, junior teachers and primary teachers in Hlegu Township. The organizational health of school questionnaire, open-ended questions, interview, and observation checklist were used to collect the required data. The internal consistency (Cronbach's alpha) of questionnaire was (0.91). Descriptive statistics, Independent Samples *t* test, and One-way ANOVA were used to analyze the quantitative data. According to organizational health index, one school had low organizational health index, eleven schools had average organizational health index, two schools had above average organizational health index and one school had high organizational health index. The organizational index was not significantly different between urban school and rural schools as a result of *t* test. In accordance with type of schools, the organizational health indexes were significantly different among three types of schools (post primary schools, middle schools, and high schools) according to one-way ANOVA result. In line with qualitative study, it was found that teachers notably pointed out the problems of unreasonable parental demands, insufficient resource support and low students' interest in learning. At low organizational health index school, the teachers pointed out that the principal's managerial functions are the most important ones to be an organizational healthy school.

Keywords: Organizational health

Introduction

In the present global competition era, a nation's success relies basically on the knowledge, skills, competencies, and attitudes of its public. The investment in education is the key for substantial long-term benefits of countries. Education enables the individuals to improve their lives, become effective members of their communities and contribute to socio-economic development of nation. Consequently, every nation attempts to upgrade their education system. Myanmar is also trying to implement quality education system, especially making implementation of KG+12 new education system in Basic Education Sector. Miles (1969) found that most innovation and changes in schools had faced failure. This is because of giving most attention to the content of these innovation and changes only and least attention to the context in which innovation and changes take place. Attention to the organizational health is to be first priority one for any administrators seriously concerned with innovativeness in today's educational environment. The school workplace, Basic Education Schools, need to be organizational healthy schools to adapt these educational reforms.

By examining the organizational health of schools, Hoy, Tarter and Kottkamp (1991) recommended that it is able to know what is needed before change efforts, to improve instructional effectiveness indirectly through the development of an open, organizational healthy and trustful climate, to continue assessments of principals' administrative practice, to promote the conditions for organizational healthy and open schools, and to find the elements that combine or intervene for the organizational health of schools. The researchers recommend to use the concept of organizational health in schools because of two reasons. The first is that school is regarded as a social system in which the principals, teachers and students take part. Thus, organization health

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can reflect the social interaction between these key representatives (Cheng, 1987; Tsui, Leung, Cheng, Mok, & Ho, 1994). The second is that organizational health is necessary for schools for the purpose of efficiency in performing certain functions. A reasonably clear conception of organization health would seem to be an important prerequisite to a wide range of activities such as attempts to improve the organization as a place to live, work, and learn. Therefore, it is needed to reveal the organizational health of Basic Education Schools so that educational reforms of Myanmar education system are to be effective changes.

Aims of the Study

Main Aim

The main aim of this study was to study the organizational health of Basic Education Schools in Hlegu Township.

Specific Aims

1. To investigate the levels of organizational health index in Basic Education Schools

2. To explore the variations of organizational health index of schools according to their location and types of schools

Research Questions

1. What are the levels of organizational health index in Basic Education Schools?

2. What are the variations of organizational health index of schools according to their location and types of schools?

Limitations of the Study

This study is geographically restricted to Hlegu Township, Yangon Reagion. The participants in this study are only teachers from Basic Education Schools in Hlegu Township.

Theoretical Framework

For this study, organizational health of schools is studied with seven dimensions based on organizational health dimensions of Hoy and Feldman (1987) and Hoy, Tarter and Kottkamp (1991).

Institutional Integrity: It is the school's ability to cope with its environment in a way that maintains the educational integrity of its program. Teachers are protected from unreasonable community and parental demands (Hoy & Feldmen, 1987). According to Hoy, Tarter and Kottkamp (1991), the school which has institutional integrity is not vulnerable to narrow, vested interests of community groups. Moreover, the school is able cope successfully destructive outsides forces.

Initiating Structure: It is the principal behavior that is both task- and achievement- oriented. Work expectations, standards of performance, and procedures are clearly articulated by the principal (Hoy & Feldmen, 1987). The principal makes his or her attitudes and expectations clear to the faculty and maintains definite standards of performance (Hoy, Tarter & Kottkamp, 1991).

Consideration: It is the principal behavior that is friendly, supportive, open and collegial. It presents a genuine concern on the part of the principal for the welfare of the teachers (Hoy & Feldman, 1987). Hoy, Tarter and Kottkamp (1991) stated consideration of principal as the principal looks out for the welfare of faculty members and is open to their suggestions.

Principal Influence: It is the principal's ability to influence the actions of superiors. Being able to persuade superiors, to get additional consideration, and to unimpeded by the hierarchy are important aspects of school administration (Hoy & Feldman, 1987). The influential principal is persuasive, works effectively with the superintendent, simultaneously demonstrates independence in thought and action (Hoy, Tarter & Kottkamp, 1991).

Resource Support: It refers to a school where adequate classroom supplies and instructional materials are available and extra materials are readily supplied if requested (Hoy & Feldman, 1987; Hoy, Tarter & Kottkamp, 1991). Hoy and Forsyth (1986) referred resource support that teachers are providing with the basic materials they need to do an outstanding teaching job, and instructional materials and supplies are readily available. If extra or supplementary materials are needed or requested, they are quickly supplied. In brief, teachers have access to the materials that they need.

Cohesiveness: It is a collective sense of friendliness, openness, enthusiasm, and trust among faculty members. Teachers like each other, like their jobs, and help each other; and they are proud of their school and feel a sense of accomplishment in their jobs (Hoy, Tarter & Kottkamp, 1991; Hoy & Feldman, 1987). Hoy and Forsyth (1986) referred cohesiveness to a collective sense of friendliness, openness, and trust within the faculty.

Academic Emphasis: It refers to the schools press for achievement. High but achievable academic goals are set for students; the learning environment is orderly and serious; teachers believe in their students' ability to achieve; and students work hard and respect those who do well academically (Hoy & Feldman, 1987; Hoy, Tarter & Kottkamp, 1991).

Definition of Key Term

Organizational Health of School: An organizational healthy school is one in which the technical (concerning with teaching-learning process, managerial (controlling the internal administrative functions of the organization), and institutional (protecting school from undue pressure of individuals and groups outside the school) levels are in harmony and the school is meeting both its instrumental and expressive needs as it successfully copes with disruptive external forces and directs it energies toward its mission (Hoy & Feldman, 1987; Hoy, Tarter and Kottkamp, 1991).

Operational Definitions

Organizational Health of Schools: Organizational health of schools was operationally defined as the level of mean values showing the degree of agreement on organizational health descriptive items measured by organizational health questionnaire which comprised of forty-four (four-point Likert-type) items in seven dimensions: institutional integrity, initiating structure, consideration, principal influence, resource support, cohesiveness and academic emphasis.

Organizational Health Index of Schools: Organizational health index of schools was defined as the level of standardized mean values showing the degree of agreement on organizational health descriptive items measured by organizational health questionnaire which comprised of forty-four (four-point Likert-type) items in seven dimensions: institutional integrity, initiating structure, consideration, principal influence, resource support, cohesiveness and academic emphasis.

Location of School: It referred to urban school and rural school based on the area the school exists according to the data of education office of Hlegu Township.

Types of Schools: It meant Basic Education Post Primary Schools, Basic Education Middle Schools, and Basic Education High Schools.

Methodology

Quantitative Methodology

Population and Sample

This study was conducted in Hlegu Township. There were (1576) teachers who are nested in Basic Education Schools of this township. Science the unit of analysis is the school level, fifteen Basic Education Schools were randomly selected to answer the research questions. To acquire the required sample size, the proportionate stratified sampling method was used. A total of (307) teacher from three strata – senior teachers, junior teachers, primary teachers were selected as sample.

Instrumentation

The questionnaire was adapted by the researcher based on organizational health dimensions of Hoy and Feldman (1987), and Hoy, Tarter and Kottkamp (1991). This questionnaire was comprised of demographic data and items stating the organizational health of schools. Demographic data included gender, position, qualification of participants, and types of school and location of schools. Organizational health of schools items could be grouped into seven dimensions: Institutional integrity, Initiating Structure, Consideration, Principal Influence, Resource Support, Cohesiveness and Academic Emphasis. Respondents were asked to indicate the extent to which each items that characterized their schools along a four-point Likert scale ranging from ("1=Strongly Disagree", "2=Disagree", "3= Agree" and "4= Strongly Agree). Open-ended questions (5 questions) about organizational health of schools were also part of the survey instrument. To be a valid and reliable instrument questionnaire, **instrument validity** and **instrument reliability** were conducted. **For instrument validity**, a panel of experts reviewed the instrument for content clarity, discriminative values among items, and grammar usages. This panel was a think-tank of nine experienced educators who were two associate professors, three lecturers, and four assistant lecturers qualified in educational administration and supervision. After taking instrument validity, pilot study was conducted with fifty teachers of No (3). Basic Education High School, Mingalardon Township, Yangon Region on 17th, September, 2019. **For instrument reliability**, the Cronbach's alpha value for overall items that taped into the organizational health of Basic Education Schools was (0.91).

Procedure

First and foremost, the related literature was first reviewed. With sincere guidance of supervisor, the researcher developed the research instrument to collect the required data. The content of the items and grammar usages were revised in accordance with the result of expert review. And then, the pilot study was undertaken to refine the developed questionnaire. After that, to distribute the questionnaires, the approvals of the professor of Department of Educational Theory and township education officer (Hlegu township) were requested. Then, the questionnaires were distributed to the respondents in each Basic Education School between 22nd October, 2019 and 25th October, 2019. After one week, the researcher recollected the questionnaires. The respondent rate was 95.05%.

Data Analysis

Descriptive Statistics, Independent Samples *t* test, One-way ANOVA and Post Hoc Tukey HSD were used to analyze the data.

Qualitative Methodology

To complete and provide strength of confidence in the quantitative findings, qualitative data were collected. Qualitative data were collected through open-ended questions, interview questions and observation checklist of organizational health of schools.

Sample

Out of fifteen schools, four schools were selected according to their organizational health index. Three teachers from four schools and totally twelve teachers were interviewed. All four schools were observed with observation checklist.

Instrumentation

Interview questions and observation checklist were developed by the researcher under the guidance of supervisor. The number of interview questions were totally 11 items which taped more details in touch information about organization health of schools dimensions. Observation checklist consists 22 descriptive facts which highlighted the observable data.

Procedure

The researcher and two collaborators held interview and observation in selected schools from 3rd December to 5th December, 2019. Interview was held by using semi structured interview.

Data Analysis

After collecting the data, they were thoroughly studied to categorize the similar ideas and to identify the main theme. Data analysis was based on categorizing and interpreting the interviews, open-ended questions and observation checklists. The data were examined in-depth to provide the detailed description of the responses of teachers in align with seven dimensions of their schools.

Findings

Quantitative Findings

Findings for research question (1) are presented in Table 1.

Table 1 Organizational Health Index of Basic Education Schools

No.	Basic Education Schools	Organizational Health Index	Remark
1.	Post Primary School A	496	Average
2.	Post Primary School B	495	Average
3.	Post Primary School C	536	Above Average
4.	Post Primary School D	504	Average
5.	Post Primary School E	520	Average
6.	Middle School A	510	Average
7.	Middle School B	578	High
8.	Middle School C	518	Average
9.	Middle School D	499	Average
10.	Middle School E	542	Above Average
11.	High School A	487	Average
12.	High School B	507	Average
13.	High School C	423	Low
14.	High School D	500	Average
15.	High School E	501	Average

Scoring Direction: Less than 400= Very Low, 400-440= Low, 441-480= Below Average, 481-520= Average, 521-560= Above Average, 561-600= High, Greater than 600= Very High

As indicated in Table 1, one school had low organizational health index; eleven schools had average organizational health index; two schools had above average organizational health index; and one school had high organizational health index.

Findings for research question (2) are revealed in Table 2 and Table 3.

Table 2 Independent Samples *t* Test Result Showing Organizational Health of Schools Grouped by Location of Schools (N=307)

Organizational Health	Location of Schools	*df*	*t*	*p*
Institutional Integrity	Urban	305	-2.429	**.016***
	Rural			

*Note: *p<0.05*

Therefore, there was a statistically significant difference in institutional integrity between urban and rural schools.

Table 3 Post Hoc Turkey HSD Multiple Comparisons Result Comparing Organizational Health of Schools in terms of Types of Schools

Organizational Health	(I) Types of Schools	(J) Types of Schools	Mean Difference(I-J)	*p*
Initiating Structure	Middle Schools	Post Primary Schools	57.80	n.s
		High Schools	77.40*	**.019***
Consideration	High Schools	Post Primary Schools	-78.45*	**.000*****
		Middle Schools	-73.74*	**.000*****

*Note: *p<0.05, ***p<0.001, n.s = no significance*

Therefore, it can be noted that three types of schools differed only in initiating structure and consideration.

Qualitative Findings

Findings from Open-ended Questions

Question 1: *Do parents make demands on teachers and or the school that the school perceives as being unreasonable? If so, gives examples.*

Low organizational health index school: 28% of teachers answered that there were no unreasonable parental demands and 72% of teachers answered that some parents made unreasonable demands. Unreasonable demands are unfollowing school discipline, showing disrespectful manners.

Average organizational health index school: 66% of teachers answered that there were no unreasonable parental demands and 20% of teachers answered that there were demands from some parents. Unreasonable demands are seating arrangement, feeding their children at lunch time and to change school hour.

Above average organizational health index school: 76% of teachers answered that there were no unreasonable parental demands and 24% of teachers answered that some parents made unreasonable demands. Unreasonable demands are seating arrangement, to meet children at lunch time.

High organizational health index school: 100% of teachers answered that there are no unreasonable parental demands.

Question 2*: What are the major problems for you in this school?*

 Low organizational health index school: 77% of teachers answered that they had the problems about principal management, resource support and students' learning and other problems.

 Average organizational health index schools: 12% of teachers answered that they had no problems. 21% of teachers answered the problems about principal management and 61% of teachers answered the problems about insufficient resource support and unsatisfactory students' learning.

 Above average organizational health index schools: 51% of teachers answered students' learning problems and 49% of teachers answered that there were no problems.

 High organizational health index school: 100% of teachers answered the problems of students' less of interest in learning.

Question 3*: Does your principal protect or buffer your school from unreasonable demands made by community organizations and superiors? Explain.*

 Low organizational health index school: 66% of teachers answered that the principal did not protect them from the unreasonable demands of community organizations.

 Average organizational health index schools: 61% of teachers answered that the principal protected them from community organization demands.

 Above average organizational health index schools: 100% of teachers answered that the principal gave protection them from the demands of community organization.

 High organizational health index school: 100% of teachers answered that the principal protected them from unreasonable demands of community organizations.

Question 4*: Do you feel enjoyment in this school or not? Why?*

 Low organizational health index school: 30% of teachers answered that they felt enjoyment in this school. 49% of teachers answered that they did not feel enjoyment in this school because of low parental involvement, unfollowing school discipline by the students, inconvenient transportation, over workload and no time for professional development, inconsistency of teaching subjects and specialization subjects and favorably treatment of principal.

 Average organizational health index schools: 19% of teachers answered that they had no enjoyment because of over workload and 76% of teachers answered that they felt enjoyment. The factors made them enjoyed are good administration, equal treatment of principals, collegial spirit among colleagues, good collaboration with community organizations, passion to teaching proficiency and adoring of students, and being their native schools.

 Above average and high organizational health schools: 100% of teachers enjoyed because of convenient transportation, family type relation among colleagues, good cooperation among parents, school and community organizations, good management of principal and being their native school.

Question 5*: How would you suggest for the organizational health of your school?*

 Low organizational health index school: 77% of teachers gave the suggestions: to reduce class size and over workload, to persuade parents to be interested in their children education, to have more cooperation among parents, teachers and principals, to nurture students for well round development and to lead by the principal with good management.

 Average organizational health index schools: 76% of teachers gave suggestions: to reduce class size, to cooperate, to emphasize academic improvement by the principals.

Above average and high organizational health index schools: 91% of teachers suggested that to provide sufficient resource such as play grounds and teaching and non- teaching staffs to be organizational healthy schools.

Findings from Interview Questions

Interview findings can be summarized in line with seven dimensions as follows.

Institutional Integrity: Low organizational health index school encountered the unreasonable community and parental demands, low parental support and bad relation with community organizations. Average and above average organizational health index schools encountered the minor parental demands and had good relation with parents and community organizations. High organizational health index school did not have the community and parental demands and these organizations gave support to the school.

Initiating Structure: For the low organizational health index school, the principal was weak at defining roles and allocating works. The principals of average and above average organizational health index schools allocated work well to accomplish effectively and efficiently. The principal of high organizational health index school was good at defining roles and allocating works and demonstrated openly what is expected from the teachers.

Consideration: The principals of all schools treated the teachers in justice. They were friendly, supportive, open and collegial. The principals understood the personal difficulties of teachers and stand for the personal welfare of teachers.

Principal Influence: For the low organizational health index school, the principal did not protect the teachers from the unreasonable parental and community demands. The principals of average and above organizational health index schools protected the teachers from unreasonable parental and community demands and solved the problems. The principal of high organizational health index school gets the support of parents and community organizations and has good relationship with them. Noticeably, all teachers from all types of schools did not answer the relations of principals and superior persons.

Resource Support: Low organizational health school supported the instructional materials and cleaning materials at the beginning of academic year. When these materials run out, the teachers had to buy makers, ink, and cleaning materials by themselves. The average and above average organizational health index schools provided the instructional materials and cleaning materials at the beginning of academic year and ink, makers were provided one time per month. The high organizational health index school provided the instructional and cleaning materials one time per three months. But all schools had the problems of unbalanced teacher-student ratio and over class size.

Cohesiveness: Most of teachers in all schools are happy and united to perform tasks. They completed the tasks with great enthusiasm. They help each other and do favor each other. They like their jobs and are proud of their school, but do not feel a sense of accomplishment in their jobs. Inconvenient transportation, over workload, no time for professional development, low parental involvement, insufficient resource support, additional tasks other than instructional ones and unsatisfactory students' learning ability were the problems facing by the teachers and that affect the teachers' cohesiveness. From the positive side, being their native schools and loving their students were the factors that enhance the cohesiveness of teachers.

Academic Emphasis: Except the low organizational health index school, other schools held the various competitions such as random talk, sport competitions for students to nurture their students to be well round developed citizens. The classrooms were decorated with instructional aid charts. The teachers tried by using various instructional methods to get the interest of students. But all

schools encountered the problems of students' less of interest in learning and unsatisfactory learning ability of students.

Conclusion, Discussion and Suggestions

Conclusion and Discussion

Based on the findings of both quantitative and qualitative studies, discussion was presented in align with seven dimensions of organizational health of schools.

According to standardized mean values of each school, two schools had low institutional integrity, another two schools were below average; seven schools had average institutional integrity; one school was above average and three schools had high institutional integrity. In this study, the schools have integrity in its educational programs, there are no narrow, vested interests of community groups. At only the low organizational health index school, the community organizations wanted to take benefit from school improvement fund. It indicated that institutional integrity depends on location of schools and does not depend on types of schools. Rural people and parents are more friendly and respectful to the teachers than urban ones. They believe teachers can best guide and instruct their students. It is consistent with the findings of Dunne (1983 as cited in McCracken, 1991). He found that rural people were proud of their schools and described a feeling of family, individual attention, and community commitment of resources and people.

In terms of standardized mean value of each principal, one principal was in low; three principals were in below average; six principals were average; three principals were above average and last one principal were high in initiating structure. Principals have task and achievement behavior and maintain the standard of performance. Principals with good initiating structure skills were good at defining roles and allocating tasks. But principals with low skills were weak in these tasks. Initiating structure of principals did not depend on the location of schools but it varied according to the types of schools. It could be the effect of organizational size. The organizational size of high schools was greater than middle schools and post primary schools. Principals cannot know the individuality of all teachers and there are misplacements of teachers when allocating tasks. It is consistent with finding of Matrix (2017). He found that company size was negatively related with task-oriented leadership dimension. It is interested that why there was no significance difference between initiating structure of post primary schools and high schools although these schools had a difference in organizational size. Number of teachers in primary schools are less than ten and all teachers had to participate in all activities of school.

In terms of standardized mean value, only one principal had low consideration standardized mean value. Three principals were in below average; five principals were in average; three principals were in above average; and three principals were in high. In this study, all principals are friendly, and approachable. Low organizational health index schools were weak in listening teachers' suggestions. It was found that consideration of principals was independent of location of schools but it varied according to types of schools. It could be the effect of organizational size. High school principals cannot listen to the voice of all teachers. They had to make decisions with only head of teachers for school affairs and subject leaders for student achievement. Principals cannot give understanding for personal difficulties of some teachers to be fair treatment. They could not reach knowing individuality of teachers. It is consistent with the literature of Matrix (2017). He found that increasing size has statistically significant negative effects on employee-oriented leadership styles.

According to standardized mean value of each principal, two principals had low principal influence standardized mean value; three principals were in below average; five principals were in average; and three principals were in above average. The last two principals had high principal

influence standardized mean value. In this study, the noticeable thing for this dimension is that there was no reverse communication by the principals to the superiors and superintendents. The principals had to carry out functions in a line with given orders of superiors and superintendents and they did not report the things that were inconsistent with the real situations. It was found that principal influence did not depend on location of schools and types of schools. It depended on own personality of principals. And also it can be because all schools are government supported schools, the trending procedure is centralized system, there are timely rules, regulations and procedures, instructions for all schools and all principals had to follow them strictly and definitely.

In terms of standardized mean value of each school, two schools had low standardized mean values for resource support; another two schools had below average; seven schools were in average; one school were above average; and three schools were in the high of resource support. It was found that resource support of schools is not governed by location of schools and types of schools. It could be because all schools are government supported schools and all schools received school improvement fund two times per one academic year based on number of students in their schools. According to observation checklist results, some classrooms were hall type and it made interference the instruction of one teacher to another. The maximum number of students per classroom was even (81) in some schools. The ratio of teachers to students was even 1: 54. Some schools had no non-teaching staffs and teachers had to perform additional tasks besides instructional ones. There were schools with no specialization teachers for some subjects and the others teachers tried to teach this subjects. It leads to over work load for teachers.

In terms of standardized mean values of cohesiveness of each school, teachers from three schools were in below average; teachers from eight schools were in average; teachers from two schools were in above average; and teachers from another schools were in high. In this study, there are no relationship problems among teachers, they are friendly, trust each other. But, teachers do not feel a sense of accomplishment from their jobs. It is the only factor which causes cohesiveness of teachers below average. It found that cohesiveness among teachers is not concerned by location of schools and types of schools. Teachers' cohesiveness depends on only their school and there are some factors that affect teachers' cohesiveness. These factors are low parental involvement, inconvenient transportation, unsatisfactory students' learning ability, insufficient resource support, mismanagement of principals and over workload, non-teaching tasks and no time for professional development. Especially, teachers did not gratify with students' learning ability and they want their students to try hard and have interest in learning. From the positive site, teachers love their students and some teachers worked at their native schools. These are the facts that enhance teachers' job satisfaction of cohesiveness.

According to standardized mean value of each school, one school had low standardized mean values of academic emphasis; eight schools had average standardized mean values; five schools had above average standardized mean values; and one school had high standardized mean values of academic emphasis. In this study, most teachers believe that students cannot learn well and do not try hard. These factors make academic emphasis of schools lower. It was found that the academic emphasis of schools was not influenced by location of schools and types of schools. Teachers put students' interest in learning as the first priority. Then, they start instructional process. In this study, it could also reveal the factors that impede academic emphasis of schools. Especially, students' interest in learning is the major problem that teachers faced and impeded the academic emphasis of schools. Although school effectiveness is a complex multifaceted construct, every effective school gives emphasis on academic emphasis.

In sum, these dimensions are the heart parts of organizational health of schools. The organizational health of a school can provide insights into aspects of their schools that could have gone unnoticed for school leaders, both teachers and principal. When these seven dimensions are

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harmony in a school, this school is a home of happy teachers, students, parents and principals. The community will be proud of their school.

Suggestions

The following suggestions should be taken into account by all educators.

- The school should persuade parents to attend the meetings held by the school. Principals should explain about the running school functions and should have good communication and collaboration with parents and community organizations. Teachers need to act and react the parents and community well.

- Principals need to listen to their voice before making work allocation and defining roles; should express openly what is expected of teachers; should strict school discipline definitely; should persuade all teachers to be actively participated in school activities; and should take into consideration about the effect of organizational size.

- It is needed by the principals to listen to teachers' voice before decision making, to implement their suggestions, and to treat them equally. Principals should read teachers mood, use formal and informal communication channels adequately and effectively.

- Principals should play as a key role in mediating the relationships among stakeholders and in developing a good school climate. They should protect teachers from unreasonable parental and community demands, and solve problems. They should report inconsistent orders back to superiors.

- Resources such as insufficient infrastructure, teaching staffs and non-teaching staffs should be provided to be effective in performing the school functions. The superiors should listen to the feedback of teachers concerning real situations of schools and give reconsideration whether or not the existing infrastructure and resources are fitted with the requirements of new curriculum implementation.

- Principals should establish clear objectives, set both school and individual goals for each teachers and implement team building activities. Principals have to persuade parents to support their children education, and provide sufficient resource.

- Principals should make academic emphasis as central theme of school. Teachers need to become an integral part of academic focus by allowing and getting participation in all decisions of instruction. The board of study meetings should be implemented well where teachers from each grade level can communicate their academic goals and objectives and share significant data regarding student performance.

Needs for Further Study

Organizational health of schools did not vary both in terms of their location and types because of all schools were government schools. Therefore, the comparative study of organizational health of government schools and private schools should be investigated. Moreover, organizational health of high education institutions should be examined. It is also needed to examine relationship studies such as organizational health of schools and students' achievement, organizational health of schools and teachers' commitment, and organizational health of schools and teacher efficacy.

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A STUDY OF PRINCIPALS' PRACTICES OF EXEMPLARY LEADERSHIP AND TEACHER COLLEGIALITY

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Abstract

The main aim of the study is the principals' practices of exemplary leadership and teacher collegiality in Basic Education High Schools, Taikkyi Township, Yangon Region. The participants were 6 principals and 201 teachers from 6 Basic Education High Schools in Taikkyi Township, Yangon Region during the 2019-2020 academic year. Quantitative and qualitative methods were used. To collect the data, questionnaire, open-ended and interview questions were conducted. This study was based on Kouzes and Posner's model of Five Practices of Exemplary Leadership (2012) and Shah's Teacher Collegiality (2011). Descriptive statistics, One-way ANOVA, Independent Samples *t* Test, and Pearson product-moment correlation were used for data analysis. According to the research findings, principals' practices of exemplary leadership were often performed by the principals of 6 Basic Education High Schools. There were significant differences in principals' practices of exemplary leadership among schools. Teacher collegiality in Basic Education High Schools was high. There were significant differences in teacher collegiality by schools, and teaching service. But there was no significant differences in qualification. Moreover, the findings revealed that there was significant positive relationship between principals' practices of exemplary leadership and teacher collegiality.

Keywords: exemplary leadership, teacher collegiality

Introduction

Every human being requires oxygen to stay alive in the world. Education is as important as this because education offers people the knowledge and skills they need. To gain education, schools are required. In schools which provide education, school principal is the most crucial person. School principal is the personal in charge for all activities that occur and around school building. It is the principals' leadership that sets up the quality of the school, the environment for teaching, the level of professionalism and morale of teachers. Moreover, the principal is the main connection between the community and the school (Horn-Turpin, 2009).Today, educational changes have emphasized to develop effective teaching and increase high level of learning. Ngang (2012) suggested that educational change is dependent on the exercise of school principals' appropriate leadership roles. Many researchers revealed that principals who more frequently perform the five practices of exemplary leadership are more successful than their counterparts who use them infrequently in their organizations.

On the other hand, a school principal should be familiar with not only leadership practices but also relationship with teachers. As a relationship, school principal can praise and show appreciation teachers for a job well done, and offers teachers a sense of self-importance, self-confidence and trust. Furthermore, collegiality is one of factors that lead to schools' achievement. Collegiality is seen as a characteristic of teacher professional development and a vehicle to raise teacher knowledge. Reorganizing teachers and making new patterns of collaboration and collegiality may also be crucial to positive and successful schools. Moreover, strengthening interpersonal relations among teacher is for school improvement. Thus, this study aims to investigate the principals' practices of exemplary leadership and teacher collegiality in schools. Today, in Myanmar, educational reforms continue to focus on improving the quality of education. To improve the quality of education, not only the role of exemplary principals but also the role of

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teachers are very important. However, the principals' exemplary leadership practices are significant and important parts in establishing successful school outcomes. As exemplary principals, principals should constantly perform at enhancing relationship in school and should foster teacher collegiality. Collegiality among teachers is regarded as crucial to school improvement and success. Schools that do not provide teacher collegiality can waste human resources (people who individually and collectively contribute to the growth and achievement of school's objectives). Most of the schools in Myanmar are becoming low performing schools. Low performing schools are in poor communities where the students do not have access to the resources that will help them learn. To solve this problem, principals' practices of exemplary leadership and teacher collegiality are needed to study.

Aims of the Research

Main Aim

The aim of the study is

- to study the principals' practices of exemplary leadership and teacher collegiality in Basic Education High Schools in Taikkyi Township, Yangon Region

Specific Aims

The specific aims of the study is

- to study the extent of the principals' exemplary leadership practices perceived by the teachers in Basic Education High Schools
- to study the differences of teachers' perceptions on their principals' exemplary leadership practices among schools
- to study the extent of teacher collegiality in Basic Education High Schools
- to study the differences of teacher collegiality according to school, teaching service, and qualification in Basic Education High Schools
- to study the relationship between principals' exemplary leadership practices and teacher collegiality

Research Questions

- To what extent do teachers perceive principals' exemplary leadership practices in Basic Education High Schools?
- What are the differences of teachers' perceptions on their principals' exemplary leadership practices among schools?
- To what extent do teachers perform their collegiality in Basic Education High Schools?
- What are the differences of teacher collegiality according to school, teaching service and qualification in Basic Education High Schools?
- Is there a significant relationship between principals' exemplary leadership practices and teacher collegiality?

Limitations of the Study

The research area is conducted only on Taikkyi Township, Yangon Region. This study is designed to study the principals' practices of exemplary leadership and teacher collegiality only for (2019-2020) Academic Year.

Theoretical Framework

In this study, the principals' practices of exemplary leadership are based on Kouzes and Posner's model of Five Practices of Exemplary Leadership (2012) and teacher collegiality is based on Shah's Teacher Collegiality (2011). Kouzes and Posner's model of Five Practices of Exemplary Leadership (2012) includes: (a) model the way, (b) inspire a shared vision, (c) challenge the process, (d) enable others to act and (e) encourage the heart. Shah's Teacher Collegiality (2011) includes: (a) mutual support and trust, (b) observing one another teaching, (c) joint planning and assessment, (d) sharing ideas and expertise, (e) teaching each other, (f) developing curriculum together, and (g) sharing resources.

The Five Practices of Exemplary Leadership

(a) Model the Way

Modeling the way is the means by which leaders create their vision substantial. The two behaviors that support modeling the way are setting the example and planning small wins. Setting the example starts with leader consciously bringing on in manner that are reliable with expressed qualities. Clarity, consensus, and intensity are three crucial factors for aligning values of leader (Kouzes & Posner, 2007). Modeling the way is planning small wins (cited in Chingombe, 2017).

(b) Inspire a Shared Vision

The second exemplary leadership practice is inspire a shared vision. Kouzes and Posner (1987) suggested that the two behavioral commitments of this practice are envisioning the future and enlisting others. Envisioning the future is a process of making a dream with enthusiasm and commitment. Enlisting others implement importance of having all followers understand and provide a vision (cited in Chingombe, 2017).

(c) Challenge the Process

McCollum (1999) stated that challenging the process is when the leader explores better approaches to fundamentally existing conditions. The two behavioral commitments are searching for opportunities and experiment and take risks. Searching for opportunities refers to carrying new plans to the organization. Experiment and take risks refers to leaders should have an openness to ideas and willing to listen (cited in Chingombe, 2017).

(d) Enable Others to Act

Kouzes and Posner (1987) suggested that the fourth practice is enabling others to act which constructs teams, empowers and encourage the success of the vision through others. The two behavioral approaches supporting this practice is fostering collaboration and strengthening others. Fostering collaboration starts with making and sustaining collaborative goals while strengthening others is when leaders provide others (cited in Chingombe, 2017).

(e) Encourage the Heart

This leadership practice includes recognizing people's contributions stating pride in the achievement of goals and making work enjoyable. The two behaviors achieving this practice are recognizing contributions and celebrating accomplishments. Recognizing contributions is when connecting rewards with performance and take time to praise achievement together (Kouzes & Posner, 2007). Genuine acts of caring, showing appreciation, kindness, courtesy and respect (Covey, 1990) are important factors that leaders practice when "acknowledging good results and reinforcing positive performance" (Kouzes & Posner, 2008).

Teacher Collegiality

(a) Mutual Support and Trust

Schwab et al., (1986) found that facilitating social support among teachers by providing sufficient time helped reduce burnout (cited in Shah, 2012a). Donaldson and Sanderson (1996) revealed that the understanding of individuals, their capacities, their abilities, and their trustworthiness were key to constructing and maintaining a strong professional relationship of collegiality (cited in Perera, 2015).

(b) Observing One Another Teaching

In a collegial setting, teachers observe each other occupied in the practice of teaching and administration. Their observations develop into the practice to reflect on and talk about (Barth, 1990).

(c) Joint Planning and Assessment

Teachers make collective agreements to investigate an idea or new approach in teaching (Little, 1990). Teachers study best when they have the chance to construct knowledge using new instruments for thinking and to reflect on and modify their ideas (Alberto, 2015). Collaboration not only involves planning, deciding and acting jointly but also engages thinking together (John et al., 1998).

(d) Sharing Ideas and Expertise

Kasten (1984) stated that teachers perceive each other as a primary and important source of ideas about teaching. Fullan and Hargreaves (1991) suggested that teachers in highly collegial setting are more likely to trust, value and justify sharing expertise, seek advice and assist other teachers. However, in a collegial setting, teachers share their expertise with colleagues and further everyone's learning (Hoerr, 2008).

(e) Teaching Each Other

In a collegial environment, teachers teach each other during formal in–service, talk publicly about what one is learning or wants to learn (Little, 1990).

(f) Developing Curriculum Together

In collegial environment, teachers arrange together lesson plans, write curriculum (Little, 1990). In a collegial setting, curriculum is always being assessed and developed. School leaders can make this possible by supporting times for teachers to question assumptions about curriculum (Hoerr, 2008).

(g) Sharing Resources

John et al., (1998) suggested that in a true collaboration, there is a commitment to shared resources (such as materials related to teacher subject teaching, journal articles and educational books), power, and talent.

Definition of Key Terms

Leadership: the process of influencing, directing and motivating organizational members to act in a way that enable the attainment of the organizational goals (Sekhu, 2011).

Teacher Collegiality: cooperative relationships among teachers whereby teachers openly and continually investigate and critique classroom practice for school improvement (Shah, 2012a).

Operational Definition

Exemplary Leadership

Exemplary leadership is a leadership practice where a leader sets an excellent example which involves functions and obligations such as setting clear goals, fostering collaboration and recognizing followers' efforts to achieve organizational success.

Teacher perceptions on principals' exemplary leadership practices were examined by the mean values of teachers' responses from Basic Education High Schools to questionnaire rated on five-point Likert scale questionnaires consisting of 30 items: 6 items for model the way, 6 items for inspire a shared vision, 6 items for challenge the process, 6 items for enable others to act, 6 items for encourage the heart. The more the mean values, the higher the extent of principals' exemplary leadership practices.

Methodology

This chapter consists of research method, population and sample, instrument development, procedure, validation and data analysis.

Research Method

Both quantitative and qualitative methods were used to collect the required data.

Population and Sample

There are 416 teachers from 10 Basic Education High Schools in Taikkyi Township, Yangon Region. Among them, 201 teachers from 6 Basic Education High Schools were taken as sample by using simple random sampling method.

Instrument Development

The questionnaire consists of 30 items related with principals' practices of exemplary leadership. Each item was rated on a five-point Likert Scale ranging from 1=never, 2= rarely, 3=sometimes, 4=often, 5= always. And then, the questionnaire consists of 38 items related with teacher collegiality. Each item was rated on a five-point Likert Scale ranging from 1=strongly disagree, 2=disagree, 3=undecided, 4=agree to, 5=strongly agree. Open-ended questions and interview questions were also used to complement the data.

Procedure

The pilot study was undertaken with (45) teachers in No. (2) Basic Education High School, South Okkala Township. After that, for field test, questionnaires were distributed to the teachers from the Basic Education High Schools in Taikkyi Township on 23rd, 24th October, 2019. And then distributed questionnaires were recollected on 30th, 31st, November, 2019. Interview was also conducted from 11st to 23rd December, 2019.

Validation

In order to obtain the content validity of the questionnaire, instrument was reviewed by 9 experts who have sound knowledge and experience from the Department of Educational Theory, Yangon University of Education. To measure the reliability of the questionnaire, a pilot test was conducted with forty-five teachers in No.(2) Basic Education High School, South Okkala Township, Yangon Region. The internal consistency (Cronbach's alpha) of principals' practices of exemplary leadership and teacher collegiality were 0.89 and 0.91 respectively.

Data Analysis

The data obtained from questionnaire survey were analyzed by using the Statistical Package for the Social Science (SPSS) version 22 as it is widely used in quantitative research. Descriptive analysis was used to compute means and standard deviations. The values of mean and standard deviations were described by tables. Furthermore, One-way ANOVA and Independence Samples *t* Test were used to analyze there are significant differences among personal factors. Pearson Correlation was also conducted to find the relationship between principals' practices of exemplary leadership and teacher collegiality.

Findings

Research findings are presented by using descriptive statistics, means and standard deviations, One-Way ANOVA, Independence Samples *t* Test and Pearson-product moment correlation. Open-ended questions and interview questions will be presented.

1. Findings of Principals' Practices of Exemplary Leadership

The descriptive statistics were described by means and standard deviations. The means and standard deviations of teachers' perceptions on principals' exemplary leadership practices are presented in Table 1.

Table 1 Means and Standard Deviations of Teachers' Perceptions on Principals' Exemplary Leadership Practices   (N=201)

No.	Principals' Exemplary Leadership Practices	Mean	SD	Remark
1.	Model the Way	4.09	0.65	Often
2.	Inspire a Shared Vision	3.91	0.76	Often
3	Challenge the Process	3.56	0.73	Often
4.	Enable Others to Act	4.19	0.72	Often
5.	Encourage the Heart	3.94	0.85	Often
	Overall Exemplary Leadership Practices	**3.94**	**0.65**	**Often**

Scoring Direction: 1.00 to 1.80= never, 1.81 to 2.60= rarely, 2.61 to 3.40= sometimes, 3.41 to 4.20= often
4.21 to 5.00= always

The differences in means and standard deviations of teachers' perceptions on principals' exemplary leadership practices by schools are shown in Table 2.

Table 2 Means and Standard Deviations of Teachers' Perceptions on Principals' Exemplary Leadership Practices among Schools

No.	School	N	Mean	SD	Remark
1.	School A	43	4.30	0.43	Always
2.	School B	25	3.07	0.72	Sometimes
3.	School C	49	3.97	0.59	Often
4.	School D	32	3.75	0.73	Often
5.	School E	23	3.69	0.39	Often
6.	School F	29	4.13	0.47	Often

Scoring Direction: 1.00 to 1.80= never   1.81 to 2.60= rarely   2.61 to 3.40= sometimes
3.41 to 4.20= often   4.21 to 5.00= always

Table 3 shows the ANOVA results of teachers' perceptions on principals' exemplary leadership practices among schools.

Table 3   ANOVA Results of Teachers' Perceptions on Principals' Exemplary Leadership Practices among Schools   (N=201)

Principals' Exemplary Leadership Practices		Sum of Squares	*df*	Mean Square	*F*	*P*
Overall Exemplary Leadership Practices	Between Group	13.915	5	2.783	7.789	.000***
	Within Group	69.675	195	.357		
	Total	83.589	200			

Note: $^*p<.05$, $^{**}p<.01$, $^{***}p<.001$ at significant level

Table 4 shows the Tukey HSD Multiple Comparisons of teachers' perceptions on principals' exemplary leadership practices among schools.

Table 4 Results of Tukey HSD Multiple Comparisons of Teachers' Perceptions on Principals' Exemplary Leadership Practices among Schools   (N=201)

Principals' Exemplary Leadership Practices	(I)School	(J)School	Mean Difference (I-J)	*p*
Overall Exemplary Leadership Practices	School A	School B	.794*	.000***
		School D	.552*	.001**
		School E	.605*	.002**
	School C	School B	.463*	.023*
	School F	School B	.622*	.003**

Note: $^*p<.05$, $^{**}p<.01$, $^{***}p<.001$ *at* significant level

2. Findings of Teacher Collegiality

The means and standard deviations of teacher collegiality are presented in Table 5.

Table 5   Means and Standard Deviations of Teacher Collegiality   (N=201)

No.	Teacher Collegiality	Mean	SD	Remark
1.	Demonstrating Mutual Support and Trust	4.08	0.56	High
2.	Observing One Another Teaching	3.76	0.59	High
3.	Joint Planning and Assessment	4.00	0.52	High
4.	Sharing Ideas and Expertise	3.98	0.46	High
5.	Teaching Each Other	4.03	0.50	High
6.	Developing Curriculum Together	3.98	0.61	High
7.	Sharing Resources	3.94	0.52	High
	Overall Teacher Collegiality	**3.97**	**0.43**	**High**

Scoring Direction: 1.00 to 2.33= low   2.34 to 3.66=moderate   3.67 to 5.00=high

The differences in means and standard deviations of teacher collegiality by schools are shown in Table 6.

Table 6   Means and Standard Deviations of Teacher Collegiality by Schools

No.	School	N	Mean	SD	Remark
1.	School A	43	4.09	0.44	High
2.	School B	25	3.75	0.19	High
3.	School C	49	3.97	0.39	High
4.	School D	32	3.87	0.59	High
5.	School E	23	3.79	0.26	High
6.	School F	29	4.07	0.40	High

Scoring Direction: 1.00 to 2.33= low   2.34 to 3.66=moderate   3.67 to 5.00=high

Table 7 shows the ANOVA results of teacher collegiality.

Table 7 ANOVA Results of Teacher Collegiality by Schools   **(N=201)**

Dimensions of Teacher Collegiality		Sum of Squares	df	Mean Square	F	P
Overall Teacher Collegiality	Between Group	2.302	5	.46	2.573	.028*
	Within Group	34.892	195	.17		
	Total	37.194	200			

Note: *$p<.05$, **$p<.01$ at significant level and ns=not significant

Table 8 shows the Tukey HSD Multiple Comparisons of teacher collegiality among Basic Education High Schools.

Table 8 Results of Tukey HSD Multiple Comparisons of Teacher Collegiality among Basic Education High Schools   **(N=201)**

Teacher Collegiality	(I)School	(J)School	Mean Differences (I-J)	p
Observing One another Teaching	School F	School D	.449*	.032*
Joint Planning and Assessment	School A	School E	.443*	.011*
	School C	School E	.373*	.045*
	School F	School E	.515*	.005**
Developing Curriculum Together	School A	School E	.513*	.013*

Note: *$p<.05$, **$p<.01$ at significant level

The differences in means and standard deviations of teacher collegiality by teaching service are presented in Table 9.

Table 9 Means and Standard Deviations of Teacher Collegiality by Teaching Service   **(N=201)**

No.	Teacher Collegiality		Teaching Service				
			≤3yrs (N=26)	4-6yrs (N=26)	7-18yrs (N=86)	19-30yrs (N=35)	31≤yrs (N=28)
	Overall Teacher Collegiality	Mean	3.74	3.78	3.99	4.00	4.25
		SD	0.56	0.41	0.37	0.39	0.36

Table 10 shows the ANOVA results of teacher collegiality by teaching service.

Table 10 ANOVA Results of Teacher Collegiality by Teaching Service   **(N=201)**

Teacher Collegiality		Sum of Squares	df	Mean Square	F	P
Overall Teacher Collegiality	Between Group	4.571	4	1.143	6.866	.000***
	Within Group	32.623	196	.166		
	Total	37.194	200			

Note: *$p<.05$, **$p<.01$, ***$p<.001$ at significant level and ns=not significant

Table 11 shows the Tukey HSD multiple comparisons of teacher collegiality by teaching service.

Table 11 Results of Tukey HSD Multiple Comparisons of Teacher Collegiality by Teaching Service   (N=201)

Teacher Collegiality	(I)Teaching Service	(J) Teaching Service	Mean Difference (I-J)	P
Overall Teacher Collegiality	7-18 years	≤3 years	.256*	.044*
	31years and above	≤3 years	.505*	.000***
		4-6 years	.469*	.000***
		7-18 years	.249*	.043*

Note: *p<.05, **p<.01, ***p<.001at significant level

The differences in means and standard deviations of teacher collegiality by qualification are presented in Table 12.

Table 12   Means and Standard Deviations of Teacher Collegiality by Qualification

                                                                                      (N=201)

No.	Teacher Collegiality	Qualification	N	Mean	SD
	Overall Teacher Collegiality	BA/BSc, MA/MSc	134	3.96	0.42
		BEd, MEd	67	4.00	0.46

Table 13 shows the Independence Sample *t* Test results of teacher collegiality by qualification.

Table 13   Results of Independence Samples *t* Test for Teacher Collegiality by Qualification

                                                                                      (N=201)

Teacher Collegiality	Qualification	N	Mean	SD	t	df	p
Teacher Collegiality	BA/BSc, MA/MSc	134	3.96	0.42	-.558	199	ns
	BEd, MEd	67	4.00	0.46			

Note: ns=not significant

The correlation between overall principals' exemplary leadership practices and overall teacher collegiality are shown in Table 14.

Table 14   Correlation between Overall Principals' Exemplary Leadership Practices and Teacher Collegiality

Variables	Principals' Exemplary Leadership Practices	Teacher Collegiality
Principals' Exemplary Leadership Practices	1	.532**
Teacher Collegiality	.532**	1

**. Correlation is significant at the 0.01 level (2-tailed).

The resulted showed that there was positively moderate correlation between principals' exemplary leadership practices and teacher collegiality (r=.532**, *p*<0.01).

3. Findings from Open-ended Questions

There were five open-ended questions about principals' practices of exemplary leadership and teacher collegiality.

For the question, **"How did the school principal take the lead in the long-term development of the school?"** 57% of teachers (n=114) responded that their principals lead by making collaboration, 22% of teachers (n=44) responded that their principals lead by making appreciation and 21% of teachers (n= 43) responded that their principals lead by modeling the way. For the question, **"How did the school principal make teachers more engaged in school work?"** 37% of teachers (n= 74) responded that their principals lead by rewarding such as making celebrations, 31% of teachers (n= 62) responded that their principals lead by using motivation, 17% of teachers (n=34) responded that their principals lead by providing teaching aids and 15% of teachers (n=31) responded that their principals lead by creating opportunities for teacher professional development. For the question, **"How do you understand the actions of an exemplary leader?"** 51% of teachers (n=102) responded that the action of an exemplary leader is cooperation, 41% of teachers (n=83) responded that the action of an exemplary leader is setting the example and 8% of teachers (n=16) responded that the action of an exemplary leader is caring and encouragement. For the question, **"Describe the actions that teachers in the school can take to improve teaching methods?"** The teachers responded that the actions that teachers in the school can take to improve teaching methods are mutual support (n=103, 52%), providing teaching aids (n=25, 12%), preparing lessons (n=73, 36%). For the question, **"Describe the types of activities that teachers should do to help one another at school?"** The teachers responded that the types of activities that teachers should do to help one another at school are social support (n=108, 54%), discussing lessons (n=43, 21%), making celebrations (n=50, 25%)**.**

4. Findings from Interview Questions

There were three interview questions about principals' practices of exemplary leadership and teacher collegiality.

For the question, **"How did the school principal lead the teachers at the school?"** All principals responded that they lead the teachers at the school by leading with collaboration. Among them, 3 principals responded that they lead the teachers at the school by setting the example, 2 principals responded that they lead the teachers at the school by leading with family type and empathy. For the question, **"How did the principal create opportunities to improve the skills of teachers?"** The principals responded that they encouraged and created opportunities all teacher to be expert in their fields (n=4), had difficulties (n=3). For the question, **"How did the principal motivate teachers to become more interested in their work and teaching?"** The principals (n=4) responded that they motivate teachers to become more interested in their work and teaching, they treated with family type (n=2), they consulted with teachers (n=2).

Conclusion, Discussion and Recommendations

Conclusion and Discussion

This study aimed to study the principals' practices of exemplary leadership and teacher collegiality of Basic Education High Schools in Taikkyi Township, Yangon Region. In this study, the extent of principals' exemplary leadership practices and the extent of teacher collegiality were determined by mean values of teachers' responses to the questionnaire. The higher mean values, the higher the extent of the principals' exemplary leadership practices and the teacher collegiality.

According to the results, it was found that overall of principals' exemplary leadership practices were often performed. According to teachers' perceptions on principals' exemplary leadership practices among schools, it was found that principals in school C, D, E and F often performed these practices. Principal in school A always performed these practices and principal in school B sometimes performed them. Thus, it may be concluded that the high school principals in Taikkyi Township often performed exemplary leadership practices according to teachers'

perceptions. Moreover, findings showed that principals focus collaboration and provide teachers. An exemplary leader fosters collaboration (Kouzes & Posner, 2008).

According to mean value results, it was found that the extent of teacher collegiality in all schools was high. The overall mean value of the school "A" was the higher mean value than others and its mean value was 4.09 and the overall mean value of the school "B" was the lower mean value than others and its mean value was 3.75. The overall mean values of school C, D, E, and F were 3.97, 3.87, 3.79, and 4.07 respectively. The mean values for teacher collegiality in each school was between M=3.67 to M=5.00 (high level) in all schools. Thus, it may be concluded that teacher collegiality in Taikkyi Township was high. Research findings revealed that demonstrating mutual support and trust such as social support, fostering teaching abilities was highly performed. Owen (2005) showed that teacher growth is based on continuous collegial support (cited in Shah, 2012b).

According to the results based on teaching service, the mean values of teachers who had teaching services (31 years and above) were higher than that of teachers who had other teaching services. Results of One-way ANOVA showed that there were significant differences in teacher collegiality by teaching service. Findings also showed that more experienced teachers perform more collegial than less experienced teachers. The more teaching services the teachers had, the more experiences the teachers had. And then, more experienced teachers can perform collegial communities. The greater the effort engaged with starting collegiality, the greater the chances that it will influence school achievement (Shah, 2012b). Moreover, collegiality makes a climate that values risk taking and continuous development. The experienced teachers who understand teacher collegiality reinforce the competence and confidence of the beginning teachers. By closing together beginning teachers and experienced teachers, improvements can be made in schools (Shah, 2011a).

According to the results based on teachers' qualification, the mean values of teachers who are BEd, MEd degree holders were higher than that of teachers who are BA/BSc, MA/MSc degree holders. It means that teachers who are BEd, MEd degree holders got the sound knowledge about educational field. And then they had educational pedagogical knowledge and they understood professional competence of their colleagues. It was also found that teachers who are BEd, MEd degree holders mostly performed in demonstrating mutual support and trust and teachers who are BA/BSc, MA/MSc degree holders mostly performed in demonstrating mutual support and trust. So, the results showed that there were no significant differences in overall teacher collegiality.

The findings showed that principals' practices of exemplary leadership were positively moderate correlated to teacher collegiality. Therefore, it could be interpreted that if principals set an excellent example which involves functions and obligations such as setting the clear goals, inspiring a vision, challenging the status quo, fostering collaboration, recognizing teachers' efforts, teacher collegiality will increase. This study reflects a notice in identifying successful principals' exemplary leadership practices that can positively impact teacher collegiality and develop a learning environment conducive for student high achievements.

Recommendations

The following recommendations are based on the analysis of the surveys, testing instruments and open-ended questions, interview questions on principals' exemplary leadership practices and teacher collegiality. Principals should motivate internal drive among teachers which are crucial parts for the long-term health of schools.

- Principals should provide positive risk takings such as encouraging both teachers and students to explore new ideas in teaching and learning.
- Principals should provide teachers with respect, recognition and open communication.

- Principals should encourage and construct teacher collegiality since strong collegial relationship was associated with school improvement and success.

- Moreover, principals should praise and show appreciation teachers for a job well done (such as rewarding certified teachers).

- Teachers should try to improve instruction effectively and efficiently by studying educational literature, sharing resources (educational journals, articles, teaching aids).

- As teachers, observing one another teaching should be performed to improve teaching-learning process.

Need for Further Study

Further research could be undertaken in various other school types, such as primary schools, middle schools, education colleges, and universities, to determine whether or not the particular results concerning principals' exemplary leadership practices and teacher collegiality. A study could be conducted to investigate principals' exemplary leadership practices and teacher collegiality with a larger sample of principals and teachers.

Acknowledgements

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A STUDY OF PRINCIPALS' EMOTIONAL INTELLIGENCE AND JOB SATISFACTION OF TEACHERS

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Abstract

The objectives of this research are to study the level of principals' emotional intelligence and the differences of principals' emotional intelligence according to their personal factors, to study the level of teachers' job satisfaction and to investigate the relationship between principals' emotional intelligence and job satisfaction of teachers. Both quantitative and qualitative methods were used in this study. By using simple random sampling method, eight principals and two hundred and five teachers were selected as sample from eight Basic Education High Schools in Thantwe Township, Rakhine State. For quantitative study, two sets of questionnaires: questionnaire for principals and questionnaire for teachers were used to collect data. Open-ended questions and interview were used for qualitative study. The internal consistency (Cronbach's α) of principals' emotional intelligence and teachers' job satisfaction were 0.96 and 0.87 respectively. In this study descriptive statistics, independent samples *t* test and Pearson-product moment correlation were used to analyze the data. According to the findings, the level of principals' emotional intelligence was high ($\bar{X}$=3.97, SD=0.45). There was significant difference in principals' emotional intelligence grouped by gender. There was no significant difference in principals' emotional intelligence grouped by position. Then, the level of teachers' job satisfaction was moderately high ($\bar{X}$=3.03, SD=0.22). There was a positive and moderate relationship between principals' emotional intelligence and job satisfaction of teachers (r=0.309, p<0.01).

Keywords: Emotional Intelligence, Job Satisfaction

Introduction

In this era of globalization where there is high cultural, scientific, economic and social complexity, the success of a person depends on many personal factors. This includes attitude, parental support, good education, social network, financial support and so on. Even with all of these, there can be failure in success. When the root causes for this was searched, it points towards Emotional Intelligence (EI). It is the ability to manage emotions intelligently. People who possess these are healthier, less depressed, more productive at work, and have better relationships (Ealias & George, 2012). Daniel Goleman explained that emotional intelligence plays a major role of leadership (Goleman, 1998). Principals' emotional intelligence plays a vital role in managing their own life and deal effectively with the feelings of others. People with a high degree of emotional intelligence know what they are feeling, what their emotions mean, and how these emotions can affect other people. People with low emotional intelligence usually have low awareness and low self-control of their emotions. They have less empathy for others to connect with and communicate to others (Bariso, 2018). People are not physical resources owned by the organization. People bring to work their own perceptions, feelings and attitudes. Emotions are part of our lives. That is, we not only think, we feel. Principals and teachers should work together for promoting our education system. Principals share and feel their emotions, issues and challenges. As principals and teachers have good relationship, schools would like to be a healthy family. So, healthy school will conduct successful organization. That is why it is important to study the principals' emotional intelligence and job satisfaction of teachers.

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Objectives of the Research

General Objective

- To study the principals' emotional intelligence and job satisfaction of teachers in Basic Education High Schools, Thantwe Township

Specific Objectives

- To study the level of principals' emotional intelligence rated by teachers and principals in Basic Education High Schools, Thantwe Township
- To study the differences of principals' emotional intelligence according to their personal factors in Basic Education High Schools, Thantwe Township
- To study the levels of teachers' job satisfaction in Basic Education High Schools, Thantwe Township
- To investigate the relationship between principals' emotional intelligence and job satisfaction of teachers rated by teachers in Basic Education High Schools, Thantwe Township

Research Questions

- What is the level of principals' emotional intelligence rated by teachers and principals in Basic Education High Schools, Thantwe Township?
- Are there any significant differences in principals' emotional intelligence according to their personal factors in Basic Education High Schools, Thantwe Township?
- What are the levels of teachers' job satisfaction in Basic Education High Schools, Thantwe Township?
- Is there any relationship between principals' emotional intelligence and job satisfaction of teachers rated by teachers in Basic Education High Schools, Thantwe Township?

Theoretical Framework

In this study Daniel Goleman's model was used for principals' emotional intelligence. Daniel Goleman's model includes self-awareness, self-management, social awareness and relationship management.

Self-Awareness

Self-awareness is the ability to read one's emotions and recognize their impact while using gut feelings to guide decisions. Self-awareness is the most crucial competency associated with work place emotional intelligence. Goleman (1998) defined emotional self-awareness as a way of identifying a person emotion and how it could affect. It is the ability to recognize one's feelings, to differentiate between them, to know what one is feeling and why, and to know what caused the feelings.

Self-Management

Self-management is the ability to regulate moods and emotions in oneself and in other people. Self-management involves controlling one's emotions and impulses to adapt to changing circumstances. Emotionally intelligent people must be able to monitor, discriminate, and label their feelings accurately, believe that they can improve or otherwise modify these feelings, employ strategies that will alter their feelings, and assess the effectiveness of these strategies. They will be able to handle uncomfortable emotions, once they have accepted that they are feeling them.

Social Awareness

Social awareness is the ability to cultivate positive relationships with sensitivity to others' needs and desires. It is the ability in managing meaningful relationships and building networks, skills in treating people according to their emotional reactions. The leader understands the interpersonal aspect of leadership including sympathy and empathy for persons in the organization. They identify with others, are skilled in communication and interaction, and let each person they work with know they are important to organizational goals.

Relationship Management

The emotional intelligence component of relationship management is the skill or adeptness at inducing desirable responses in other. Relationship management is having the ability to build others competency and inspire them to expand their current state to higher levels. With skilled communication, the leader understands the importance of building relationships that connects a person to the leader and organization. This connection allows effective two ways communication and growth from the constructive feedback provided. Thus, relationship management allows the leader to create a positive environment and builds commitment to organizational values and goals.

Herzberg's two-factor theory was used for teachers' job satisfaction. Herzberg's two-factor theory includes motivation factors and hygiene factors. Motivation factors are achievement, recognition, work itself, responsibility and advancement and hygiene factors are pay, supervision, working conditions, interpersonal relations, and security.

Achievement

This includes the personal satisfaction of completing a job, solving problems and seeing the result of one's efforts or the potential of the individual to tackle any sorts of problem related to work which means the capacity to do the work effectively. It is achieved by setting clear, achievable goals and standards for each position, and making sure employees know what those goals and strategies are. Individuals should also receive regular, timely feedback on how they are doing and feel they are adequately challenged in their jobs.

Recognition

The employees should be praised and recognized for their accomplishments by the managers. Employees should be acknowledged for doing something well immediately after their good work.

Work itself

The work itself means the satisfaction derived from the job through the intrinsic aspects. It should be meaningful, interesting and challenging for the employees to perform and to get motivated. Setting goals and reminding and emphasizing that their efforts lead to and contribute to positive outcomes and goal accomplishment is crucial.

Responsibility

The employees must hold themselves responsible for the work. The managers should give them ownership of the work. They should minimize control but retain accountability.

Advancement

Advancement involves electing employees from the present job or position to a higher one or level in the organization. If possible, permit and support them to acquire higher certificates so

that they could become experts themselves and make them more valuable to the practice and more fulfilled individuals.

Pay

Pay is the annual income which may be an indicator of recognition and achievement. According to Luthans (1998), salaries not only assist people to attain their basic needs, but are also instrumental in satisfying the higher-level need of people. Pay is one of the tools to improve employee job satisfaction. When employees feel that their pay is equitable and fair, they tend to be more satisfied.

Supervision

Supervision forms a pivotal role relating to job satisfaction in terms of the ability of the supervisor to provide emotional and technical support and guidance with work related tasks. Supervision is about the capabilities of the supervisor in order to show his or her interest toward his or her subordinates needs and also supports them. There should be positive feedback and a set means of evaluating or appraising employees.

Working Conditions

Working conditions means the place physical attributes of the work place, including the materials available to make the work easier. The working conditions should be safe, clean and hygienic. The work equipments should be updated and well-maintained.

Interpersonal relations

Interpersonal relation refers to the team work, consultation, friendliness and supportive relation with the superiors. The relationship of the employees with his peers, superiors and subordinates should be appropriate and acceptable.

Security

Security refers to job security that is freedom from threats of layoffs, frequent queries, harassment, discrimination, bullying and so on. When there is no job security, an employee's needs for higher growth will be blocked. If he works hard but security does not return, he will seek to fulfil his needs elsewhere or burn out. Job security has significant effect in the overall performance of individuals, teams as well as organization.

Definitions of Key Terms

Emotional Intelligence

Emotional intelligence is a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions (Salovey & Mayer, 1990).

Job Satisfaction

Job satisfaction is the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values (Locke, 1976).

Methodology

Research Method

Both quantitative and qualitative methods were used in this study.

Sample

The sample was consisted of eight schools from Thantwe Township. Then, 8 principals and 205 teachers from selected schools in Thantwe Township were chosen by using simple random sampling method. Purposive sampling method was used in qualitative study.

Instrumentation

Emotional Competencies Inventory (ECI-V2) by Boyatzis et al. (2001) was utilized to collect on principals' emotional intelligence. There were 63 items in the questionnaire concerning with principals' emotional intelligence. Five-point Likert scale ranging from never to always (1=never, 2=rarely, 3=sometimes, 4=often, 5=always) to measure the level of emotion was used in this questionnaire. In principals' emotional intelligence questionnaire, item 1 to item 9 that related to self-awareness, item 10 to 29 that related to self-management, item 30 to 40 that related to social awareness and item 41 to 63 that related to relationship management were included.

On the other hand, there were 37 items in the questionnaire concerned with teachers' job satisfaction. Four-point Likert scale ranging from strongly disagree to strongly agree (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree) to measure the level of satisfaction was used in these questionnaires. Teachers' job satisfaction questionnaire was used to measure the level of job satisfaction, namely; four items for achievement, three items for recognition, four items for work itself, four items for responsibility, three items for advancement, four items for pay, four items for supervision, four items for working conditions, four items for interpersonal relations and three items for security. For qualitative study, open-ended questions and interview questions were used to obtain the required data.

Data Analysis

Independent samples *t* test, descriptive statistics and Pearson-product moment correlation were used to analyze the data by using SPSS software version 25. For qualitative study, data analysis was based on categorizing and interpreting.

Procedures

Firstly, the relevant literature was explored. After that, the instruments were constructed under the guidance of the supervisor. The instruments were distributed to nine experienced educators from Department of Educational Theory, Yangon University of Education to obtain the content validation. Moreover, the pilot was conducted with forty teachers in B.E.H.S (5) Kamaryut, Yangon Region in 1st week of September, 2019. Then, the modified questionnaires were distributed to eight Basic Education High Schools in Thantwe Township on 21st November, 2019. For qualitative study, six open-ended questions and eight interview questions were administered in order to obtain in depth information about principals' emotional intelligence.

Findings

Quantitative Research Findings

The level of principals' emotional intelligence, the differences of principals' emotional intelligence according to their personal factors, the levels of teachers' job satisfaction and the relationship between principals' emotional intelligence and job satisfaction of teachers were investigated for the quantitative study.

Table 1 Mean Values and Standard Deviations of Principals' Emotional Intelligence in Basic Education High Schools   (N=213)

No.	Variables	Mean	SD	Remark
1.	Self-Awareness	3.55	0.53	moderate
2.	Self-Management	3.99	0.56	high
3.	Social Awareness	4.19	0.59	high
4.	Relationship Management	4.14	0.49	high
	Principals' Emotional Intelligence	**3.97**	**0.45**	**high**

Scoring directions: 1-2.33=low   2.34-3.67=moderate   3.68-5.00=high

According to Table 1, the level of principals' emotional intelligence in self-awareness was moderate and the level of principals' emotional intelligence in self-management, social awareness and relationship management was high. Then, principals' emotional intelligence in Basic Education High School was at high level.

Table 2 Independent Samples *t* Test Results of Principals' Emotional Intelligence Grouped by Gender   (N=213)

Variables	Gender	No. of principals	No. of participants	*t*	*df*	*p*
Self-Awareness	Male	2	36	3.79	211	.000***
	Female	6	177			
Self-Management	Male	2	36	5.17	76.22	.000***
	Female	6	177			
Social Awareness	Male	2	36	.79	211	ns
	Female	6	177			
Relationship Management	Male	2	36	2.43	64.46	.018*
	Female	6	177			
Principals' Emotional Intelligence	**Male**	**2**	**36**	**3.11**	**211**	**.002****
	Female	**6**	**177**			

*p<.05, **p<.01, ***p<.001, ns=no significance

According to Table 2, self-awareness (*t*=3.97, *df*=211, *p*=.000), self-management (*t*=5.17, *df*=76.22, *p*=.000) and relationship management (*t*=2.43, *df*=64.46, *p*=.018) were significant differences between male principals and female principals. Moreover, there was a significant difference between principals' emotional intelligence grouped by gender.

Table 3 Independent Samples *t* Test Results of Principals' Emotional Intelligence Grouped by Their Position   (N=213)

Variables	Position	No. of principals	No. of participants	*t*	*df*	*p*
Self-Awareness	MSP	3	68	-3.29	211	.001**
	HSP	5	145			
Self-Management	MSP	3	68	1.17	211	ns
	HSP	5	145			
Social Awareness	MSP	3	68	1.57	211	ns
	HSP	5	145			
Relationship Management	MSP	3	68	1.57	211	ns
	HSP	5	145			
Principals' Emotional Intelligence	**MSP**	**3**	**68**	**.28**	**211**	**ns**
	HSP	**5**	**145**			

*p<.05, **p<.01, ***p<.001, ns=no significance, **Note:** MSP=middle school principal   HSP=high school principal

According to Table 3, self-awareness (*t*=-3.29, *df*=211, *p*=.001) was significant difference between middle school principals and high school principals. Moreover, there was no significant difference between principals' emotional intelligence grouped by their position.

Table 4 Mean Values and Standard Deviations Showing the Level of Teachers' Job Satisfaction in Basic Education High Schools (N=205)

Variables	Mean	SD	Remark
Achievement	3.19	.36	moderately high
Recognition	3.14	.45	moderately high
Work itself	3.28	.45	high
Responsibility	3.17	.33	moderately high
Advancement	3.09	.38	moderately high
Pay	2.31	.32	moderately low
Supervision	3.04	.40	moderately high
Working Conditions	2.87	.36	moderately high
Interpersonal Relations	3.15	.34	moderately high
Security	3.10	.42	moderately high
Teachers' Job Satisfaction	**3.03**	**.22**	**moderately high**

Scoring directions: 1.00-1.75=low   1.76-2.50=moderately low
                              2.51-3.25=moderately high   3.26-4.00=high

According to Table 4, job satisfaction regarding work itself was high. And job satisfaction regarding to achievement, recognition, responsibility, advancement, supervision, working conditions, interpersonal relations and security was moderately high. But job satisfaction regarding pay was moderately low. The highest mean value was 3.28 in the satisfaction of work itself and the lowest mean value was 2.31 in the satisfaction of pay. The overall mean value of teachers' job satisfaction in Basic Education High Schools was 3.03 and it was at moderately high level.

Table 5 Correlation Between Principals' Emotional Intelligence and Job Satisfaction of Teachers

Variables	Mean	SD	1	2	3	4	5	6
1.Self-Awareness	3.55	0.53	1					
2.Self-Management	3.99	0.56	.515**	1				
3.Social Awareness	4.19	0.59	.410**	.698**	1			
4.Relationship Management	4.14	0.49	.353**	.739**	.763**	1		
5.Principals' Emotional Intelligence	3.97	0.45	.683**	.894**	.875**	.858**	1	
6.Job Satisfaction	3.03	0.22	.251**	.285**	.186**	.312**	.309**	1

**. Correlation is significant at the 0.01 level (2-tailed).

According to Table 5, the correlation between dimensions of principals' emotional intelligence and job satisfaction of teachers showed a significant relationship. The relationship between self-awareness and teachers' job satisfaction showed the significant but weak correlation (*r*=.251, *p*<0.01). The relationship between self-management (*r*=.285, *p*<0.01), social awareness (*r*=.186, *p*<0.01) and teachers' job satisfaction illustrated the significant but weak correlation. The remaining dimension, relationship management also showed a significance moderately relationship and the correlation result was (*r*=.312, *p*<0.01). Then, there was a significant positive

relationship between principals' emotional intelligence and job satisfaction of teachers and the strength of the correlation was moderate ($r = .309$, $p < 0.01$).

Qualitative Research Findings

The results of open-ended and interview questions were presented as qualitative research findings. The open-ended questions used in this study were conducted to study the teachers' free perceptions of principals' emotional intelligence and job satisfaction of teachers. Various responses for open-ended questions were described in detailed as follows:

1. What are your points of interest in your principals that you would like to imitate? Why?

According to teacher responses, 12% (n=25) of teachers responded that they imitated good management of being their principals. 36% (n=75) of teachers responded that they imitated their principals' enthusiasm and accuracy in work.

2. Does your principal discuss with his teachers concerning his strengths and weakness? If so, what are their strengths and weakness?

According to teacher responses, 64% (n=133) of teachers responded that their principals discussed with them concerning their strengths and weaknesses. The strengths of their principals were empathy and understanding their teachers with different opinions and situations. Anger was the weakness of principals. 30% (n=62) of teachers answered that their principals didn't discuss with them concerning their strengths and weaknesses.

3. How does your principal handle issues that arise during a time of turmoil?

According to teacher responses, 36% (n=75) of teachers responded that their principals handled issues calm down. 34% (n=71) of teachers responded that their principals resolved issues with Parent Teacher Association. 14% (n=29) of teachers responded that their principals warned them school issues. 4% (n=9) of teachers responded that their principals solved them quickly and 2% (n=6) of teachers responded that their principals blamed them.

4. What do you think the relationship between the principal and the stakeholders?

According to teacher responses, 84% (n=172) of teachers responded that their principals and stakeholders had warm relationships.

5. Does your principal recognize you for your successful performance?

According to teacher responses, 72% (n=149) of teachers responded that their principals recognized them and appreciated with verbal and non-verbal. 13% (n=27) of teachers answered that their principals awarded with certificate and 3% (n=8) of teachers responded that they received trust in work. 4% (n=9) of teachers responded that their principals didn't recognize them.

6. Describe the social situations within the workplace that are relevant to your teaching career.

According to teacher responses, 70% (n=145) of teachers responded that they worked together friendly in teaching career.

Principals were asked interview questions. Various responses for interview questions were described as followed:

1. How does the principal cope with the difficulties in his school?

During the interview periods, all principals were able to calmly address important issues. And then, they resolved the issues by discussing with teachers and stakeholders.

2. Does the school and the organization work to improve the principal's personality?

The principal in one school said that the organization could provide whatever she needs. The local authority also provided for her needs. The principal in another school said that the school didn't have much support from the stakeholders, especially students' parents were not supported in school activities because they didn't have socioeconomic status. It would be better to be continued if they were supported.

3. What qualities are needed to improve principals' leadership skills?

All principals should attend management and administrative training with the educational reforms. The principal in another school said that principal must be interested in all of them, consider the strengths and weaknesses of the school, the teachers and the students. Then, the principal in another school could take in collaboration with school members and must be a role

model, sometimes a member role.

4. How does the principal address the situation at school (such as teachers not arriving in class early, students getting out of class)?

The principal talked to the teachers about the situation at school. Then the principal should consult with the parent teacher association if the student was getting out of class. The principal in another school was first warned verbally. The principal would contact the parents to discuss the reason for the absence.

5. Describe the relationship among principal, parents, teachers and school staff members.

The principal in one school said that relationships with the principal and parents, teachers and school members got on will with each other. They discussed school-related issues regularly and monthly school meeting. Many parents attended every school meeting enthusiastically. The principal in another school said that relationships with teachers, parents and the principal were in moderation. Only a minority of the school's members were active.

6. How does the principal make sure that some parents, teachers, and school members are interested in school matters?

The principal encouraged and acted as a guide for parents and school staff members to take an interest in school matters. Then, the principal explained the parents and the members of the school to be interested in school matters. The members of the school committee who were less interested, were invited to attend the meeting several times. In dealing with teachers, we have to talk about it directly and indirectly. The relationship of the teachers at the school was like a family.

7. How does the principal treat people who have different backgrounds?

All principals understood the teachers who have different backgrounds. They discussed the issues facing teachers (family, personal, etc.). Then, they acted as a role model for teachers and respected the teachers and followed the rules. They were responsible for providing help and advice based on the causes of the teachers. Therefore, the principals equally treated students and teachers although they were from different socioeconomic backgrounds including education.

Conclusion

Conclusion and Discussion

In studying the level of principals' emotional intelligence at eight Basic Education High Schools in Thantwe Township, the level of principals' emotional intelligence was high. There was a significant difference in principals' emotional intelligence grouped by gender. Moreover, it was found that there was no significant difference in principals' emotional intelligence grouped by their position. The levels of teachers' job satisfaction were moderately high. Moreover, there was a

positive relationship between principals' emotional intelligence and job satisfaction of teachers and the strength of the correlation was moderate ($r=.309$, $p<0.01$).

First of all, Goleman (2001) mentioned when a leader has a stable emotional intelligence, the leader is able to control his emotions and behaviors as well as better understand and have a good relationship with his followers to have successful organization. This study was conducted to find out the level of principals' emotional intelligence rated by principals and teachers. According to the perceptions of principals and teachers, the level of principals' emotional intelligence was high. Therefore, principals should retain their own emotions, understand those of their followers and make relationship with others.

Secondly, the variations of principals' emotional intelligence according to their personal factors would be discussed. It was found that there was significant difference in the overall areas of principals' emotional intelligence grouped by gender. In this study, the mean value of male group was a little more than female group. According to the results, it may be said that male principals had a strong sense of self and were better at stress management and adaptability than female principals. The findings of this study supported those of Chu (2002), whose study revealed that males have a higher level of emotional intelligence than females. According to the personal factor, position, there was no significant difference in the overall areas of principals' emotional intelligence grouped by position. The interview results also pointed out there was no significant difference in principals' emotional intelligence among their position.

Thirdly, the result of the levels of teachers' job satisfaction would be discussed. It was found that the level of job satisfaction was moderately high. In this study, job satisfaction regarding work itself was high and job satisfaction regarding pay was moderately low. According to teachers' results, many of teachers would be more satisfied with their pay when it was more enough for living.

Finally, the findings of this study revealed that there was positive and moderate relationship between principals' emotional intelligence and job satisfaction of teachers. The findings suggest that those teachers who are satisfied at their place of work rate their principals' emotional intelligence as being high. This result was supported by Chowdhury (2014) research which revealed that principals' emotional intelligence was correlated with teachers' job satisfaction. Therefore, emotional intelligence is very important of organizational outcome including job satisfaction.

Recommendations

Based on the analyses of research findings from the quantitative and qualitative study, the followings are recommended for enhancing principals' emotional intelligence and teachers' job satisfaction.

- It is necessary to provide principals with opportunities to take part in a leadership workshop or seminars which could be based on the practical activities of enhancing their emotional intelligence.
- Principals who want to improve their schools and manage their educational setting to become more successful through job satisfaction of teachers should be more awareness, manageable, sociable and approachable.
- The curriculum for those who will take the role of principals should be organized with the sufficient lessons and matters of exercises of enhancing emotional intelligence.
- Principals should learn the findings of this study to be able to employ concerning emotional intelligence for making changes in their schools.

- It is necessary for providing books and journals associated with enhancing emotional intelligence in schools.
- Principals should provide a safe and pleasant working condition for enhancing teachers' job satisfaction as much as they can.
- The government should concentrate on providing adequate salaries and better benefits for teachers in order to enhance teachers' job satisfaction.

Need for Further Research

It is only admitted that this study was to examine the relationship between principals' emotional intelligence and job satisfaction of teachers in Basic Education High Schools of Thantwe Township, Rakhine State. Therefore, this result cannot be generalized to any wider population. The first recommendation for further study is to conduct in middle schools and primary schools in the same township. The second recommendation for further study is to conduct the research in more than one state.

Acknowledgements

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A STUDY OF TEACHERS' READINESS FOR CHANGE AND PRINCIPALS' TRANSFORMATIONAL LEADERSHIP PRACTICES

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Abstract

The aim of the research is to study the relationship between teachers' readiness for change and principals' transformational leadership practices. The participants in the study were 208 teachers and seven principals from seven public high schools in Theagone Township, Bago region. The purposive sampling method was applied to select only those principals who had served for at least two years in their current schools. And all teachers in these schools participated. Teachers' readiness for change was measured through the questionnaires which were modified based on the "Readiness for the Organizational Change Measure" developed by Holt, Armenakis et al. (2007) and its Cronbach α was 0.886. In addition, principals' transformational leadership practices were measured by using questionnaires which were modified based on the "Multifactor Leadership Questionnaire" developed by Avolio and Bass (2004) and its Cronbach α was 0.955. The pilot tests were undertaken with 57 teachers from two public high schools. The collected data were analyzed by descriptive statistics, the independent samples *t* test, One-Way ANOVA and post hoc analysis. The readiness of teachers for change and principals' transformational leadership practices were found to be moderately high in level. Among the personal factors of teachers, there was significant difference in *appropriateness* according to their age and there was also significant difference in *change efficacy* according to their total years of service. Moreover, there were significant differences in all dimensions of transformational leadership according to the age and gender of the principals. There was significant difference in *idealized influence* according to their total years of service. The schools which were highest and lowest in mean values were interviewed and results were found to be reflecting the quantitative findings with some variations. When the Pearson Product Moment Correlation was calculated, the *idealized influence*, *inspirational motivation, intellectual stimulation* and *individualized consideration* were found to be positively correlated with teachers' readiness for change. Moreover, the principals' transformational leadership practices were found to be positively correlated with teachers' readiness for change with the r value of 0.297 although it was not high.

Keywords: readiness for change, transformational leadership practices

Introduction

Change is inevitable. Every organization has to face with the unavoidable and undeniable changes. Cartwright and Schoenberg (2006) revealed that almost 70% of major change initiatives do not achieve their expected success. Clegg and Walsh (2004) suggested that the cause of poor effectiveness is the human side of change which is ignored. Readiness for change is generally regarded as the key for successful change efforts since it creates the positive energy needed by employees and it is the initial step for the desired change outcomes (Bernerth, 2004). Therefore, resistance can be overcome by creating readiness for change (Self, Armenakis, & Schraeder, 2007). Leadership is key in transforming organizations, and is the crucial aspect in the organizational change models (Kotter, 1995). Transformational leadership is concerned with the transformation of the organizations and the individuals within it and influence the followers to transcend their own self-interests for the interest of the whole group. Therefore, it is necessary and interesting to examine if the transformational leadership is related with the employees' readiness for organizational change.

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Significance of the Study

The Myanmar Education System has been undergoing numerous large and small scale changes in education including the curriculum reform, new assessment grading system, learner-centred teaching methods, applying modernized e-learning tools, and restructuring the levels of grades. Ignoring the voice and attitude of teachers can turn the several interventions to unsatisfactory results. The inconsistency between behavioural change of change recipients and change itself can be blockage to the change (Hallinger & Bryant, 2013). The successful organizational change depends on sound leadership at multiple levels and by both formal and informal leaders (Mayner, 2017). And it can positively influence employee attitudes of resistance or positive attitude towards change. Given the need for a more collaborative, communicative, and empowering style of leadership, transformational leadership can reduce employee resistance to change during organizational change. The transformational leadership of the school principals can, therefore, create the conducive conditions for the teachers to prepare for the upcoming changes in the organization.

Main Aim

The aim of this study is to study the teachers' readiness for change and the principals' transformational leadership practices.

Specific Aims

1. To investigate the readiness levels of teachers for change
2. To study the variations of teachers' readiness for change in terms of their personal factors
3. To study the levels of transformational leadership practices of principals
4. To study the variations of the principals' transformational leadership practices in terms of their personal factors
5. To investigate the relationship between teachers' readiness for change and the transformational leadership practices of principals

Research Questions

1. What are the readiness levels of teachers for change?
2. Are there any significant differences in teachers' readiness for change in terms of their personal factors?
3. To what level do the principals perform the transformational leadership practices?
4. Are there any significant differences in principals' transformational leadership practices in terms of their personal factors?
5. Is there any significant relationship between teachers' readiness for change and the transformational leadership practices of principals?

Theoretical Framework

Readiness collectively reflects cognitions and emotions of the individuals to accept, and adopt the change for the purpose of changing the present situations. Therefore, the investigation of teachers' readiness for change will be based on the following dimensions proposed by Rafferty, Jimmieson, and Armenakis (2013).

1. *Appropriateness* – the extent to which members feel change is needed and the extent to which members feel the change would be beneficial to the organization
2. *Management Support* – the extent to which organizational members felt senior leaders support the change
3. *Change Efficacy* – the extent to which organizational members felt confident that they would perform well and be successful
4. *Personally Beneficial* – whether the change is perceived to be personally beneficial
5. *Affective Emotional Responses* – the individual's current and future-oriented positive affective emotional responses to a specific change event

The other part is the transformational leadership which is the process whereby a person engages with others and creates a context which can boost the motivation and morality of both the leader and the followers. The analysis of principals' transformational leadership practices will be conducted in term of the four factors of the transformational leadership as described by Bass and Avolio (1994). They are as follow:

1. Idealized influence
2. Inspirational motivation
3. Intellectual stimulation
4. Individualized consideration

Idealized influence: The behaviours of the transformational leaders make them to be the ideal models for the followers. Therefore, they are recognized as the admirable and trustworthy leaders. Followers like to emulate their leaders and believe that their leaders have extraordinary abilities, persistence and determination. Leaders consider the needs of others over their own personal needs and avoid using power for personal gain and use only when needed.

Inspirational motivation: The behaviors of the transformational leaders motivate and inspire the followers by rendering the meaning and challenge to their works. Esprit de corps among the followers are aroused. Enthusiasm and optimism are displayed. Leaders get followers involved in envisioning attractive future states; they create clearly communicated expectations that followers want to meet and also demonstrate commitment to goals and the shared vision.

Intellectual stimulation: Transformational leaders promote the innovation and creation among followers by raising doubt about the assumptions, approaching old situations in new ways, and reframing the problems. Creativity is encouraged. New ideas and creative problem solutions are solicited from followers. Followers are encouraged to try new approaches, and their ideas are not criticized because they differ from the leaders' ideas.

Individualized consideration: Transformational leaders act as a coach or mentor while giving attention to the needs of the followers for achievement and development. They develop their followers to reach the higher levels of potential. They consider the needs of the individuals and create the learning opportunities for addressing these needs in the favorable climate. They recognize and accept the individual differences of the followers. However, followers do not feel they are being checked.

Limitation of the Study

As the Myanmar Education System has been dealing with many changes, this study will only study the teachers' readiness for the most prevailing changes in public including curriculum reform, new assessment grading, applying e-learning, and so forth. Among three levels of readiness, this study will emphasize only on the individual level of readiness for change. Moreover,

it is intended to administer the study only in public high schools in Theagon Township, Bago Region.

Definitions of Key Terms

Readiness for change is the extent to which an individual or individuals are cognitively and emotionally inclined to accept, embrace and adopt a particular plan to purposefully alter the status quo (Holt et al., 2007).

Transformational Leadership: Raising followers' level of consciousness about the importance and value of desired outcomes and the methods of reaching those outcomes, transcending their own self-interest for the sake of the organization (Burns, 1978).

Operational Definitions

 Readiness for change: this term here refers to how ready the teachers are to embrace the ongoing changes and the extent to which they are emotionally and cognitively prepared themselves for the pending changes in education. It consists of five dimensions such as appropriateness, management support, change efficacy, personally beneficial and affective emotional.

Transformational leadership practices mean the practices of high school principals in terms of inspirational motivation, idealized influence, intellectual stimulation and individualized consideration.

Methodology

Sample

For the quantitative study, two hundred and eight teachers and seven principals from seven Basis Education High Schools in Theagone township, Bago Region were selected as the sample to be used by using the purposive sampling methods. Only high schools in which principals were serving for at least two years in the present schools and all teachers from these schools were selected for this study. For the qualitative study, open-ended questions were conducted with all teachers from these seven schools. Moreover, fourteen teachers and three principals from three schools E, F and G which were selected based on the quantitative findings were interviewed.

Instrumentation

Readiness for change was measured by modifying "Readiness for Organizational Change Measure" developed by Holt et al. (2007). There are 34 items on five dimensions of readiness for change in the questionnaire for measuring readiness for change. They were measured by using four-point Likert Scale ranging from Strongly Disagree to Strongly Agree (1=Strongly Disagree, 2=Disagree, 3=Agree and 4=Strongly Agree).

The instrument for measuring the transformational leadership practices of school principals was modified and constructed based on the "Multifactor Leadership Questionnaire" (MLQ 5X) developed by Avolio and Bass (2004). There are 38 items for four dimensions of transformational leadership. They were measured by four-point Likert Scale ranging from 'Not at all' to 'Always' (1=Not at all, 2=Sometimes, 3=Frequently and 4=Always). Moreover, there are four open-ended questions for readiness for change and three open-ended questions for transformational leadership practices. There are five interview questions for readiness for change and six interview questions for the transformational leadership practices.

Procedure

      The instrument was constructed based on them while adapting the questionnaires developed by the scholars which are readiness for organizational change developed by Holt et al. (2007) and the Multifactor Leadership Questionnaire (MLQ) developed by Avolio and Bass (2004). The validity of the questionnaires was confirmed by the guidance and advice of ten experts from the Department of Educational Theory at the Yangon University of Education.

      After that, the pilot test was carried out in order to measure the reliability of the instrument with the sample of 57 participants from two Basic Education High School in Yangon in the third week of September, 2019. And the Cronbach alpha value for the readiness for change is 0.886 and that for transformational leadership practices is 0.955. Then the additional corrections were made under the guidance of the supervisor. The questionnaires were delivered to the selected schools in Theagone Township, Bago Region in the fourth week of October, 2019.

      Descriptive statistics, independent samples *t* test, one-way ANOVA, Tukey post hoc mean comparison and the Pearson Product Moment Coefficient were used to analyse the data. Moreover, answers to open-ended questions and interviews were read and analysed.

Findings

      The present section details the findings from both quantitative and qualitative analysis of teachers' readiness for change and principals' transformational leadership practices.

Table 1 Mean Values and Standard Deviations Showing the Levels of the Teachers'
Readiness for Change   (N=208)

No.	Variables	Mean	SD	Remarks
1.	Appropriateness	3.17	0.27	Moderately High
2.	Management Support	2.99	0.34	Moderately High
3.	Change Efficacy	3.08	0.29	Moderately High
4.	Personally Beneficial	3.20	0.35	Moderately High
5.	Affective Emotional	3.05	0.24	Moderately High
Readiness for Change		**3.10**	**0.22**	**Moderately High**

Scoring directions: 1.00-1.75 = Low, 1.76-2.50=Moderately Low, 2.51-3.25=Moderately High, 3.26-4.00 =High

      According to the above Table (1), the mean value of the *appropriateness* was moderately high. That of *management support* was found to be moderately high. The mean values of *change efficacy, personally beneficial and affective emotional* were found to be high, too. Although they existed in the moderately high level, the *personally beneficial* was found to be higher than others. Therefore, it can be concluded that teachers had the moderately high level of readiness.

      However, when the readiness of teachers for change was analysed in terms of their personal factors, there is no statistically significant difference in Teachers' Readiness for Change according to their *gender*, *qualifications*, *ranks*, *years of service in their current school* and *course attended*.

Table 2 One-Way ANOVA Results Showing Mean Values and Standard Deviation of Teachers' Readiness for Change According to their Age Groups (N=208)

No.	Variables	Age Groups	N	Mean	SD	*F*	*p*
1.	Appropriateness	≤ 30 years	17	3.19	0.27	3.628	0.014*
		31-40 years	50	3.07	0.27		
		41-50 years	51	3.24	0.24		
		≥51 years	90	3.18	0.27		
2.	Management Support	≤30 years	17	3.00	0.29	1.347	ns
		31-40 years	50	2.93	0.23		
		41-50 years	51	3.06	0.31		
		≥51 years	90	2.98	0.42		
3.	Change Efficacy	≤30 years	17	2.97	0.36	1.756	ns
		31-40 years	50	3.04	0.29		
		41-50 years	51	3.11	0.30		
		≥51 years	90	3.11	0.25		
4.	Personally Beneficial	≤30 years	17	3.22	0.26	.255	ns
		31-40 years	50	3.18	0.35		
		41-50 years	51	3.23	0.38		
		≥51 years	90	3.18	0.34		
5.	Affective Emotional	≤30 years	17	2.99	0.16	.621	ns
		31-40 years	50	3.03	0.24		
		41-50 years	51	3.06	0.27		
		≥51 years	90	3.06	0.23		
	Readiness for Change	≤30 years	17	3.08	0.17	1.971	ns
		31-40 years	50	3.04	0.20		
		41-50 years	51	3.14	0.23		
		≥51 years	90	3.10	0.22		

Scoring directions:1.00-1.75=Low, 1.76-2.50=Moderately Low, 2.51-3.25=Moderately High, 3.26-4.00=High

Table 3 One-Way ANOVA Results Showing Significantly Different Dimensions of Teachers' Readiness for Change Grouped by Age Groups (N=208)

Variables		Sum of Squares	*df*	Mean Square	*F*	*p*
Appropriateness	Between Groups	.760	3	.253	3.628	.014*
	Within Groups	14.249	204	.070		
	Total	15.009	207			

*p<0.05, **p<0.01, ***p<0.001, ns = not significant

As shown in the above Table (2) and Table (3), there is no significant difference between the readiness levels of teachers for change grouped by their age except in the dimension *appropriateness* ($F(3, 204)$= 3.628, $p<0.05$). In the *appropriateness,* the 41-50 age group was found to have the mean value of 3.24 which was higher than other groups.

Table 4 Tukey HSD Results Showing Multiple Comparison for the Appropriateness Grouped by Age (N=208)

Variable	Age Groups (I)	Age Groups (J)	Mean Difference (I-J)	*p*
Appropriateness	41-50 years	≤30 years	.05447	ns
		31-40 years	.17068*	.007**
		≥51 years	.06500	ns

*p<0.05, **p<0.01, ***p<0.001, ns = not significant

According to the Table (4), teachers who aged 41-50 were significantly different from the group of teachers who aged 31-40 years (*p*<0.01) in *appropriateness* of the pending changes and had more positive attitude towards changes. Moreover, the mean value of the group of teachers who aged 41-50 years were found to be higher than that of other age groups.

Table 5 One-Way ANOVA Results Showing Mean Values and Standard Deviation Showing Teachers' Readiness for Change According to their Total Service Years   (N=208)

No.	Variables	Total Service Year	N	Mean	SD	*F*	*p*
1.	Appropriateness	≤10 years	24	3.14	0.26	.589	ns
		11 to 20 years	83	3.15	0.26		
		21 to 30 years	30	3.18	0.30		
		≥31 years	71	3.20	0.27		
2.	Management Support	≤10 years	24	2.94	0.30	.716	ns
		11 to 20 years	83	3.00	0.25		
		21 to 30 years	30	2.93	0.45		
		≥31 years	71	3.02	0.40		
3.	Change Efficacy	≤10 years	24	2.91	0.35	3.625	0.014*
		11 to 20 years	83	3.08	0.26		
		21 to 30 years	30	3.11	0.31		
		≥31 years	71	3.12	0.26		
4.	Personally Beneficial	≤10 years	24	3.20	0.38	.109	ns
		11 to 20 years	83	3.19	0.32		
		21 to 30 years	30	3.23	0.44		
		≥31 years	71	3.20	0.34		
5.	Affective Emotional	≤10 years	24	2.99	0.17	1.602	ns
		11 to 20 years	83	3.03	0.26		
		21 to 30 years	30	3.04	0.17		
		≥31 years	71	3.10	0.24		
	Readiness for Change	≤10 years	24	3.04	0.19	1.148	ns
		11 to 20 years	83	3.09	0.20		
		21 to 30 years	30	3.09	0.24		
		≥31 years	71	3.13	0.23		

Scoring directions:1.00-1.75=Low, 1.76-2.50=Moderately Low,2.51-3.25=Moderately High, 3.26-4.00=High

Table 6 One-Way ANOVA Results Showing Significantly Different Dimensions of Teachers' Readiness for Change Grouped by Total Service Year   (N=208)

Variable		Sum of Squares	*df*	Mean Square	F	*p*
Change Efficacy	Between Groups	.852	3	.284	3.625	.014*
	Within Groups	15.980	204	.078		
	Total	16.832	207			

*p<0.05, **p<0.01, ***p<0.001, ns = not significant

The above shown Table (5) and Table (6) present that there was no significant difference in readiness for change of teachers grouped by their total years of service except in *change efficacy* which was statistically significant (*F*(3,204)=3.625, *p*<0.05). However, mean value of groups of teachers who had total service years of 31 and above was higher than other groups of teachers.

Table 7 Tukey HSD Results Showing Multiple Comparison for the Appropriateness Grouped by their Total Service Year (N=208)

Variable	Service Year (I)	Service Year (J)	Mean Difference (I-J)	p
Change Efficacy	≤10	11 to 20	-.17462*	.038*
		21 to 30	-.20139*	.045*
		≥31	-.21234*	.008**

*p<0.05, **p<0.01, ***p<0.001, ns = not significant

According to the Table (7), the perception of teachers of 1-10 years of service on their *change efficacy* was found to be significantly different from those who had 11-20 years of service ($p<0.05$) and from those who had 21-30 years of service ($p<0.05$).

The followings are the findings from the quantitative data analysis with regard to the transformational leadership practices of principals.

Table 8 Mean Values and Standard Deviations Showing the Levels of Transformational Leadership Practices of Principals (N=215)

No.	Dimensions	Mean	SD	Remarks
1.	Idealized Influence	3.42	0.51	High
2.	Inspirational Motivation	3.34	0.57	High
3.	Intellectual Stimulation	3.01	0.58	Moderately High
4.	Individualized Consideration	3.21	0.61	Moderately High
	Transformational Leadership Practices	**3.25**	**0.52**	**Moderately High**

Scoring directions: 1.00-1.75 = Low, 1.76-2.50 = Moderately Low,2.51-3.25=Moderately High, 3.26-4.00 =High

The Table (8) presents that among the four dimensions, the *intellectual stimulation* which was moderately high was found to be lower in mean value than other three dimensions and the *idealized influence* which was high in range was found to be higher than others. In general, the transformational leadership practices of the principals of seven schools can be interpreted as moderately high.

Table 9 Independent Samples *t* Test Results of Transformational Leadership Practices Grouped by Gender (N=215)

Variables	Principals' Gender	N		Mean	SD	t	df	p
		N₁	N₂					
Idealized Influence	Male	127	4	3.55	.43	4.677	156.41	.000***
	Female	88	3	3.22	.55			
Inspirational Motivation	Male	127	4	3.43	.53	2.739	213	.007**
	Female	88	3	3.21	.60			
Intellectual Stimulation	Male	127	4	3.08	.53	2.388	213	.018*
	Female	88	3	2.89	.63			
Individualized Consideration	Male	127	4	3.32	.56	3.268	168.38	.001***
	Female	88	3	3.04	.65			
Transformational Leadership Practices	Male	127	4	3.35	.46	3.499	163.72	.001***
	Female	88	3	3.10	.56			

*p<0.05, **p<0.01, ***p<0.001, ns = not significant, N₁=Number of Participants, N₂=Number of Principals

As shown above in the Table (9), it was found that there were significant differences in the practices of the male and female groups of principals in all four dimensions as well as in the overall transformational leadership practices. According to their mean values, the male groups of principals were higher than the female groups of principals.

Table 10 Independent Samples *t* Test Results of Transformational Leadership Practices Grouped by Total Service Year   (N=215)

Variables	Principals' Service Year	N		Mean	SD	*t*	*df*	*p*
		N₁	N₂					
Idealized Influence	≤ 20	97	3	3.32	.42	-2.79	211.20	.006**
	≥ 21	118	4	3.50	.56			
Inspirational Motivation	≤ 20	97	3	3.34	.52	.135	212.86	ns
	≥ 21	118	4	3.33	.61			
Intellectual Stimulation	≤ 20	97	3	3.04	.55	.903	213	ns
	≥ 21	118	4	2.97	.60			
Individualized Consideration	≤ 20	97	3	3.17	.62	-.910	213	ns
	≥ 21	118	4	3.24	.61			
Transformational Leadership Practices	≤ 20	97	3	3.22	.48	-.663	213	ns
	≥ 21	118	4	3.27	.56			

*$p<0.05$, **$p<0.01$, ***$p<0.001$, ns = not significant, N_1=Number of Participants, N_2=Number of Principals

The above Table (10) details the results showing that there was no statistically significant difference between those who had the 20 years and under 20 years of service and those who had the service years of 21 and above, except in *idealized influence* at $p<0.01$ (*t=-2.79, df=211.20*). Nonetheless, there is no statistically significant difference in the principals' transformational leadership practices according to their *age*.

Table 11 The Correlations between Readiness for Change and the Dimensions of the Transformational Leadership Practices

Dimensions of Transformational Leadership Practices	Readiness for Change
Idealized Influence	.331**
Inspirational Motivation	.258**
Intellectual Stimulation	.263**
Individualized Consideration	.244**

** Correlation is significant at the 0.01 level (2-tailed).

The above Table (11) depicts that among the four dimensions of transformational leadership, the *idealized influence* was positively correlated with the readiness for change (r=0.331, $p<0.01$). Interestingly, the *intellectual stimulation* was found to have positive correlation (r=0.263, $p<0.01$) with the readiness for change. The *inspirational motivation* was found to be positively correlating with the readiness for change with the r value of 0.258 (*$p<0.01$*). However, the *individualized consideration* was found to have the positive correlation of r=0.244 with the readiness for change.

Table 12 The Correlations between Teachers' Readiness for Change and Principals' Transformational Leadership Practices

Variables	Principals' Transformational Leadership Practices	Teachers' Readiness for change
Principals' Transformational Leadership Practices	1	0.297**
Teachers' Readiness for Change	0.297**	1

** Correlation is significant at the 0.01 level (2-tailed).

Finally, the above Table (12) shows that according to Cohen (1998), there was medium strength of positive correlation between principals' transformational leadership practices and teachers' readiness for change as the Pearson Product Moment Correlation, r, was only 0.297 which was statistically significant at $p<0.01$ although the effect size would only be less than typical.

Qualitative Findings

Findings on Teachers' Readiness for Change from Open-ended Questions

Appropriateness

Certain number of participants (n=190, 95%) agreed with the appropriateness of the changes. Teachers gave several reasons for that. Some answered that these changes would pave the way to the modern quality education system (n= 46, 22.66%) and some answered they could make students to be better educated and all-round developed (n=36, 17.73%), promote the ability of students to have open communication and discussion, to be creative, to think critically, and to enjoy schooling (n=27, 13.3%) and changes would make teaching-learning process more successful and improved and they would bring good results (n=11, 5.4%). However, some teachers (n=10, 5%) thought changes were not appropriate for some reasons. Additionally, some teachers (n=6, 2.96%) said it was not appropriate because there were shortages of teachers and teaching aids and facilities.

Change Efficacy

The 54.5% of teachers (n=108) thought they were confident with their skills and competencies required to make changes. Among them, teachers answered that their own skills and competencies were sufficient to make changes successful (n=69, 35.2%), changes required them to read more books and learn more (5.56%, n=11) but some (n=15, 8.09%) responded that they had confidence on their own skills but they could not be enough to make changes and they would need to attend courses given by the Ministry. However, 46.4% of teachers (n=92) had admitted that they would need to upgrade their qualifications and skills in order to be able to participate in the change process. Among them, some answered that they decided to learn more to have sufficient qualifications and to learn from more qualified colleagues by discussing (n=3, 1.52%).

Personally Beneficial

The 70.5% of teachers (n=139) replied that changes had more benefits for themselves. Most of them answered that these changes made them more knowledgeable and read more books (n=21, 10.65%) and changes made their teaching more effective and these changes were refreshing (n=3, 1.5%). The 29.4% of the teachers (n=58) thought that changes were fruitful but gave some other complaints. Two teachers (1.0%) answered that advantages would be more if teaching aids were supported. And eight teachers (4.02%) said it would be time-consuming to teach with new

approaches, (n=6, 3.02%) they would have little time for their personal affairs and family, (n=6, 3.02%) there would be bad things like limiting their socio-economics status and income, (n=6, 3.02%). Some (n=20, 10.1%) described that they could not decide with regard to that question because advantages usually came with disadvantages.

Affective Emotional

Most of the participants (n=116, 59.5%) expressed their satisfaction with the pending changes. Among them, 46.7% of teachers (n=91) had the feeling of satisfaction with the changes. However, certain number of teachers (n=25, 12.8%) had both feeling satisfaction and some negative feelings towards changes. Some of teachers (n=5, 2.6%) said that although they felt stressed and anxious a bit, they were much satisfied with the changes. Conversely, two teachers answered that although there could be good outcomes, they were stressed (n=2, 1.02%). There were 76 teachers (39%) who developed only negative feelings about changes. Forty teachers (20.4%) expressed that they felt stressed. Some teachers (n=15, 7.7%) described that they had some feeling of anxiety and stress because of the burden of workloads and paper work. Some participants expressed that they got stressed because it was more time-consuming and the amount of teachers was insufficient (n=3, 1.5%). Seven teachers (3.6%) said they had no stress for the work of teaching but they felt very annoyed with the unnecessary paperwork.

Findings on Principals' Transformational Leadership Practices from Open-ended Questions

Among seven schools under the study, the transformational leadership practices of principals of only three schools – school E which had lowest mean scores in transformational leadership, school F, which had lowest mean scores in readiness for change, and school G, which had the high mean values in both, will be presented in brief.

Q-(1) How does the principal inspire teachers to do more than they think they can?

The principal of the School E explained in that she used persuasion method in order to make them able to perform for the better results. Thirteen of the teachers (31.7%) replied that she provided all necessary facilities for them to exert their effort to be able to do more than they could. The 22% (n=9) of the teachers remarked that she sometimes motivated them to do so. Four teachers (9.8%) observed that she instructed them to report to her if they had any requisites. One of teachers (2.4%) said that she discussed with each individual and gave encouragement to him. And she provided books and equipment necessary for the subjects taught. One teacher (2.4%) added that she allowed her to teach using teaching methods she liked while providing teaching aids as much as possible. One teacher (2.4%) boasted that she was grateful to her because she did not enforce the elderly like them other than the young. Two teachers (4.9%) complained that she was weak at providing facilities for their teaching. Five teachers (12.2%) told that she did nothing of that kind.

The principal of the School F explained in that she provided the necessary things for them. She counselled them to sharpen their personalities. She especially supported facilities for their teaching. Seven teachers (38.9%) also agreed that she gave guidance and other necessary facilities. The 16.7% (n=3) of the teachers also added that she motivated them through encouragement. Another three teachers (16.7%) replied that she provided necessary support and advice. Two of teachers (11%) said that she shared them general knowledge and she made teachers to have good communications between each other and she also provided guidance and necessary helps. A teacher (5.6%) also replied that she shared knowledge on the internet and asked teachers to imitate other smart schools. Another one's answered was that she asked him to read books (5.6%). Another one (5.6%) reported that she increased teachers' desire to be successful and she provided enough teaching aids.

The principal of the School G answered in that he motivated his teachers and asked them to do the tasks only after having them understand the nature of these tasks and also inspired them to always have the positive sign in their capabilities. The 41% (n=7) of the teachers in his school also agreed that he always encouraged them and shared the inspirational or motivational thoughts, and ideas. Two teachers (12%) said as well that he frequently holds the discussion and talks. Another two teachers (12%) replied that he supervised the teaching methods and gave directions for the necessary things. One of the teachers (6%) said he delegated tasks and made him take charge of them followed by encouragement. Another one (6%) also replied that he gave the necessary support to him. Another teacher (6%) said that he gave both advice and necessary supports to her. Another one (6%) also added that he encouraged her to try harder and better. A teacher (6%) also described that he worked by consulting and cooperating with teachers. One the teachers (6%) remarked that he modelled how to work as an exemplary figure while giving guidance to them.

Q-(2) How does the principal help teachers to be innovative and creative?

The principal of the School E did not reply to this question. But thirteen teachers in this school (31.7%) answered in that with regard to this, she frequently discussed with them and provided necessary things to create and innovate teaching aids. Nine of the teachers (22%) said that she gave them helpful advice. Three teachers (7.3%) added that she sometimes encouraged them to do so. A teacher remarked that she provided teachers with knowledgeable books. Another one (2.4%) replied that she trained her to be creative and innovative by giving her chance to do tasks she thought she could do well. Another one (2.4%) said that she held exhibition and competition. One teacher (2.4%) said that she trusted her to do everything good for the successful teaching and high achievement of students. But contrary to this, one teacher said that she was weak in doing so. And similarly, seven teachers (17.1%) reported that she did nothing concerning with that matter. Moreover, one teacher (2.4%) said that they all had no time for such things as being innovative and creative because they had to teach in order to finish in time, and examinations and the process of scrutiny were really wasting their time.

The principal of the School F answered that she encouraged teachers to do life-long learning and to be investigative in new things and she facilitated them providing necessary information. Five of teachers (27.8%) added that she shared new technologies, knowledge and new teaching methods found on the internet. Three teachers (16.7%) replied that she gave good advice, new ways and necessary things for them. Another three teachers (16.7%) also answered that she asked them to read books and she provided enough facilities for teaching aids. Another two teachers (11%) also commented that she gave supports and new ideas based on her experiences, study and knowledge. Two teachers (11%) replied that she helped them in creating teaching aids by giving helpful advice. One of the teachers (5.6%) said that she helped her develop her strengths and gave advice for her development. Another teacher (5.6%) remarked that she gave guidance with good examples.

The principal of the School G gave the answer to this question in that for that purpose, he got them to look at problems from different perspectives, got them to accept difficulties as challenges to overcome, held talk-giving ceremonies, consolidated old thoughts and visions for developing new ones and shared new thoughts and visions gained from the books and social networks and also asking them to explore. The 53% of the teachers in his school (n=9) reported that he advised and gave necessary supports for having desire to create and innovate. The 35% of the teachers (n=6) also recounted that he always urged them to read many books, and to do learning and he gave encouragement for what they have created. A teacher (6%) replied that he often held school meeting to help solve the problems of teachers and school affairs together. Another one (6%) also said that he first gave teachers the things to think and if some new and good ideas were given rise, he encouraged them to do them actually happen.

Q-(3) Does the principal know the strengths and weaknesses of teachers? If teachers have some weaknesses, how does the principal address them?

The principal of the School E replied that she knew theirs but she was understanding for their weaknesses and help them to correct their weaknesses. The 78.4% of teachers (n=29) in this school also agreed with that. She addressed their weaknesses in different ways (n=8, 19.5%), was very understanding and helped them solve their weaknesses (n=8, 19.5%), tried to give advice for their weaknesses (n=3, 7.3%), and tried to solve in a family-like manner (n=1, 2.4%). But seven teachers (17.1%) denied that she did not know their strengths and weaknesses. In the same manner, a teacher (2.4%) admitted that she did not know much about her.

The principal of the School F replied that she knew their strengths and weaknesses. For their weaknesses, she tried to help them correct theirs and she also discussed with them about their difficulties openly. Almost all teachers (94.4%) agreed with the principal's effort to know their strengths and weaknesses. She explained and discussed their weaknesses and asked them to correct them (n=8, 44%), gave advice for correcting them (n=2, 11%), tried to address their weaknesses by sharing her experiences and knowledge (n=2, 11%), and delegated tasks for her which were suitable with her strengths and weaknesses praised her strengths and gave guidance for her weaknesses (n=1, 5.6%). But one teacher said that she knew her weaknesses rather than her strengths and she gave advice regarding to correct them.

The principal of the School G answered that he knew their strengths and weaknesses very well. So he praised their strengths and encouraged them to develop those strengths. For weaknesses, they found solutions by discussion and helping and he asked them to see weaknesses as things to overcome but not as problems. All teachers (n=17) had the same opinion on the principal's knowledge about the strengths and weaknesses. He delegated tasks for them which were suitable with them and he helped solve their difficulties (n=5, 29%), discussed with them and gave encouragement for their weaknesses (n=4, 24%), helped with their weaknesses in different ways; sometimes by discussing, sometimes by giving guidance and sometimes by intervening in person (n=2, 12%), and he helped and sometimes intervened in person to address them (e.g. in teaching) (n=1, 6%), he might know but he never announced them publicly (n=1, 6%). One of the teachers remarked that the principal knew her strengths and weaknesses and helped with her weaknesses cooperatively and by giving guidance to her.

Findings from the Interview

When the teachers and principals were interviewed, their responses were found to be reflecting the open-ended answers. The teachers in the school E were found to have moderately high level of readiness and the transformational leadership practices of the principal in this school were also generally weak. The teachers in the school F could be evaluated as moderately ready for changes while the principal in that school was found to be weakly practising the transformational leadership as some of the major attributes of a transformational leader were missing. Finally, the teachers in the school G were found to have developed the high level of readiness for change and active to embrace the changes. Moreover, the principal of the school G was practising the transformational leadership quite highly compared to other principals in the study although some features of a really transformational leader could not be vividly found.

Therefore, according to the quantitative and qualitative findings, the teachers' readiness in the present study were found to be ready for changes although there are some objections because of the certain reasons. The transformational leadership practices were also found to be weak in general in the leadership of all principals in the present study. Moreover, as there is a positive correlation between the teachers' readiness for change and the principals' transformational leadership practices in their school, the findings also support the research objectives of the study.

Conclusion

Discussion

   Teachers' background variables are weak predictors of the readiness for change, except total experience of teachers (Kondakci et al., 2017). Weak supports by the Ministry undermines the reciprocal relationship between change agents and change recipients. There is little access to the exact, sufficient, and effective high-quality communication and information about changes. Change recipients have the fear of the uncertainty, the unknown about what to expect about changes. Moreover, there is intense emotion of teachers working in the conditions of insufficient teachers and heavy burden of paper work. In addition to this, we had long decade without genuine changes or with the negative past experience about changes. Some teachers have self-doubt about their personal competencies. Additionally, the perception on the content of changes and value congruence between change agents and recipients will also play some roles in teachers' readiness. Moreover, principals do not have direct and feasible authority and responsibility to make changes to the ongoing processes of changes. They cannot participate in making decisions about changes. Challenges in the workplace aggravate the existing positive attitudes towards changes. There are vague preoccupied attitudes of change recipients towards change. In addition, the education system is still a centralized rigid organization where hard to accustomed to change culture. Finally, it is the cultural gap which makes the transformational leadership practices of the principals weak and different.

Recommendations

- Research on change readiness should always be done before implementing a big planned change and the investigation into the change readiness should always be done in order to enhance the effectiveness of the changes.

- Teachers having fewer years of service should be particularly given more encouragement of various forms so that they feel more confident that they can successfully perform the change processes.

- Feeling of the uncertainty and concern should be undermined through quality-communication and sufficient information and by providing the sufficient and timely supports including teaching aids and enough teachers with the respective specialization for co-curriculum subjects should be given.

- Principals need to address the above problems by intervening through the transformational leadership practices, be dependable, reliable companions for teachers for teachers in the long journey of change.

- As affective emotion of teachers is one of the major attributes of the change readiness, any conditions that make teachers feel something bad towards change should be eliminated or supressed as soon as possible. The pleasant atmosphere in the workplace of teachers should be given considerable attention.

- The heavy workload of teachers should be reduced and burden of paperwork ought to be lessened. Otherwise the intense working conditions will create the certain resistance to changes however appropriate they are, however confident they are on their efficacy and however much supports are provided and however beneficial they are for them. Nonetheless, principals are the solely responsible persons for creating a pleasant atmosphere for teachers to work in.

- Principals should be equipped with the skills necessary to create the conditions conducive to the changes and to act accordingly with changes and to act in accordance with and to respond properly to the changes.

- The competencies of the principals should be sharpened through the most possible ways, especially, for the *intellectual stimulation* as it is positively correlated with the teachers' readiness for change and receptivity to change. The system should be mended to be flexible enough for the principals to have conditions in which they can practise them well.

- It is advisable that principals should practise the transformational leadership especially in the time of change while boosting the *inspirational motivation* as it was also positively correlated with the teachers' readiness for change.

- Kotter's eight steps of transforming an organization should be followed in order to have successful change process especially in the second step of forming a powerful guiding coalition, and the third step of creating the vision. Consequently, the loose management in the mechanism should be lessened by building a powerful guiding coalition.

Need for Further Study

It is advisable for the future researchers who would like to study the similar content with the present study that the readiness for change should be measured at different levels i.e. at organizational and workgroup levels by using different measuring instruments. Moreover, it is suggested to do this kind of study in primary and middle schools run by the government and other private schools in other parts of the country as the present study was done in high schools in Theagone Township, Bago Region. Besides, the future study ought to focus to find the factors which are affecting the teachers' readiness for change and which can boost the readiness for change. Last, according to the related findings and results sought by the present study, it would also be interesting to investigate the readiness for change or other change-related attitudes of the change recipients and other types of leaderships.

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A STUDY OF TEACHERS' KNOWLEDGE AND ATTITUDES TOWARDS SEXUAL MINORITY STUDENTS

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Abstract

The aims of this study are to investigate the teachers' knowledge and attitudes towards sexual minorities, to determine whether the teachers' knowledge and attitudes vary according to age, qualification, teaching service and teaching position, to examine whether the teachers' attitudes vary according to knowledge level and to investigate the relationship between teachers' knowledge and attitudes towards sexual minority students. Both quantitative and qualitative studies were conducted. For quantitative study, a set of questionnaire was used: knowledge questions with true-false items and attitude questions with five-point likert scale. For qualitative study, open-ended questions and interview were used. By using proportional stratified sampling method, a total of 210 teachers, 86 are senior teachers and 124 are junior teachers from Dawei Township, Tanintharyi Region were selected for sample. Descriptive statistics, Item Percent Correct (IPC), Independent Samples *t* Test, one-way ANOVA, Post-hoc Tukey HSD test and Pearson product moment correlation were utilized to analyse the data. Results indicated that most of the teachers were at the satisfactory level of knowledge concerning sexual minorities. Overall teachers' knowledge varied depending on teachers' personal factors such as, age and qualification. Findings revealed that the teachers held moderately positive attitude in such areas as "attitude towards lesbian" and "in giving equal rights to sexual minorities". And, the teachers held moderately negative attitude in such areas as "attitude towards gay men" and "in being comfortable in the presence of sexual minorities". It was also found that there were significant differences in teachers' attitudes according to their age and knowledge level. The younger teachers had more positive attitude towards sexual minorities than the older teachers. There was a statistically significant association between teachers' knowledge and attitudes towards sexual minorities (r =.24, *p*<0.01). It can be said that the teachers who were more knowledgeable about sexual minorities tend to have more positive attitude towards sexual minorities.

Keywords: Sexual minority, teachers' attitudes

Introduction

All forms of discrimination and violence in schools are barriers in giving the quality education to children and young people and no country can achieve inclusive and equitable quality education if students are discriminated against or experience violence because of their actual or perceived sexual orientation and gender identity. The term sexual minority includes a variety of gender and sexual identities and expressions that differs from cultural norms. Usually, sexual minorities are comprised of lesbian, gay, bisexual and transgender individuals (Report of People's Union for Civil Liberties (PUCL), nd). Gini and Pozzoli (2009) contended that minority youths especially as sexual minority students are facing homophobic bullying, abusive names by fellow students, homophobic comment by teachers, physically and verbally threatened by peers. Eccles and Roeser (2011) pointed out that schools are a critical setting for many aspects of youth development, ranging from academic to social development. Accordingly, every educator's responsibility is to create a school environment where children can thrive socially, emotionally, and academically.

In Myanmar, although there is no much empirical research that is conducted concerning homosexuality issues, it is obvious that many LGBT youths can be seen in the society. In educational setting, teachers were reported to frequently insult gay and lesbian students in front of

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the class and bullying from peers and teachers alike causes a great deal of sexual minority students to drop out of school early, given them a severe disadvantage (Colors Rainbow, 2015).

According to Morgan (2003), teachers' positive or negative attitude will reflect to their behaviour and classroom climate. Consequently, the teachers who have knowledge about homosexuality and with positive attitude towards homosexuality can create inclusive classroom climate for all students. The primary focus of this study will help to investigate teachers' knowledge and attitudes towards sexual minority students for creating safe and non-discrimination classroom climate. Moreover, this study can assist in providing training programs, sensitization workshops on diversity, culturally awareness and sensitivity for teachers to create welcome and safe learning environment for all students regardless of different sexual orientation.

Aims of the study

The main aim of the study is to investigate the teachers' knowledge and attitudes towards sexual minority students.

The specific aims of the study are to study the teachers' knowledge levels about sexual minorities, to study the variations of teachers' knowledge about sexual minorities according to their personal factors, to study the teachers' attitudes towards sexual minorities, to study the variations of teachers' attitudes towards sexual minorities according to their personal factors, to study the variations of teachers' attitudes towards sexual minorities according to their knowledge levels and to study the relationship between teachers' knowledge and attitudes towards sexual minorities.

Research Questions

This study seeks to answer the following questions:

1. What are the levels of teachers' knowledge about sexual minorities?
2. Are there any significant differences in teachers' knowledge about sexual minorities according to their personal factors?
3. What are the teachers' attitudes towards sexual minorities?
4. Are there any significant differences in teachers' attitudes towards sexual minorities according to their personal factors?
5. Are there any significant differences in teachers' attitudes towards sexual minorities according to their knowledge levels?
6. Is there any relationship between teachers' knowledge and attitudes towards sexual minorities?

Definitions of Key Terms

Sexual minority: **A s**exual minority is a group whose sexual identity, orientation or practices differ from the majority of the surrounding society (Sullivan, 2003). Usually, sexual minorities comprise of lesbian, gay, bisexual and transgender individuals (Report of People's Union for Civil Liberties (PUCL), nd).

Attitudes towards sexual minorities: Attitudes toward sexual minorities can be defined as the perception or thought towards sexual minorities. According to Lehman and Thornwall (2010), negative perceptions can lead to hate crimes directed towards gay men and lesbians, whereas positive perceptions can bring about social activism for this minority group.

Lesbian: A female who is attracted toward other females (Human Rights Watch, 2001).

Gay: One who is attracted to a person of the same sex. The word gay can refer to both males and females, but is commonly used to identify males (Human Rights Watch, 2001).

LGBT: A common abbreviation for an individual who is either gay, lesbian, bisexual or transgendered (Human Rights Watch, 2001).

Operational Definition

Attitudes towards sexual minorities: Attitudes towards sexual minorities refers to the respondents' scores on the questionnaire and higher score means the respondents have more positive attitude towards sexual minorities.

Theoretical Framework

Essentialist Theories

Essentialist theories support that sexuality is the essence of an individual, basically means the biological and psychological inner state and structure which can either exist from the prenatal periods biologically or attained in very early years of life, shaping the sexual orientation of an individual. Furthermore according to the essentialist theory, one's sexuality is fixed and cannot change in time (Yuksek, 2016). The causes of homosexuality were tried to be defined through many studies in the framework of essentialist theories: Meyer-Bahlburg (1979), hormonal arguments; Simon LeVey (1991), brain study; Dennis McFadden et al., (1998), auditory systems study; and Dean Hamer (1993), gene study.

Gay and Lesbian Identity Development Model (Cass Identity Model)

There are stage development theories that attempt to describe the process of coming out. In 1979, Vivienne Cass released her "Homosexual Identity Model" based on her empirical research of gays and lesbians in Australia. Cass is the most widely known and used. This model includes six stages that are not necessarily mutually exclusive. The stages are: stage 1: identity confusion, stage 2: identity comparison, stage 3: identity tolerance, stage 4: identity acceptance, stage 5: identity pride and stage 6: identity synthesis.

The Sexual Minority Stress Model

Meyer (2003) defined minority stress as a chronic level of stress caused by prejudice, discrimination, lack of social support, and other factors that the members of stigmatized minority groups are experiencing. Meyer (2003) described the minority stress model in terms of distal stressors and proximal stressors. The distal stressors are defined as objective stressors that are brought on from the outside and do not depend on the individual's subjective assessment. The proximal stressors are internal processes that appear under the influence of the individual's cognitive, emotional, and social experiences. Some of the proximal stressors relevant for the LGB individuals include the following: the expectation of rejection by other people; the concealment of their own identity; and internalized homonegativity.

Social Cognitive Career Theory (SCCT)

As a complement to the minority stress model, social cognitive career theory (Lent, Brown & Hackett, 2000) to frame the discussion of sexual minority and gender-variant youths' experiences in the school and academic domain. Much of SCCT is grounded in Bandura's work on social learning theory and self-efficacy. SCCT proposes that individuals' personal attributes (e.g., sexual orientation) and their context (e.g., environmental conditions and events) influence their learning experiences. Contextual factors such as unwelcoming school climates and

victimization can exert a sizeable negative effect on the learning experiences of sexual minority and gender-variant youth. In turn, these learning experiences influence individuals' self-efficacy, interest, outcome expectations, and personal goals. (Lent et al., 2000).

General Psychological Mediating Process

Hatzenbuehler (2009) expanded on Meyer's minority stress theory by formulating the general psychological mediating process. The psychological mediation framework seeks to gain a better understanding of the processes that can explain the relation between stigma-related stressors and psychopathology among sexual minorities. Hatzenbuehler (2009) separated the three mental health disorders of depression, anxiety, and alcohol use disorder, which are the most common among sexual minorities, into internalizing and externalizing realms. According to Hatzenbuehler (2009), there are a number of different psychosocial processes that may impact the relationship between stigma-related stress and mental health morbidity, but hypothesized that coping and emotion regulation processes, social/interpersonal processes, and cognitive processes contain the "strongest empirical support as risk factors".

Methodology

In this study, quantitative and qualitative research methods were used. For quantitative study, a set of questionnaire was used and this questionnaire was developed based on related literature under the guidance of supervisor. There were three parts in the questionnaire: the first one is collecting personal information of participants. The second part is examining participants' knowledge by defining true-false items and measure by scoring 1-mark for one true item and 0-mark for one false item on 27-items questionnaire. And, the third part is examining participants' attitudes on a five-point Likert scale with twenty-eight items. Each item was rated on a five-point Likert scale ranging from (1) "strongly disagree", (2) "disagree", (3) "neutral" (4) "agree" and (5) "strongly agree". Reverse scoring was used for some items on the instrument and the scale ranging from (1) "strongly agree", (2) "agree", (3) neutral", (4) "disagree" and (5) "strongly disagree". The higher mean scores reflecting more positive attitudes towards sexual minorities. For qualitative study, open-ended questions and interview were used. By using proportional stratified sampling method, a total of 210 teachers, 86 are senior teachers and 124 are junior teachers from Dawei Township, Tanintharyi Region were selected for sample. Descriptive statistics, Item Percent Correct (IPC), Independent Samples *t* Test, one-way ANOVA, Post-hoc Tukey HSD test and Pearson product moment correlation were utilized to analyse the data.

Findings

The results of the study were presented in the following part.

Findings from Quantitative Study

Table 1   Numbers and Percentages of Teachers Showing Levels of Knowledge about Sexual Minority Students   (N=210)

No.	Scoring Range	No. of Items that Correctly Answer	No. of Correct Teachers (%)	Remark
1.	≥75%	21 - 27	16 (7.61%)	Above Satisfactory Level
2.	50% - 74%	14 - 20	163 (77.47%)	Satisfactory Level
3.	<50%	0 - 13	31 (14.62%)	Below Satisfactory Level

Scoring Range: <50% (0-13) = Below Satisfactory Level
                                      50% - 74% (14-20) = Satisfactory Level
                                      ≥75% (21-27) = Above Satisfactory Level

According to Table 1, it can be noted that 7.61% of teachers (n = 16) were at the above satisfactory level of knowledge, 77.47% of teachers (n = 163) were at the satisfactory level of knowledge and 14.62% of teachers (n=31) were at the below satisfactory level of knowledge about sexual minority students.

Table 2 Mean Values and Standard Deviations Showing Level of Teachers' Attitudes towards Sexual Minority Students (N = 210)

No.	Variables	Mean (SD)	Remark
1.	Attitude towards Lesbian (ATL)	3.18 (.65)	Moderately positive attitude
2.	Attitude towards Gay (ATG)	2.63 (.70)	Moderately negative attitude
3.	Being comfortable in the presence of sexual minorities (COMFORT)	2.82 (.63)	Moderately negative attitude
4.	Giving equal rights to Sexual minorities (EQUAL)	3.49 (.52)	Moderately positive attitude
	Teachers' Attitude	**3.00 (.51)**	**Moderately negative attitude**

Scoring Direction: 1.00-2.00 = negative attitude 2.01-3.00 = moderately negative attitude
3.01-4.00 = moderately positive attitude 4.01-5.00 = positive attitude

As the results presented in Table 2, it can be seen that teachers held moderately negative attitude in such areas of "being comfortable in the presence of sexual minorities" and "attitude towards gay". And then, they have moderately positive attitude in such areas of "attitude towards lesbian" and "giving equal rights to sexual minorities" respectively. Generally, as the average mean value of teachers' attitude was 3.00, it can be interpreted that the participant teachers held moderately negative attitude towards sexual minority students.

Table 3 Mean Values and Standard Deviations Showing Teachers' Knowledge about Sexual Minority Students Grouped by Age (N=210)

Variable	Age	N	Mean	SD
Overall Teachers' Knowledge	≤30 years	22	17.09	2.81
	31-40 years	61	17.46	2.19
	41-50 years	60	16.05	2.89
	≥51 years	67	16.89	2.77

To analyse and evaluate whether there was a significant difference in teachers' knowledge grouped by age, one-way ANOVA was used.

Table 4 One-Way ANOVA Results Showing Teachers' Knowledge Grouped by Age

Variables		Sum of Squares	df	Mean Square	F	p
Overall Teacher' Knowledge	Between Groups Within Groups Total	62.41 1454.08 1516.5	3 206 209	20.804 7.05	2.947	**.034***

Note: *p< .05

Table 4 revealed that there was a significant difference in teachers' knowledge (F (3,206) = 2.95, p < .05) grouped by age.

Table 5 Tukey HSD Results Showing Significantly Different in Teachers' Knowledge Grouped by Age

Dependent Variables	Age of Participants (I)	Age of Participants (J)	Mean Difference (I-J)	p
Knowledge	31-40 years	41-50 years	1.409	**.020***

Note: *p< .05

As shown in Table 5, participants who were the age of (31-40 years) group was significantly different from participants who were the age of (41-50 years) group in knowledge concerning sexual minority students. Thus, it can be said that the teachers who were the age of 31 to 40 years group was more knowledgeable with higher mean values than the age of 41-50 years group.

Table 6 Mean Values and Standard Deviations Showing Teachers' Knowledge about Sexual Minority Students Grouped by Qualification   (N=210)

Variable	Qualification	N	Mean	SD
Overall Teachers' Knowledge	B.A./B.Sc./M.A./M.Sc.	115	16.48	2.79
	B.Ed./M.Ed.	95	17.26	2.52

To analyse and evaluate whether there was a significant difference in teachers' knowledge grouped by qualification, Independent Samples *t* Test was used.

Table 7   Independent Samples *t* Test Results Showing Teachers' Knowledge about Sexual Minority Students Grouped by Qualification

Variables	Qualification	N	*t*	*df*	*p*
Teachers' Knowledge	B.A./B.Sc./M.A./M.Sc.	115	-2.095	208	**.037***
	B.Ed./M.Ed.	95			

Note: *p< .05

Table 7 showed that the teachers who got B.A./B.Sc./M.A./M.Sc. degree were significantly different from the teachers who got B.Ed./M.Ed. degree in knowledge concerning sexual minorities ($p < .05$). So, it can be interpreted that the teachers who got B.Ed./M.Ed. holders were more knowledgeable with higher mean values than B.A./ B.Sc./M.A./M.Sc. holders concerning sexual minorities.

Table 8   Mean Values and Standard Deviations Showing Teachers' Attitudes towards   Sexual Minority Students Grouped by Age   (N=210)

No.	Variables	Age	N	Mean	SD
1.	Attitude towards Lesbian	≤30 years	22	3.57	.53
		31-40 years	61	3.23	.63
		41-50 years	60	3.08	.58
		≥ 51 years	67	3.10	.71
2.	Attitude towards Gay	≤30 years	22	2.79	.72
		31-40 years	61	2.66	.68
		41-50 years	60	2.58	.71
		≥ 51 years	67	2.60	.71
3.	Being comfortable in the presence of sexual minorities	≤30 years	22	3.02	.68
		31-40 years	61	2.87	.53
		41-50 years	60	2.76	.69
		≥ 51 years	67	2.76	.63
4.	Giving equal rights to sexual minorities	≤30 years	22	3.47	.43
		31-40 years	61	3.53	.50
		41-50 years	60	3.50	.58
		≥ 51 years	67	3.46	.51

Scoring Direction: 1.00-2.00 = negative attitude   2.01-3.00 = moderately negative attitude
                3.01-4.00 = moderately positive attitude   4.01-5.00 = positive attitude

To analyse and evaluate whether there was a significant difference in teachers' attitudes grouped by age, one-way ANOVA was used.

Table 9 One Way ANOVA Results Showing Teachers' Attitudes towards Sexual Minority Students Grouped by Age

Variables		Sum of Squares	df	Mean Square	F	p
Attitude towards Lesbian	Between Groups	4.52	3	1.51	3.73	
	Within Groups	83.12	206	.40		.012*
	Total	87.64	209			
Attitude towards Gay	Between Groups	.803	3	.268	.54	
	Within Groups	101.67	206	.494		n.s
	Total	102.47	209			
Being comfortable in the presence of sexual minorities	Between Groups	1.48	3	.49	1.27	
	Within Groups	80.32	206	.39		n.s
	Total	81.81	209			
Giving equal rights to sexual minorities	Between Groups	.14	3	.046	.169	
	Within Groups	56.34	206	.273		n.s
	Total	56.48	209			

Note: *p<.05,   ns = not significant

According to the data presented in Table 9, significant difference was found in the area of attitude towards lesbian ($F (3,206) = 3.73$, $p<.05$) among age groups.

Table 10 Tukey HSD Results Showing Significantly Difference in Teachers' Attitudes Grouped by Age

Dependent Variables	Age of Participants (I)	Age of Participants (J)	Mean Difference (I-J)	P
Attitude towards Lesbian	≤30 years	41-50 years	.49	.012*
	≤30 years	≥ 51 years	.47	.015*

Note: *p< .05

As shown in Table 10, participants who were the age of (≤ 30 years) group was significantly different from participants who were the age of (41-50) years group and the age of (≥ 51 years) group in relation with attitude towards lesbian women. It can be said that the teachers (≤ 30 years) group have more positive attitude with higher mean values towards lesbian than the teachers (41-50 years) group and the teachers (≥ 51 years) group.

Table 11   Mean Values and Standard Deviations of Teachers' Attitudes towards Sexual Minority Students Relating to Knowledge   (N=210)

No.	Variables	Knowledge Level	N	Mean	SD
1.	Attitude towards Lesbian	Group A (Below Satisfactory Level)	31	2.94	.69
		Group B (Satisfactory Level)	163	3.20	.61
		Group C (Above Satisfactory Level)	16	3.41	.65
2.	Attitude towards Gay	Group A (Below Satisfactory Level)	31	2.45	.79
		Group B (Satisfactory Level)	163	2.63	.68
		Group C (Above Satisfactory Level)	16	2.99	.67
3.	Being comfortable in the presence of sexual minorities	Group A (Below Satisfactory Level)	31	2.65	.71
		Group B (Satisfactory Level)	163	2.83	.60
		Group C (Above Satisfactory Level)	16	3.03	.73
4.	Giving equal rights to sexual minorities	Group A (Below Satisfactory Level)	31	3.56	.42
		Group B (Satisfactory Level)	163	3.46	.54
		Group C (Above Satisfactory Level)	16	3.65	.46

Scoring Direction: 1.00-2.00 = negative attitude   2.01-3.00 = moderately negative attitude
                3.01-4.00 = moderately positive attitude   4.01-5.00 = positive attitude

To analyse and evaluate whether there was a significant difference in teachers' attitudes towards sexual minority students relating to knowledge, one-way ANOVA was used.

Table 12   One Way ANOVA Results Showing Teachers' Attitudes towards Sexual Minority Students relating to Knowledge

Variables		Sum of Squares	df	Mean Square	F	p
Attitude towards Lesbian	Between Groups Within Groups Total	2.77 84.88 87.65	2 207 209	1.38 .41	3.37	**.036***
Attitude towards Gay	Between Groups Within Groups Total	3.07 99.40 102.47	2 207 209	1.53 .48	3.19	**.044***
Being comfortable in the presence of sexual minorities	Between Groups Within Groups Total	1.57 80.24 81.81	2 207 209	.78 .39	2.02	n.s
Giving equal rights to sexual minorities	Between Groups Within Groups Total	.71 55.77 56.48	2 207 209	.35 .27	1.31	n.s

*p< .05,   ns = not significant

According to Table 12, there was significant difference in the area of attitude towards lesbian ($F(2,207)=3.37, p<.05$) and in the area of attitude towards gay ($F(2,207)=3.37, p<.05$) relating to knowledge.

Table 13 Tukey HSD Results Showing Significantly Difference in Teachers' Attitudes towards Sexual Minority Students relating to Knowledge

Dependent Variables	Knowledge (I)	Knowledge (J)	Mean Difference (I-J)	P
Attitude towards lesbian	Group A	Group C	-.47	**.047***
Attitude towards Gay	Group A	Group C	-.54	**.033***

Note: *p< .05

As shown in Table 13, Group A teachers were significantly different from Group C teachers in attitudes towards lesbians ($p<.05$). And there was also a significant difference between Group A teachers and Group C teachers in attitude towards gay ($p<.05$). It can be said that Group C teachers at above satisfactory level of knowledge have more positive attitudes with higher mean values towards lesbian and gay than Group A teachers at below satisfactory level of knowledge.

To investigate if there was a statistically significant association between teachers' knowledge and attitudes towards sexual minorities, a correlation was computed. Table 14 shows Pearson correlation matrix result for the two variables.

Table 14   Pearson Correlation Matrix between Teachers' Knowledge and Attitudes towards Sexual Minority Students   (N=210)

Variables	Knowledge	Attitude
Knowledge	1	.238**
Attitude	.238**	1

** Correlation is significant at the 0.01 level (2-taileld)

As shown in the Table 14, the direction of the correlation was positive, which means that the teachers who have more knowledgeable about sexual minorities tend to have more positive attitude towards sexual minorities students (r = .24, *p*<0.01).

Findings from Qualitative Study

1. Responses to the Open-Ended Questions

When asking about ***attending sensitization workshops and discussions or reading books, periodicals and journals in relating to sexual minority people and their attitudes***, some of the teachers (n=80, 39%) responded that they had no chance to attend the sensitization workshops and didn't read the books concerning sexual minority people. (n=90, 44%) of teachers responded that they read some books, journals and got information from social media. (n=29, 14%) of the teachers attended courses about sexual minority people. Some of the teachers (n=5, 3%) said that they didn't read books and journals and in relating to sexual minority people but they disliked LGBT people.

The participant teachers were asked about ***their perception on sexual minority people***, some teachers (n=35, 18%) responded LGBT were just human beings and it was normal. (n=29, 15%) of the teachers said that they have some homosexual friends and these LGBT people were not mental disorders and should not discriminate them. (n=36, 54%) of the teachers responded that sexual minorities broke down the natural laws and disliked them. Some of the teachers (n=23, 16%) said that they felt bothered in dealing with sexual minorities because of their excessive behaviours.

When asking the participant teachers' opinions of ***thinking that LGBT people should be equally treated as others***, some of the teachers (n=6, 3%) said that LGBT people should not be equally treated as others because these people broke down the natural law. Most of the teachers (n=192, 97%) replied that LGBT people should be equally treated as others and they should get equal rights.

The teachers were asked about ***how they will create emotionally and physically safe environment for LGBT students***, most of the teachers (n=108, 59%) responded that they would treat LGBT students without discrimination, prevent from bullying and harassment. The teachers (n= 37, 21%) said that they would gradually change LGBT students' clothing style and talk them to accept and live naturally. Some of the teachers (n=32, 18%) said that they let LGBT students watch movies that can educate them and create collaborative work to involve all of the students.

2. Findings from Interview

Concerning ***the teachers' knowledge about sexual minorities***, the teachers who had more positive attitude towards sexual minorities replied that they read some books, attended the course and knew from social media concerning homosexual people. Although some of the teachers didn't read books and journals, they assumed that a person become homosexual because of biological factors. The teachers who had less positive attitude towards sexual minority people responded that they didn't read books or journals. Some of the teachers who had less positive attitude said that they even read about homosexual people but they thought that homosexual people should live in line with the natural laws.

As regard with ***the teachers' attitude towards sexual minorities***, most of the teachers who had more positive attitude viewed homosexual people as human beings and it was normal. The teachers who had less positive attitude towards sexual minorities felt bothered when they saw homosexual people and they thought that everyone should not break down the laws and principles.

As regard with ***factors that contributed to teachers' attitudes towards sexual minorities***, one of the teachers who had more positive attitude replied that she could understand the lives of

LGBT people because she has homosexual friends. The other two teachers who had more positive attitude replied that they became to accept and understand LGBT people' lives after they have attended the courses and have read books. The teachers who have less positive attitude towards sexual minorities said that they believed that everyone should obey the proper roles for men and women in society and of behaviour norms for men and women.

Summary of Research Findings

The main aim of this study is to investigate the teachers' knowledge and attitudes towards sexual minority students and so, the findings of the quantitative and qualitative study will be shown in this section.

- As regard with levels of overall teachers' knowledge about sexual minorities, the participant teachers were found with different knowledge levels: the numbers of 16 (7.61%) teachers were at the above satisfactory level of knowledge, the numbers of 163 (77.47%) teachers were at the satisfactory level of knowledge and the numbers of 31 (14.62%) teachers were at the below satisfactory level of knowledge. Therefore, it can be interpreted that most of the teachers were at the satisfactory level of knowledge concerning sexual minorities.

- According to the result from the investigation into the participant teachers' knowledge level grouped by their age, the mean value of teachers who were the age of 31 to 40 years group was higher than other age groups. According to the ANOVA and Tukey HSD results, there was significant difference in teachers' knowledge between the age of (31-40 years) group and (41-50 years) group. So, it can be said that the teachers who were the age of 31 to 40 years group was more knowledgeable than the teachers who were the age of 41 to 50 years group.

- As the result of analysing the teachers' knowledge level concerning sexual minority students grouped by their qualification, the mean value of the teachers who were B.Ed./M.Ed. holders was higher than B.A./B.Sc./M.A./M.Sc. holders. According to the Independent Samples *t* Test result, there was significant difference in teachers' knowledge between these two groups and the teachers who got B.Ed./M.Ed. degree were more knowledgeable than the teachers who got B.A./B.Sc./M.A./M.Sc. degree concerning sexual minority students.

- As the result in investigating the teachers' knowledge level concerning sexual minority students grouped by their teaching service, no significant difference was found in teachers' knowledge among teaching service groups.

- Regarding with the result of teachers' knowledge level concerning sexual minority students grouped by their position, there was no significant difference in teachers' knowledge between groups.

- According to the results from the investigation of teachers' attitude towards sexual minorities, the mean values of teachers' attitude in lesbians, gay men, being comfortable in the presence of sexual minorities and giving equal rights to sexual minorities were 3.18, 2.63, 2.82 and 3.49 respectively. Moreover, the average mean value of teachers' attitudes towards sexual minority students was 3.00. So, it can be said that participant teachers have moderately negative attitude towards sexual minority students.

- As the result of analysing the teachers' attitudes towards sexual minorities grouped by their age, younger teachers had more positive attitude with higher mean values than the older teachers. According to the ANOVA and Tukey HSD results, the age of ≤30 years group was significantly different from the age of 41-50 years group and the age of ≥ 51 years group in the area of attitude towards lesbian women. So, it can be concluded that the teachers who were

the age of ≤ 30 years group had more positive attitude towards lesbian than the teachers who were the age of 41-50 years group and ≥ 51 years group.

- There was no significant difference in teachers' attitudes towards sexual minorities between their qualification groups.

- There was no significant difference in teachers' attitudes towards sexual minorities among their teaching service groups.

- According to their teaching position, there was no significant difference in teachers' attitudes towards sexual minorities between groups.

- As results from the investigation into the participant teachers' attitudes towards sexual minority students grouped by their knowledge levels, ANOVA and Tukey HSD results indicated that Group A teachers at below satisfactory level of knowledge was significantly different from Group C teachers at above satisfactory level of knowledge in such areas of the attitude towards lesbian and attitude towards gay. Thus, it can be interpreted that Group C teachers at above satisfactory level of knowledge have more positive attitude with higher mean values towards gay men and lesbians than Group A teachers at below satisfactory level of knowledge.

- As result from the investigation into the relationship between the participant teachers' knowledge and attitudes towards sexual minority students, it was found that there was a positive relationship between these two variables at (r =.238, p<0.01). It can be concluded that the teachers who have more knowledgeable about sexual minorities tend to have more positive attitude towards sexual minorities.

- As the qualitative study, the responds to the open –ended questions and interview results were summarized. According to the open-ended questions, some of the teachers responded that they had no chance to attend the sensitization workshops and didn't read books concerning sexual minority people. And most of the teachers responded that they read some books, journals and knew information from social media and attended courses about sexual minority people. Some teachers said that they have some homosexual friends and these LGBT people were not mental disorders and should not discriminate them. Some of them responded that sexual minorities broke down the natural laws and they felt bothered in dealing with sexual minorities. The teachers were asked about how they will create emotionally and physically safe environment for LGBT students, most of the teachers responded that they would treat LGBT students without discrimination, prevent from bullying and harassment. In interview results, it can be concluded that the teachers who had more positive attitude towards sexual minorities became to accept and understand LGBT people' lives after they had attended the courses and read books. Being friendly with LGBT people make them accept and understand LGBT people more. The teachers who have less positive attitude towards sexual minorities said that they believed that everyone should obey the proper roles for men and women in society and of behaviour norms for men and women.

Discussion

The research finding pointed out that (n = 31, 15%) of the teachers were at the below satisfactory level of knowledge with regard to sexual minorities. Therefore, teachers had better prepare to be more inclusive by joining professional development programs on diversity, cultural awareness and sensitivity. The findings revealed that the younger teachers were more knowledgeable with higher mean values than the older teachers relating to sexual minority students. According to qualitative results, the older teachers have no chance to attend the sensitization workshops but most of the younger teachers were attended the sensitization workshop

that was arranged by Colors Rainbow in Dawei Township. A teacher may have at least one student who is gay or lesbian in the classroom and therefore, teachers should have knowledge concerning sexual minorities. Liaw et al., (2008) mentioned that sharing knowledge is one of the important goals of an organization where all individuals' experiences and knowledge can be transferred as an organizational asset and maintained for future learning and creating new knowledge. Accordingly, the principals should offer the opportunities to the teachers who attended the sensitization workshops regarding with sexual minorities to share knowledge and experiences to their colleagues.

When examining the teachers' knowledge according to their qualification, it can be seen that the teachers who got B.Ed./M.Ed. degree were more knowledgeable concerning sexual minorities with higher mean values than those of the teachers who got B.A./B.Sc./M.A./M.Sc. degree. Based on the results of interview with the teachers who got B.Ed./M.Ed. degree, it was also found that most of the teachers knew about homosexuality. Interesting about sexual diversity and reading journals and books concerning sexual minorities might have played role in this result. Hurtado et al., (2012) contended that teachers need to know more about students and understand the nature of students' interactions in the classroom in order to create inclusive educational environments.

According to the results from the investigation of teachers' attitudes towards sexual minorities, the findings showed that the teachers had more negative attitude towards gay men than lesbian women align with findings from Kite and Whitley (1996); Steffens and Buchner (2003) examined that both heterosexual men and women show a more positive view of lesbians than gay men. According to the qualitative results, the teachers who had less positive attitude felt annoyed in dealing with gay men because of their excessive behaviours. Therefore, homosexual men had better try to promote their manners to be a worthy person to be understood and accepted more by majority groups.

The findings in examining the teachers' attitudes towards sexual minorities according to their personal factors pointed out that the younger teachers have more positive attitudes towards lesbian women than the older teachers which supported findings from Avery et al., (2007); Andersen and Fetner (2008); William and Grayson (2018). According to open-ended and interview results with the younger teachers, they knew about homosexuality by reading books and attending the training and courses than the older teachers and they have homosexual friends. It is in line with what Maddux (1988) examined the homophobic attitudes of pre-service teachers, and found that the teachers who had personally known a LGBT individual exhibited a lesser degree of homophobia than subjects who had not. Thus, knowing about homosexuality and having interpersonal contact with LGBT people were the facts that the younger teachers have more positive attitude towards homosexual people.

When examining for why some of the older teachers have more negative attitude towards homosexual people, based on the results of interview with them, they believed that everyone should fulfil their gender role that they biologically belong to. According to Cardenas et al., (2012) and Wellman and McCoy (2014), gender role belief lead to more negative attitudes towards homosexuals. Accordingly, teachers need to be aware that their LGBT related attitudes can influence their behaviour, and these attitudes may serve as a foundation for supportive actions regarding LGBT students, or may contribute to a hostile school climate for these youths.

Moreover, the findings showed that Group A teachers at below satisfactory level of knowledge was significantly different from Group C teachers at above satisfactory level of knowledge concerning sexual minorities in such areas of attitude towards lesbian and gay. It can be interpreted that the teachers who were more knowledgeable about sexual minorities have more positive attitude towards sexual minorities. This result was similar with what Detenber et al.,

(2013); Hou et al., (2006) asserted that higher level of knowledge regarding LGBT was positively associated to positive attitudes towards LGBT. According to open-ended and interview results, the teachers who had more positive attitude said that before knowing about homosexual people, they disliked LGBT people. When they knew about homosexual people, they became to understand and accept sexual minority people more.

The findings also indicated that there was a positive relationship between the teachers' knowledge and attitudes towards sexual minority people at (r =.238, p<0.01). It can be said that the teachers who were more knowledgeable concerning homosexual people tend to have more positive attitude towards homosexual people. Therefore, it was needed to arrange and integrate knowledge about LGBT and sexual orientation and gender identification and expression (SOGIE) as one of the topics in sensitization workshop for teachers to increase positive attitude towards sexual minority people. According to quantitative and qualitative findings, most of the senior and junior teachers in Dawei Township have adequate knowledge concerned with sexual minority people. However, some of them still not have knowledge about homosexuality and still hold negative attitude towards homosexual people. Thus, education and training are needed to address problematic attitude that may negatively affect sexual minority students.

Recommendations

Based on the results of this study, the following facts are recommended to improve the teachers' knowledge and positive attitudes towards sexual minority students.

- Teachers should prepare to be more inclusive by attending professional development programs on diversity, cultural awareness and sensitivity.
- Teachers should have a deeper understanding of gender and sexual diversity.
- Teachers need to realize the importance of consideration of cultural and family backgrounds exists for the students they teach.
- Teachers need to be aware of their attitudes towards sexual minorities that may serve as a foundation for supportive actions or may contribute to a hostile school climate for sexual minority students.
- The principals should offer the opportunities to the teachers who attended the sensitization workshops regarding with sexual minorities to share knowledge and experiences to their colleagues.
- It is a need to arrange pre-service teacher education programs that have incorporated diversity-related topics into the curricula.
- It is necessary to integrate knowledge about LGBT and Sexual Orientation and Gender Identification and Expression (SOGIE) as one of the topics in sensitization workshop to decrease bad impacts of discrimination caused by different situations of children with different sexual orientation.
- Non-government organization such as Colors Rainbow should arrange the trainings that can educate sexual minorities to have good manners for improving public understanding and acceptance toward LGBT people.

Needs for Further Research

This study tried to investigate the senior and junior teachers' knowledge and attitudes towards sexual minority students in Dawei Township. Therefore, further studies should be conducted in other townships, states or regions. In addition to examining the teachers' attitudes

towards sexual minority students, future research should also be investigated the issues and challenges faced by sexual minority students in their schools. Future studies should also be conducted to explore the conditions which teachers' negative attitudes lead to negative behaviours towards sexual minority students.

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RELATIONSHIP BETWEEN SENIOR TEACHERS' WORK VALUES AND JOB INVOLVEMENT IN KYONPYAW TOWNSHIP, AYEYARWADY REGION

Hsu Myint Myat Hnin[1], Thet Naing Oo[2], Su Su Hlaing[3]

Abstract

The purpose of the study is to investigate the relationship between work values and job involvement of senior teachers in Kyonpyaw Township, Ayeyarwady Region. Both quantitative and qualitative methods were used in this study. As focused on census method, total number of 190 senior teachers in Kyonpyaw Township participated. Wu et. al.'s Work Values Inventory (1996) and Agarwala's five dimensions of Job Involvement (1978) were based in this study. Descriptive Statistics, One-way ANOVA, Independent Samples *t* test and Pearson Correlation were used to analyze the data. Level of work values of senior teachers was high. There were no significant differences in the levels of work values of senior teachers according to their socio-demographic factors. Level of job involvement of senior teachers was moderate. There was a significant difference in the level of job involvement of senior teachers grouped by race (t=2.090, df=136.247, p<.05). There were no significant differences in other factors. The finding showed moderate level of positive significant relationship between work values and job involvement.

Keywords: values, work values, job involvement

Introduction

Education gives the eyes of the way in harmony of life with others. Teacher plays a pivotal role in education for cultivating the human capital and essential for school improvement. As a teacher, nowadays, there are many challenges. Teacher as a human being has his or her own an individual values system. Working is really important to an individual's life and his or her status and thus, values of respective work are one of the most important aspects of an individual values system. In workplace, job involved persons have a feeling of competence and success at work and their contributions tend to be positive results at work to factors which are under their personal control. Therefore, investigation of work-related attitudes, values and involvement in job should be continuously employed for the image of self, the success in work and work-related activities and the organization's prosperity.

Significance of the Study

The present study is important for all educationists, educational administrators, teachers and the all members in society who are involved in education. As for teachers, the investigation of work values and job involvement of teachers could make potential for teachers' guidelines in ensuring that eight continuous hours of daily working life is stimulating, involving and personally rewarding rather than boring, frustrating and alienating. As for organizational administrators, it can make a great contribution to the provision of the quality of work life and smart environment, restructuring the financial innovation and generating positive challenges for global competition to promote institutional effectiveness. Therefore, it calls for the investigation of work values and job involvement in Myanmar education setting with consideration to the potential of work values and job involvement.

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Aims of the Study

The main aim of the study is to investigate the relationship between work values and job involvement of Senior Teachers in Kyonpyaw Township, Ayeyarwady Region.

Specific aims of the study are to investigate: the levels of work values of senior teachers, the variations of senior teachers' work values according to socio-demographic factors, the levels of job involvement of senior teachers, the variations of senior teachers' job involvement according to socio-demographic factors and the relationship between work values and job involvement of senior teachers in Kyonpyaw Township.

Research Questions

1. What are the levels of work values of senior teachers in Kyonpyaw Township?
2. Are there any significant differences of senior teachers' work values according to their socio-demographic factors?
3. What are the levels of job involvement of senior teachers in Kyonpyaw Township?
4. Are there any significant differences of senior teachers' job involvement according to their socio-demographic factors?
5. Is there any significant relationship between work values and job involvement of senior teachers in Kyonpyaw Township?

Limitations of the Study

In this research, it is restricted to the dimensions of variables, area of Kyonpyaw Township, Ayeyarwady Region and the participants of teachers.

Conceptual Framework

The major concepts in this framework are work values, job involvement and socio-demographic factors. Wu et al. (1996) divided work values into Terminal values and Instrumental values and their seven sub-dimensions:

Terminal Values

- *Self- growth* is the degree of importance on acquiring new knowledge, self-growth, exerting creativity, and promoting personal development during the course of their work.
- *Self-realization* is the degree of importance on fulfilling their lifelong goals, application of personal talent, improving quality of life and enhancing their social welfare during the course of their work.
- *Self-esteem* is the degree of importance on sense of personal achievement, self-recognition and autonomy, respect from others and senior management during the course of their work.

Instrumental Values

- *Social interaction consideration tendency* is the degree of importance on achieving an excellent level of social interaction and sharing their daily emotional experiences with colleagues and supervisors, as well as establishing harmonious social relationships with others during the course of their work.
- *Security and economic consideration tendency* is the degree of importance on reaching reasonable economic remuneration through holistic organizational systems, to satisfy their sense of security during the course of their work.
- *Stability and freedom from anxiety consideration tendency* is the degree of importance on regularly and stably performing his job without tension, anxiety, chaos or fear.

- ***Recreation, health and transport consideration tendency*** is the degree of importance on attaining sufficient physical energy, recreation activities and availability of convenient traffic transport potions during their work.

Agarwala (1978) developed a comprehensive measure of Job Involvement which contains five dimensions:

(a) ***Job Longing***: showing an eager desire or craving to be at job;

(b) ***Work underload***: feeling depressed and irritated with less work;

(c) ***Persistence***: keeping on thinking about and sticking to the unsolved problems even after the working hours;

(d) ***Task completion sensitivity***: feeling bothered if unable to complete or finish the task at hand; and

(e) ***Job saliency***: having readiness to sacrifice what one considers important for the sake of job.

It is assumed that the levels of senior teachers' work values and job involvement can be difference according to their socio-demographic factors and there is significant relationship between work values and job involvement.

Definition of key Terms

Values: an indicator of a strong personal preference for what is important to the individual (Super, 1980).

Work Values: endurable beliefs and standards which judge the worth of what is done through work, justify the work experience and express one's working behaviours and the pursuit for work goals whenever the individual is engaging in his or her own job (Wu, 1996).

Job Involvement: the psychological importance of one's job (Kanungo, 1982).

Operational Definitions

Work Values: the one's beliefs and standards concerning about that one's job. Levels of work values are defined by mean values of senior teachers' responses towards the items of work values. The greater the levels of mean values, the higher the work values.

Job Involvement: the one's recognition of the importance of one's job. Levels of job involvement are determined by mean values of senior teachers' responses to the items of job involvement. The greater the levels of mean values, the higher the job involvement.

Methodology

This study was conducted by descriptive research design. Both quantitative and qualitative methods were used in this study.

Quantitative Methodology

Population and Sample

Required data was collected through questionnaires. Census method was used in this study. According to the Census sampling method, each and every participant of the population was selected as the sample. Therefore, all senior teachers in Basic Education High schools situated in Kyonpyaw Township were selected as sample. The total number of 190 senior teachers participated in this study.

Instrumentation

There are three parts in the questionnaire. The first part was to collect the socio-demographic information concerning Gender, Generation, Race, Teaching service, Qualification, Marital status and School location. Base on the work of Wu. et al. (1996), work values questionnaire was modified that consists of (21) items for Terminal values and (28) items for Instrumental values. The total number of 49 items was used. The third part of job involvement questionnaire consists of 7 items for each dimension and there were 35 items for teachers' job involvement. In the questionnaire, the five-point Likert-type scale was used: 1=Strongly disagree, 2=Disagree, 3=Neither disagree nor agree, 4=Agree, 5=Strongly agree.

Instrument Validity: Expert review was conducted to (9) experienced educators from Department of Educational Theory, Yangon University of Education.

Instrument Reliability: Pilot study was investigated to 40 senior teachers from No. 1, No.3, No.5 Basic Education High School, South Okkalar Township, Yangon Region. The internal consistency (Cronbach's alpha) of the whole scales of Work Values was (0.91) and that of Teachers' Job Involvement was (0.84).

Procedure

First and foremost, the related literature was reviewed and conceptual framework was developed. After that, the instruments were developed and experts review was conducted. Next, a pilot study was conducted where are not in the main survey area. After obtaining the permission of DBE, the questionnaires were distributed to senior teachers from B.E.H.S in Kyonpyaw Township on October 22 to 28, 2019. Collecting the required data with questionnaires was completed in November 1, 2019.

Data Analysis

The Statistical Package for Social Science (SPSS) software of version 22 was used to analyze the collected data. The Descriptive Statistics, One-way ANOVA and Independent Samples *t* Test, Pearson Correlation was used. Open-ended questions were analyzed and categorized the similar ideas and contents.

Qualitative Methodology

Instrumentation

As for qualitative method, seven open-ended questions were developed. The instrument consists of four items for work values and three items for job involvement.

Procedure

According to the literature review, seven open-ended questions were developed.

Data analysis

By taking Tarli counting system, responses of open-ended questions were analyzed and categorized under the same ideas and contents that based on the previous related literature and findings.

Findings

Quantitative Findings

Levels of Work Values of Senior Teachers in Kyonpyaw Township

In Table 1, means and standard deviations of work values of senior teachers were shown. High level of work values of senior teachers in Kyonpyaw Township was found.

Table 1 Mean Values and Standard Deviations Showing the Levels of Work Values of Senior Teachers   (N = 190)

Dimensions of Work Values	Mean	SD	Remarks
Terminal Values	3.86	0.49	High
Instrumental Values	3.38	0.49	Moderate
Work Values	**3.58**	**0.45**	**High**

Scoring Direction: 1.00-1.80=Very Low   1.81-2.60=Low   2.61-3.40=Moderate
                        3.41-4.20=High   4.21-5.00=Very High

Differences in Work Values of Senior Teachers According to Their Socio-Demographic Factors

In Table 2, independent samples *t* test for the levels of work values grouped by gender were shown.

Table 2 The Results of Independent Samples *t* Test Showing the Levels of Work Values of Senior Teachers Grouped by Gender   (N=190)

Variables	Gender	N	Mean	SD	*t*	*df*	*p*
Terminal Values	Male	41	3.81	0.50	-.567	188	ns
	Female	149	3.87	0.49			
Instrumental Values	Male	41	3.28	0.54	-1.519	188	ns
	Female	149	3.41	0.48			
Work Values	**Male**	**41**	**3.51**	**0.48**	**-1.223**	**188**	**ns**
	Female	**149**	**3.60**	**0.44**			

*p<.05, **p<.01, ***p<.001, ns = no significance

In Table 3, means and standard deviations of senior teachers' work values grouped by generation were shown.

Table 3 Mean Values and Standard Deviations Showing the Levels of Work Values of Senior Teachers Grouped by Generation   (N=190)

Variables	Generation	N	Mean	SD
Terminal Values	Gen Z	23	3.65	0.45
	Gen Y	99	3.89	0.53
	Gen X	57	3.88	0.44
	Baby Boomers	11	3.88	0.44
Instrumental Values	Gen Z	23	3.16	0.57
	Gen Y	99	3.37	0.48
	Gen X	57	3.47	0.45
	Baby Boomers	11	3.44	0.53
Work Values	**Gen Z**	**23**	**3.37**	**0.46**
	Gen Y	**99**	**3.59**	**0.46**
	Gen X	**57**	**3.65**	**0.40**
	Baby Boomers	**11**	**3.63**	**0.46**

Scoring Direction: 1.00-1.80=Very Low   1.81-2.60=Low   2.61-3.40=Moderate
                      3.41-4.20=High   4.21-5.00=Very High

In Table 4, ANOVA results for the levels of senior teachers' work values grouped by generation were shown.

Table 4 The Results of One-Way ANOVA Showing the Levels of Work Values of Senior Teachers Grouped by Generation (N=190)

Variables		Sum of Square	df	Mean Square	F	p
Terminal Values	Between Groups	1.093	3	.364	1.511	ns
	Within Groups	44.837	186	.241		
	Total	**45.930**	**189**			
Instrumental Values	Between Groups	1.645	3	.548	2.293	ns
	Within Groups	44.468	186	.239		
	Total	**46.113**	**189**			
Work Values	**Between Groups**	**1.297**	**3**	**.432**	**2.194**	**ns**
	Within Groups	**36.655**	**186**	**.197**		
	Total	**37.952**	**189**			

$*p<.05$, $**p<.01$, $***p<.001$, ns = no significance

In Table 5, results of independent samples *t* test showing the levels of senior teachers' work values grouped by race were shown.

Table 5 The Results of Independent Samples *t* Test Showing the Levels of Work Values of Senior Teachers Grouped by Race (N=190)

Variables	Race	N	Mean	SD	t	df	p
Terminal Values	Group A	136	3.89	0.49	1.436	188	ns
	Group B	54	3.78	0.48			
Instrumental Values	Group A	136	3.41	0.52	1.209	188	ns
	Group B	54	3.31	0.43			
Work Values	**Group A**	**136**	**3.61**	**0.46**	**1.440**	**188**	**ns**
	Group B	**54**	**3.51**	**0.41**			

$*p<.05$, $**p<.01$, $***p<.001$, ns = no significance

In Table 6, mean values and standard deviations of senior teachers' work values grouped by teaching service were shown.

Table 6 Mean Values and Standard Deviations Showing the Levels of Work Values of Senior Teachers Grouped by Teaching Service (N=190)

Variables	Teaching Service	N	Mean	SD
Terminal Values	≤ 3 Years	30	3.70	0.47
	4 - 6 Years	38	3.85	0.55
	7 - 18 Years	83	3.85	0.51
	19 - 30 Years	20	4.02	0.31
	≥ 31 Years	19	3.97	0.43
Instrumental Values	≤ 3 Years	30	3.23	0.55
	4 - 6 Years	38	3.36	0.41
	7 - 18 Years	83	3.37	0.49
	19 - 30 Years	20	3.49	0.55
	≥ 31 Years	19	3.56	0.44
Work Values	**≤ 3 Years**	**30**	**3.43**	**0.46**
	4 - 6 Years	**38**	**3.57**	**0.45**
	7 - 18 Years	**83**	**3.58**	**0.46**
	19 - 30 Years	**20**	**3.72**	**0.39**
	≥ 31 Years	**19**	**3.74**	**0.39**

Scoring Direction: 1.00-1.80=Very Low   1.81-2.60=Low   2.61-3.40=Moderate
                          3.41-4.20=High   4.21-5.00=Very High

In Table 7, ANOVA results for the levels of work values of senior teachers grouped by teaching service were shown.

Table 7 The Results of One-Way ANOVA Showing the Levels of Work Values of Senior Teachers Grouped by Teaching Service (N=190)

Variables		Sum of Square	df	Mean Square	F	p
Terminal Values	Between Groups	1.496	4	.374	1.557	ns
	Within Groups	44.434	185	.240		
	Total	**45.930**	**189**			
Instrumental Values	Between Groups	1.625	4	.406	1.690	ns
	Within Groups	44.487	185	.240		
	Total	**46.113**	**189**			
Work Values	**Between Groups**	**1.538**	**4**	**.385**	**1.954**	**ns**
	Within Groups	**36.414**	**185**	**.197**		
	Total	**37.952**	**189**			

*p<.05, **p<.01, ***p<.001, ns = no significance

In Table 8, results of independent samples *t* test showing the levels of senior teachers' work values grouped by qualification were shown.

Table 8 The Results of Independent Samples *t* Test Showing the Levels of Work Values of Senior Teachers Grouped by Qualification (N= 190)

Variables	Qualification	N	Mean	SD	t	df	p
Terminal Values	B.A./B.Sc./M.A./M.Sc.	121	3.89	0.47	1.254	188	ns
	B.Ed./M.Ed.	69	3.79	0.52			
Instrumental Values	B.A/B.Sc./M.A/M.Sc.	121	3.43	0.49	2.059	188	ns
	B.Ed./M.Ed.	69	3.28	0.49			
Work Values	**B.A./B.Sc./M.A./M.Sc.**	**121**	**3.63**	**0.44**	**1.889**	**188**	**ns**
	B.Ed./M.Ed.	**69**	**3.50**	**0.45**			

*p<.05, **p<.01, ***p<.001, ns = no significance

According to Table 9, results of independent samples *t* test for the levels of work values of senior teachers grouped by marital status were shown.

Table 9 The Results of Independent Samples *t* Test Showing Levels of Work Values of Senior Teachers Grouped by Marital Status (N=190)

Variables	Marital Status	N	Mean	SD	t	df	p
Terminal Values	Single	96	3.88	0.48	.749	188	ns
	Married	94	3.83	0.51			
Instrumental Values	Single	96	3.30	0.51	-2.141	188	ns
	Married	94	3.46	0.46			
Work Values	**Single**	**96**	**3.55**	**0.45**	**-.982**	**188**	**ns**
	Married	**94**	**3.62**	**0.45**			

*p<.05, **p<.01, ***p<.001, ns = no significance

In Table 10, results of independent samples *t* test showing the levels of senior teachers' work values grouped by school location were shown.

Table 10 The Results of Independent Samples *t* Test Showing the Levels of Work Values of Senior Teachers Grouped by School Location   **(N=190)**

Variables	School location	N	Mean	SD	t	df	p
Terminal Values	Rural	158	3.85	0.49	-.570	188	ns
	Urban	32	3.90	0.51			
Instrumental Values	Rural	158	3.39	0.50	.686	188	ns
	Urban	32	3.32	0.44			
Work Values	**Rural**	**158**	**3.59**	**0.46**	**.163**	**188**	**ns**
	Urban	**32**	**3.57**	**0.41**			

*p<.05, **p<.01, ***p<.001, ns = no significance

Levels of Job Involvement of Senior Teachers in Kyonpyaw Township

In Table 11, means and standard deviations of the levels of job involvement of senior teachers in Kyonpyaw Township were shown.

Table 11 Mean Values and Standard Deviations Showing the Levels of Job Involvement of Senior Teachers   **(N=190)**

Dimensions of Job Involvement	Mean	SD	Remarks
Job Longing	3.22	0.59	Moderate
Work underload	2.93	0.58	Moderate
Persistence	3.52	0.62	High
Task Completion Sensitivity	3.72	0.56	High
Job saliency	3.29	0.59	Moderate
Job Involvement	**3.33**	**0.46**	**Moderate**

Scoring Direction: 1.00-1.80=Very Low   1.81-2.60=Low   2.61-3.40=Moderate   3.41-4.20=High
4.21-5.00=Very High

There was at the moderate level of job involvement of senior teachers (M=3.33) in Kyonyaw Township.

Differences in the Levels of Senior Teachers' Job Involvement According to Their Socio-demographic Factors

In Table 12, means and standard deviations of senior teachers' job involvement grouped by gender were shown.

Table 12 The Results of Independent Samples *t* Test Showing the Levels of Job Involvement of Senior Teachers Grouped by Gender   **(N=190)**

Variables	Gender	N	Mean	SD	t	df	p
Job Longing	Male	41	3.22	0.58	.027	188	ns
	Female	149	3.22	0.59			
Work underload	Male	41	3.01	0.58	1.022	188	ns
	Female	149	2.91	0.59			
Persistence	Male	41	3.50	0.54	-.164	188	ns
	Female	149	3.52	0.64			
Task Completion Sensitivity	Male	41	3.76	0.45	.560	188	ns
	Female	149	3.70	0.59			
Job saliency	Male	41	3.35	0.55	.714	188	ns
	Female	149	3.27	0.61			
Job Involvement	**Male**	**41**	**3.37**	**0.43**	**.542**	**188**	**ns**
	Female	**149**	**3.32**	**0.47**			

*p<.05, **p<.01, ***p<.001, ns = no significance

In Table 13, means and standard deviations of senior teachers' job involvement grouped by generation were shown.

Table 13 Mean Values and Standard Deviations Showing the Levels of Job Involvement of Senior Teachers Grouped by Generation   (N=190)

Variables	Generation	N	Mean	SD
Job Longing	Gen Z	23	3.11	0.55
	Gen Y	99	3.15	0.56
	Gen X	57	3.34	0.62
	Baby Boomers	11	3.38	0.64
Work underload	Gen Z	23	2.67	0.52
	Gen Y	99	2.93	0.58
	Gen X	57	3.01	0.58
	Baby Boomers	11	3.01	0.68
Persistence	Gen Z	23	3.34	0.56
	Gen Y	99	3.49	0.63
	Gen X	57	3.59	0.59
	Baby Boomers	11	3.74	0.77
Task Completion Sensitivity	Gen Z	23	3.61	0.54
	Gen Y	99	3.69	0.53
	Gen X	57	3.77	0.63
	Baby Boomers	11	3.87	0.62
Job Saliency	Gen Z	23	3.12	0.51
	Gen Y	99	3.29	0.61
	Gen X	57	3.32	0.58
	Baby Boomers	11	3.52	0.69
Job Involvement	**Gen Z**	**23**	**3.17**	**0.42**
	Gen Y	**99**	**3.31**	**0.44**
	Gen X	**57**	**3.41**	**0.48**
	Baby Boomers	**11**	**3.50**	**0.57**

Scoring Direction: 1.00-1.80=Very Low   1.81-2.60=Low   2.61-3.40=Moderate
                            3.41-4.20=High   4.21-5.00=Very High

One-way ANOVA results for the levels of job involvement of senior teachers grouped by generation were shown in Table 14.

Table 14 The Results of One-Way ANOVA Showing the Levels of Job Involvement of Senior Teachers Grouped by Generation   (N=190)

Variables			Sum of Square	df	Mean Square	F	p
Job longing	Between Groups		1.869	3	.623	1.817	ns
	Within Groups		63.792	186	.343		
		Total	65.662	189			
Work underload	Between Groups		2.008	3	.669	1.989	ns
	Within Groups		62.594	186	.337		
		Total	64.602	189			
Persistence	Between Groups		1.671	3	.557	1.471	ns
	Within Groups		70.394	186	.378		
		Total	72.065	189			
Task Completion Sensitivity	Between Groups		.743	3	.248	.775	ns
	Within Groups		59.461	186	.320		
		Total	60.204	189			
Job Saliency	Between Groups		1.259	3	.420	1.183	ns
	Within Groups		65.983	186	.355		
		Total	67.242	189			
Job Involvement	**Between Groups**		**1.289**	**3**	**.430**	**2.048**	**ns**
	Within Groups		**39.031**	**186**	**.210**		
		Total	**40.320**	**189**			

*p<.05, **p<.01, ***p<.001, ns = no significance

In Table 15, results of independent samples *t* test for the levels of job involvement grouped by race were shown.

Table 15 The Results of Independent Samples *t* Test Showing the Levels of Job Involvement of Senior Teachers Grouped by Race   (N=190)

Variables	Race	N	Mean	SD	t	df	p
Job Longing	Group A	136	3.27	0.63	1.809	188	ns
	Group B	54	3.09	0.47			
Work underload	Group A	136	2.97	0.60	1.727	188	ns
	Group B	54	2.81	0.52			
Persistence	Group A	136	3.53	0.67	.685	136.014	.003**
	Group B	54	3.47	0.47			
Task Completion Sensitivity	Group A	136	3.75	0.61	1.537	136.830	.043*
	Group B	54	3.63	0.43			
Job Saliency	Group A	136	3.33	0.59	1.642	188	ns
	Group B	54	3.18	0.58			
Job Involvement	**Group A**	**136**	**3.37**	**0.49**	**2.090**	**136.247**	**.028***
	Group B	**54**	**3.24**	**0.35**			

*p<.05, **p<.01, ***p<.001, ns = no significance

There was a significant difference in the levels of job involvement of senior teachers grouped by race (*t*=2.090, *df*=136.249, *p*<.05). In Table 16, means and standard deviations of senior teachers' job involvement grouped by teaching service were shown.

Table 16 Mean Values and Standard Deviations Showing the Levels of Job Involvement of Senior Teachers Grouped by Teaching Service (N=190)

Variables	Teaching Service	N	Mean	SD
Job Longing	≤ 3 Years	30	3.14	0.52
	4 - 6 Years	38	3.13	0.48
	7 - 18 Years	83	3.22	0.67
	19 - 30 Years	20	3.33	0.51
	≥ 31 Years	19	3.38	0.59
Work underload	≤ 3 Years	30	2.75	0.49
	4 - 6 Years	38	2.91	0.42
	7 - 18 Years	83	2.95	0.67
	19 - 30 Years	20	3.05	0.57
	≥ 31 Years	19	3.03	0.57
Persistence	≤ 3 Years	30	3.44	0.56
	4 - 6 Years	38	3.38	0.55
	7 - 18 Years	83	3.57	0.68
	19 - 30 Years	20	3.59	0.61
	≥ 31 Years	19	3.58	0.57
Task Completion Sensitivity	≤ 3 Years	30	3.68	0.52
	4 - 6 Years	38	3.57	0.48
	7 - 18 Years	83	3.73	0.62
	19 - 30 Years	20	3.89	0.62
	≥ 31 Years	19	3.82	0.45
Job Saliency	≤ 3 Years	30	3.17	0.50
	4 - 6 Years	38	3.12	0.59
	7 - 18 Years	83	3.34	0.62
	19 - 30 Years	20	3.46	0.61
	≥ 31 Years	19	3.43	0.56
Job Involvement	**≤ 3 Years**	**30**	**3.24**	**0.39**
	4 - 6 Years	**38**	**3.22**	**0.37**
	7 - 18 Years	**83**	**3.36**	**0.52**
	19 - 30 Years	**20**	**3.46**	**0.43**
	≥ 31 Years	**19**	**3.45**	**0.44**

Scoring Direction: 1.00-1.80=Very Low   1.81-2.60=Low   2.61-3.40=Moderate
3.41-4.20=High   4.21-5.00=Very High

Table 17 The Results of One-Way ANOVA Showing the Levels of Job Involvement of Senior Teachers Grouped by Teaching Service   (N=190)

Variables		Sum of Squares	*df*	Mean Square	*F*	*p*
Job Longing	Between Groups	1.240	4	.310	.891	ns
	Within Groups	64.421	185	.348		
	Total	**65.662**	**189**			
Work underload	Between Groups	1.462	4	.366	1.071	ns
	Within Groups	63.140	185	.341		
	Total	**64.602**	**189**			
Persistence	Between Groups	1.366	4	.342	.894	ns
	Within Groups	70.699	185	.382		
	Total	**72.065**	**189**			
Task Completion Sensitivity	Between Groups	1.641	4	.410	1.296	ns
	Within Groups	58.562	185	.317		
	Total	**60.204**	**189**			
Job Saliency	Between Groups	2.772	4	.693	1.988	ns
	Within Groups	64.470	185	.348		
	Total	**67.242**	**189**			
Job Involvement	**Between Groups**	**1.424**	**4**	**.356**	**1.693**	**ns**
	Within Groups	**38.896**	**185**	**.210**		
	Total	**40.320**	**189**			

*$p<.05$, **$p<.01$, ***$p<.001$, ns = no significance

One-way ANOVA results for the levels of job involvement of senior teachers grouped by teaching service were shown in the Table 17.

In Table 18, results of independent samples *t* test showing the levels of job involvement of senior teachers grouped by qualification were shown.

Table 18 The Results of Independent Samples *t* Test Showing the Levels of Job Involvement of Senior Teachers Grouped by Qualification   (N=190)

Variables	Qualification	N	Mean	SD	*t*	*df*	*p*
Job Longing	B.A./B.Sc./M.A./M.Sc.	121	3.27	0.58	1.651	188	ns
	B.Ed./M.Ed.	69	3.12	0.59			
Work underload	B.A./B.Sc./M.A./M.Sc.	121	2.98	0.60	1.747	188	ns
	B.Ed./M.Ed.	69	2.83	0.54			
Persistence	B.A./B.Sc./M.A./M.Sc.	121	3.54	0.63	.667	188	ns
	B.Ed./M.Ed.	69	3.48	0.59			
Task Completion Sensitivity	B.A./B.Sc./M.A./M.Sc.	121	3.74	0.61	.676	188	ns
	B.Ed./M.Ed.	69	3.68	0.47			
Job Saliency	B.A./B.Sc./M.A./M.Sc.	121	3.31	0.59	.679	188	ns
	B.Ed./M.Ed.	69	3.25	0.60			
Job Involvement	**B.A./B.Sc./M.A./M.Sc.**	**121**	**3.37**	**0.48**	**1.382**	**188**	**ns**
	B.Ed./M.Ed.	**69**	**3.27**	**0.42**			

*$p<.05$, **$p<.01$, ***$p<.001$, ns = no significance

In Table 19, results of independent samples *t* test showing the levels of job involvement of senior teachers grouped by marital status were shown.

Table 19 The Results of Independent Samples *t* Test Showing the Levels of Job Involvement of Senior Teachers Grouped by Marital Status (N=190)

Variables	Marital Status	N	Mean	SD	t	df	p
Job Longing	Single	96	3.14	0.50	-1.877	188	ns
	Married	94	3.29	0.66			
Work underload	Single	96	2.86	0.58	-1.728	188	ns
	Married	94	3.00	0.58			
Persistence	Single	96	3.51	0.59	-.020	188	ns
	Married	94	3.52	0.65			
Task Completion Sensitivity	Single	96	3.72	0.52	.073	188	ns
	Married	94	3.71	0.61			
Job Saliency	Single	96	3.24	0.57	-1.166	188	ns
	Married	94	3.34	0.62			
Job Involvement	**Single**	**96**	**3.29**	**0.41**	**-1.201**	**188**	**ns**
	Married	**94**	**3.37**	**0.51**			

$*p<.05, **p<.01, ***p<.001$, ns = no significance

Table 20 The Results of Independent Samples *t* Test Showing the Levels of Job Involvement of Senior Teachers Grouped by School Location (N=190)

Variables	School Location	N	Mean	SD	t	df	p
Job Longing	Rural	158	3.23	0.59	.688	188	ns
	Urban	32	3.15	0.55			
Work underload	Rural	158	2.93	0.61	.228	188	ns
	Urban	32	2.91	0.46			
Persistence	Rural	158	3.53	0.64	.606	188	ns
	Urban	32	3.46	0.50			
Task Completion Sensitivity	Rural	158	3.70	0.58	-.768	188	ns
	Urban	32	3.79	0.51			
Job Saliency	Rural	158	3.30	0.61	.595	188	ns
	Urban	32	3.23	0.54			
Job Involvement	**Rural**	**158**	**3.34**	**0.48**	**.362**	**188**	**ns**
	Urban	**32**	**3.31**	**0.38**			

$*p<.05, **p<.01, ***p<.001$, ns = no significance

In Table 20, results of independent samples *t* test showing the levels of job involvement of senior teachers grouped by school location were shown.

Relationship Between Work Values and Job Involvement of Senior Teachers in Kyonpyaw Township

In Table 21, Pearson Correlation Matrix between senior teachers' work values and job involvement were shown.

Table 21 Pearson Correlation of Work Values and Job Involvement of Senior Teachers in Kyonpyaw Township (N=190)

Variables	Work values	Job Involvement
Work Values	1	.394**
Job Involvement	.394**	1
**. Correlation is significant at the 0.01 level (2-tailed).		

Qualitative Findings

Q - 1: Select one of your favorite reasons for choosing a Teaching career?

55.26% (n=103) of senior teachers stated that they chose teaching profession because of serving as a donar (PyinNyar Darna). 31.05% (n=59) of senior teachers stated that they chose because of their interest. 14.74% (n=28) of senior teachers stated that they accepted as a teacher because of the situations and their parents.

Q - 2: Do you think the teaching profession offers sufficiently for livelihood? Why?

39.47% (n=75) of senior teachers stated that the teaching profession offers sufficiently for livelihood. 60.53% (n=115) of senior teachers stated that teaching profession cannot offer sufficiently for livelihood because of the inflation.

Q - 3: Discuss the challenges you face as a teacher in a teaching career?

83.16% (n=158) of senior teachers stated the challenges as that the management styles (44.30%, n=70), the weaknesses of parental involvement (37.97%, n=60), the status of children who are not interested in learning and having difficulties in learning (6.33%, n=10) and the dissatisfaction in their self-work (11.39%, n=18). The remaining 16.84% (n=32) of senior teachers stated that there were no difficulties in their workplace.

Q - 4: Did you make any changes as a teacher in your workplace of teaching career?

34.21% (n=65) of senior teachers stated that they have trust in themselves that they performed as they expected. 65.79% (n=125) of senior teachers were stated that there were no something special changes they performed in their workplace because of unstable management (37.6%, n=47) and weaknesses in community participation (16%, n=20) and themselves (46.4%,n=58).

Q - 5: As a teacher, what activities do you usually do in your home?

4.74% (n=9) of senior teachers stated that they were not prepared for teaching because of households. But the remaining 95.26% (n=181) of senior teachers stated that they always prepare for their work of successful teaching learning process.

Q - 6: "**Do you think about work-related activities on your free time?**

9.47% (n=18) of senior teachers stated that they were not in thinking about their job in their free time. The remaining 90.53% (n=172) of senior teachers stated that they usually think of their jobs in that time.

Q - 7: "**What do your family members and colleagues have to say about your job? How?**

37.37% (n=71) of senior teachers stated that they were not receiving any comments from their colleagues and family. The remaining 62.63% (n=119) of senior teachers were received comments concerning about their jobs and their working styles: 43.7% (n=52) of senior teacher were defined as they are good at work and to keep trying in their job, 43.7% (n=52) of senior teachers are also described as workaholic person being absorbing from their job, 10.92% (n=13) of senior teachers were accepted as a responsive person with accountability in their work and 1.68% (n=2) of senior teachers were accepted as non-involved person in their job.

Conclusion and Discussion

In senior teachers groups of race, there was significance difference in job involvement (*t*=2.090, *df*=136.247, *p**<.05). Because Group A may be under the great influence of Myanmar sayings of teaching profession is noble and the effects of individual and environmental differences between two majority and minority groups.

According to the findings of the relationship between work values and job involvement, the results of correlation suggested that there was significant positive relationship between work values and job involvement of senior teachers (*r*=.394, *p***<.01). According to the findings studied by Chin Chin Ho (2006) in Taiwan, there were significant positive relationship between work values and job involvement and greater work values are associated with higher levels of job involvement. According to study of the Relationship between Work values and Work-related attitudes: the role of Social Support as Moderator explored by Ali et. al. (2013), they also found that the significant positive relationship between work values and work-related attitudes (job involvement and job satisfaction). These results were consistence to the result of the present study.

Recommendations

- Top manager should continuously provide effective professional development for teachers' terminal values according to their respective educational settings and consider the status of remuneration and transportation system of the educational context to improve instrumental work values.

- Diversity management should be more emphasized in real settings and should provide more opportunities for teaching in specialization.

- Basic need, like providing and promoting the quality and quantity of houses for the teachers, should be continuously observed and provided.

- For the entire improvement of education, educational research should be encouraged to do more and to apply in their respective settings.

- To contribute the educational organization, there were needed to construct more rooms for educationists and to make more alive in reality.

- For well-being performance, teachers need to be more active in psychological importance of one's job and pleasing in absorbing from that.

- To contribute the organization, teachers should consider the idealization of the profession.

- Based on the educational research of work values and job involvement, the recruitment system should be considered for teacher effectiveness to meet the challenges of education.

Needs for Further Research

Further studies should conduct not only for senior teachers but also for the junior teachers and primary teachers in other townships, states and regions of the whole country.

Acknowledgements

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A STUDY OF PRINCIPALS' TALENT MANAGEMENT LEADERSHIP AND TEACHERS' ORGANIZATIONAL COMMITMENT

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Abstract

The main aim of this research is to investigate the relationship between principals' talent management leadership and teachers' organizational commitment in Basic Education High Schools, Phyu Township, Bago Region. Quantitative and qualitative methods were used in this research. A total of two hundred teachers were selected as subjects from five Basic Education High Schools, Phyu Township, using the purposive sampling method. The reliability coefficient of principals' talent management leadership questionnaire was 0.959 and that of teachers' organizational commitment questionnaire was 0.773. Descriptive analysis, Independent Samples *t*-Test, One-Way ANOVA, Pearson product-moment correlation and Multiple regression analysis were conducted to analyze the data in this study. The level of principals' talent management leadership in this study was moderately high (Mean = 3.14, SD = .31). There were significant differences in the level of principals' talent management leadership among schools and principals grouped by administrative service. The level of teachers' organizational commitment in this study was moderately high (Mean = 2.80, SD = .25). There were significant differences in the level of teachers' organizational commitment among schools and teachers grouped by qualification, age, position and years of service in current school. There is a moderate positive correlation between principals' talent management leadership and teachers' organizational commitment (r = .548, *p* < .01). According to the result of multiple regression analysis, values dimension is the best predictor of teachers' organizational commitment (R^2 = .289, *F* (5,194) = 17.183). Information from teachers' interviews, open-ended answers and quantitative results were complementary to each other. The levels of principals' talent management leadership were associated with the levels of teachers' organizational commitment.

Keywords: talent management leadership, organizational commitment

Introduction

The current education reforms focus on the success and development of the youths who are the future of the country because the future of a nation is in the hands of educated persons. In producing valuable human resources for the nation, the role of leaders is in an important position. Today, every society emphasizes the quality, not the quantity. Our education society also emphasizes the quality of teachers, to be quality education. In twenty-first century, talent management (TM) has been one of the most important human capital challenges faced by various organizations. A talented employee was regarded as the most significant resource in both private business organizations and educational organizations (Axelroad, Michaels & Hanfield, 2001). Teachers who are talented, skillful and knowledgeable can contribute their society effectively and efficiently. Hence, the school leaders need to perform the talent management practices among their teachers.

Talent management is increasingly seen as a critical factor in developing successful organizations and is a strategic priority for business. Indeed, in a people-focused organization such as school, the key resource is the talent of the individuals who work there. In education, the 'talent' could be considered as the critical factor in school success. Organizational commitment is also a critical factor for successful organizations. Talents of the employees and school leaders' TM skills provide the basis for the success of the educational organizations (Davies & Davies, 2011).

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In a school, teachers are the most valuable asset for contributions. Teachers are human resources who can define the success or failure of the school. From the view of talent management leadership, principals need to manage teachers to be talented and deploy the talented teachers at the right place at the right time and results the right things which means the school's success. Moreover, principals need to maintain the right talented human resources for continuous long-term success. To retain and maintain talented teachers, their organizational commitment needs to be increased. Therefore, the researcher focuses to study the relationship between talent management leadership of principal and organizational commitment of teachers because both principal and teachers are important parts of school success.

The findings of the study may indicate the strengths of talent management leadership and its contributions to teachers' organizational commitment. Through this study the researcher shows that the talents must be valued and believed and commitment to organization makes continuous improvement of the organization. This study would be useful for further research.

Main Aim

The main aim of this study was to study the relationship between principals' talent management leadership and teachers' organizational commitment in Basic Education High Schools, Phyu Township, Bago Region.

Specific Aims

1. To study the levels of principals' talent management leadership in Basic Education High Schools
2. To study the differences in the levels of principals' talent management leadership in terms of administrative service
3. To study the levels of teachers' organizational commitment in Basic Education High Schools
4. To study the differences in the levels of teachers' organizational commitment in terms of teachers' personal factors such as qualification, age, position and services in current school
5. To study the relationship between principals' talent management leadership and teachers' organizational commitment
6. To investigate the predictors of principals' talent management leadership on teachers' organizational commitment

Research Questions

1. What are the levels of principals' talent management leadership in Basic Education High Schools?
2. Are there any significant differences in the levels of principals' talent management leadership in terms of administrative service?
3. What are the levels of teachers' organizational commitment in Basic Education High Schools?
4. Are there any significant differences in the levels of teachers' organizational commitment in terms of teachers' personal factors such as qualification, age, position and services in current school?
5. Is there any relationship between principals' talent management leadership and teachers' organizational commitment?
6. What are the predictors of principals' talent management leadership on teachers' organizational commitment?

Limitation of the Study

This study is limited to the selection of the following sample as the scope of the study. Due to time constraints, the study is geographically limited to Basic Education High Schools of Phyu Township, Bago Region.

Theoretical Framework

These dimensions of talent management leadership are described in details as follows.

Strategic Acumen: Strategic Acumen is the ability in which an individual can create strategic intent, shape the future, make things happen, make connections and see the big picture. First, it is important to establish the need to be a strategist. It is important for a leader with strategic acumen to set the future direction of the school- being strategic is a way of managing the impact of future trends and influences on the school and being able to make conscious decisions about those influences. It is about setting priorities and using resources to achieve those priorities. Strategic acumen has always been associated with the idea of direction setting for the organization.

Working with others: Working with others involves the abilities of communication, care and concern, credibility, and support and challenge. Leaders need to care about others in order to want to involve them. Individual leaders can make a difference but for sustainable organizations strength comes from staff working together to achieve the same goals (Barth, 1990). Leaders need to understand their school, those in the school community and those in the wider community (Davies & Davies, 2011). Talent managers and leaders nurture and develop others, and get the best out of their colleagues. They find ways to engage others and feel a sense of personal contribution to a school's development.

Personal qualities: Personal qualities are the characteristics, attributes or personality traits of an individual. Personal qualities involve the talents of resilience, confidence, risk taking, self-motivation and intellectual curiosity. Leaders with full of personal qualities always learn from experience. What leaders know and do is important but who they are also determines what they can achieve. Most importantly, effective leaders motivate loyalty and support because of the way they behave, conducting themselves with integrity and trust. Effective leaders have the confidence to work with people who are, or have the ability to become, better than themselves.

Values: Values are the guiding principles in our lives. Values focus on trust, truth and respect. Values should be at the heart of everything human beings do, both organizationally and personally. While building a values framework which is important, that they must be seen in action is critical. Leadership occurs within the context of core values. Leaders guide and facilitate others to make a positive difference in their own lives and to contribute to a larger good. Values inform the application of leadership qualities as the competencies of leadership are activated – learned, developed, and practiced within the set of core values.

Organizational Commitment

Affective Commitment: Affective commitment is a kind of commitment that emerges from respect for the organization's objectives and values; admiration for and respect for the managers; emotional closeness; sharing of organizational vision and mission. According to Meyer and Allen (1997), affective commitment is "the employee's emotional attachment to, identification with, and involvement in the organization". Organizational members who are committed to an organization on an affective basis, continue working for the organization because they **want to** do so (Meyer & Allen, 1991). Members who are committed on an affective level stay with the organization because they view their personal employment relationship as congruent to the goals and values of the organization (Beck & Wilson, 2000).

Continuance commitment: Continuance commitment involves being aware of the cost of and difficulties resulting from leaving the organization. Those who have continuance commitment continue to work in order not to suffer a loss, so as to serve their own personal interests and to benefit from the organization. This type of commitment results from an individual's willingness to stay in the organization because of his past personal investments in the organization (Balay, 2001). Meyer and Allen (1991) stated that "employees whose primary link to an organization is based on continuance commitment remain because they **need to** do so".

Normative commitment: Normative commitment is the one which depends on the beliefs of the members of an organization. They stay with the organization because of their sense of responsibility and obligations towards the organization. Employees with a high level of normative commitment feel that they **ought to** remain with the organization. Meyer and Allen (1997) define normative commitment as "a feeling of obligation to continue employment".

Definitions of Key Terms

Talent consists of those individuals who can make a difference to organizational performance, either through their immediate contribution or in the long term by demonstrating the highest levels of potential. (Chartered Institute of Personnel and Development, 2007)

Talent management is the systematic attraction, identification, development, engagement/ retention and deployment of those individuals with high potential who are of particular value to an organization. (Chartered Institute of Personnel and Development, 2007)

Commitment – A force that binds an individual to a course of action of relevance to one or more targets (Cohen, 2003).

Organizational Commitment- A psychological state that reflects an attitude and a desire, a need, a necessity to continue the activities in the organization (Khoshnud, 2012).

Operational Definitions

Principals' Talent Management Leadership refers to the leadership qualities of school managers forming talent management functions such as talent identification, talent development and talent culture.

Teachers' Organizational Commitment means an attachment to an organization to exert extra effort on its behalf based on desire, necessity and obligation of teachers.

Methodology

Quantitative Method

Sample

Purposive sampling method was used in this study. The target population in this study was senior teachers, junior teachers and primary teachers from Basic Education High Schools in Phyu Township, Bago Region. A total of two-hundred teachers was selected as subject from five Basic Education High Schools in Phyu Township, Bago Region.

Research Instrumentation

In this study, the researcher used the questionnaire to investigate the teachers' perceptions. There were 40 items which are concerned with Principals' Talent Management Leadership and 35 items which are concerned with Teachers' Organizational Commitment. All the 75 items included in this questionnaire were rated in a Four-point Likert Scale ranging from (1) Strongly disagree, (2) Disagree, (3) Agree and (4) Strongly agree. Moreover, 6 open-ended question items

were included in this questionnaire. The questionnaire included demographic data of selected teachers.

Instrument Validity

Before pilot study, the instrument was checked by a panel of experts. This panel included ten experts, who are experienced educators (Ph.D. degree holders) having special knowledge and close relationship in this field from the Department of Educational Theory, Yangon University of Education. The review panel scrutinized the instrument for content, format, item clarity, and grammar and usages.

Instrument Reliability

To measure the reliability of this questionnaire, the Cronbach's alpha was used. According to the test of study, the reliability coefficient of Principals' Talent Management Leadership questionnaire was 0.959 and that of Teachers' Organizational Commitment questionnaire was 0.773.

Procedure

Firstly, the researcher explored the relevant literature which is concerned with the research problem. Then, the instrument was constructed to collect the required data under the guidance of the supervisor. The instruments were distributed to ten experienced educators (Ph.D. degree holders) from the Department of Educational Theory, Yangon University of Education to obtain the content validation. After that, necessary changes were made under the guidance of the supervisor. Next, the pilot test was conducted on the first week of September, 2019. Then, the items were modified under the guidance of the supervisor. In the last week of October, 2019, (200) questionnaires were distributed to the selected schools. Then, these questionnaires were collected again and the respond rate was 100%.

Analysis of Data

After the questionnaires were returned from the participants, the data were processed and analyzed using the Statistical Package for the Social Science (SPSS) software version 25. Descriptive analysis, Independent Samples *t*-Test, One-Way ANOVA, Pearson product -moment correlation and Multiple regression analysis were conducted to analyze the data.

In qualitative analysis, the data obtained from open-ended questions were shared with the supervisor and discussions were held to find out the similarities and differences in their findings. The interpretation and summarization of the findings from interview was also conducted with the help of the supervisor to draw conclusions.

Qualitative Method

Required data were obtained through open-ended questionnaire and interviews about the principals' talent management leadership and the teachers' organizational commitment.

Sample

Among five high schools, two schools (one with the highest mean scores and one with lowest mean scores) were selected. From selected schools, 8 teachers (at least four teachers from each school) were selected from each school.

Instrumentation

As an instrument, 6 open-ended questions and 7 interview questions were used to obtain the required data.

Procedure

Based on the related literature review, 6 open-ended questions and 7 interview questions were administered in order to obtain in-depth information about principals' talent management leadership and teachers' organizational commitment.

Findings

Quantitative Findings

Mean values, standard deviations and levels of each variable in principals' talent management leadership were described in Table 1.

Table 1   Mean Values, Standard Deviations and Levels of Each Variable in Principals' Talent Management Leadership Perceived by Teachers   (N=200)

No.	Variables	Mean	SD	Levels
1.	Strategic Acumen	3.14	.35	**Moderately high**
2.	Working with Others	3.13	.39	**Moderately high**
3.	Personal Qualities	3.10	.43	**Moderately high**
4.	Values	3.19	.48	**Moderately high**
	Principals' Talent Management Leadership	3.14	.37	**Moderately high**

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

To know the level of principals' talent management leadership, mean values and standard deviations were used. Findings were presented in Table 2.

Table 2   Mean Values, Standard Deviations and the Levels of Principals' Talent Management Leadership in Basic Education High Schools

No.	School	Mean	SD	Level
1.	**A**	2.88	.48	Moderately high
2.	**B**	3.27	.28	High
3.	**C**	3.19	.33	Moderately high
4.	**D**	3.23	.35	Moderately high
5.	**E**	3.09	.21	Moderately high

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

Mean values, standard deviations and the levels of teachers' perceptions on principals' talent management leadership grouped by administrative service were shown in Table 3. The administrative service group was divided into two groups such as (1-3 years) and (4-6 years).

Table 3 Mean Values, Standard Deviations and Levels of Teachers' Perceptions on Principals' Talent Management Leadership Grouped by Administrative Services
(N=200)

No.	Variables	Administrative Service	N	Mean (SD)	Level
1.	Strategic Acumen	1-3	3	3.20(.29)	**Moderately high**
		4-6	2	3.01(.43)	**Moderately high**
2.	Working with Others	1-3	3	3.20(.32)	**Moderately high**
		4-6	2	2.99(.49)	**Moderately high**
3.	Personal Qualities	1-3	3	3.17(.35)	**Moderately high**
		4-6	2	2.96(.54)	**Moderately high**
4.	Values	1-3	3	3.27(.35)	**High**
		4-6	2	3.04(.63)	**Moderately high**
	Principals' Talent Management Leadership	1-3	3	3.21(.29)	**Moderately high**
		4-6	2	3.00(.37)	**Moderately high**

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

Mean values, standard deviations and levels of each variable in teachers' organizational commitment were described in Table 4.

Table 4   Mean Values, Standard Deviations and Levels of Each Variable in Teachers' Organizational Commitment   (N=200)

No.	Variables	Mean	SD	Levels
1.	Affective Commitment	3.08	.39	**Moderately high**
2.	Continuance Commitment	2.41	.36	**Moderately low**
3.	Normative Commitment	2.92	.29	**Moderately high**
	Teachers' Organizational Commitment	2.80	.25	**Moderately high**

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

To know the levels of teachers' organizational commitment, mean values and standard deviations were used. Findings were presented in Table 5.

Table 5   Mean Values, Standard Deviations and the Levels of Teachers' Organizational Commitment in Basic Education High Schools

No.	School	Mean	SD	Level
1.	A	2.69	.28	Moderately high
2.	B	2.88	.20	Moderately high
3.	C	2.82	.20	Moderately high
4.	D	2.85	.28	Moderately high
5.	E	2.73	.25	Moderately high

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

Mean values and standard deviations of teachers' organizational commitment grouped by qualifications were shown in Table 6.

Table 6   **Mean Values, Standard Deviations and Levels of Each Variable in Teachers'**
                  Organizational Commitment Grouped by Qualifications   **(N=200)**

No.	Variables	Qualifications	N	Mean (SD)	Level
1.	Affective Commitment	B.A. or B.Sc.	143	3.16(.34)	Moderately high
		B.Ed. or M.Ed.	57	2.88(.45)	Moderately high
2.	Continuance Commitment	B.A. or B.Sc.	143	2.45(.36)	Moderately low
		B.Ed. or M.Ed.	57	2.29(.31)	Moderately low
3.	Normative Commitment	B.A. or B.Sc.	143	2.96(.28)	Moderately high
		B.Ed. or M.Ed.	57	2.83(.29)	Moderately high
	Teachers' Organizational Commitment	B.A. or B.Sc.	143	2.86(.23)	Moderately high
		B.Ed. or M.Ed.	57	2.67(.23)	Moderately high

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

Mean values and standard deviations of teachers' organizational commitment grouped by age were shown in Table 7.

Table 7 Mean Values and Standard Deviations of Each Variable for the Level of Teachers'
          Organizational Commitment Grouped by Age   **(N=200)**

No.	Variables	Years of Age	N	Mean (SD)	Level
1.	Affective Commitment	21-30	24	2.91(.47)	Moderately high
		31-40	36	3.03(.34)	Moderately high
		41-50	66	3.08(.41)	Moderately high
		51 and above	74	3.15(.37)	Moderately high
2.	Continuance Commitment	21-30	24	2.21(.43)	Moderately low
		31-40	36	2.41(.28)	Moderately low
		41-50	66	2.44(.34)	Moderately low
		51 and above	74	2.45(.36)	Moderately low
3.	Normative Commitment	21-30	24	2.92(.34)	Moderately high
		31-40	36	2.85(.28)	Moderately high
		41-50	66	2.90(.30)	Moderately high
		51 and above	74	2.97(.26)	Moderately high
	Teachers' Organizational Commitment	21-30	24	2.68(.28)	Moderately high
		31-40	36	2.76(.21)	Moderately high
		41-50	66	2.81(.25)	Moderately high
		51 and above	74	2.86(.23)	Moderately high

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

In Table 8, mean values and standard deviations of teachers' organizational commitment grouped by position were shown.

**Table 8   Mean Values and Standard Deviations of Each Variable for the Level of Teachers'
Organizational Commitment Grouped by Position   (N= 200)**

No.	Variables	Position	N	Mean (SD)	Level of Commitment
1.	Affective Commitment	Senior Teacher	63	2.91(.44)	Moderately high
		Junior Teacher	113	3.18(.35)	Moderately high
		Primary Teacher	24	3.03(.29)	Moderately high
2.	Continuance Commitment	Senior Teacher	63	2.35(.37)	Moderately low
		Junior Teacher	113	2.42(.34)	Moderately low
		Primary Teacher	24	2.50(.39)	Moderately low
3.	Normative Commitment	Senior Teacher	63	2.84(.32)	Moderately high
		Junior Teacher	113	2.96(.26)	Moderately high
		Primary Teacher	24	2.97(.29)	Moderately high
	Teachers' Organizational Commitment	Senior Teacher	63	2.70(.26)	Moderately high
		Junior Teacher	113	2.85(.22)	Moderately high
		Primary Teacher	24	2.83(.24)	Moderately high

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

In Table 9, mean values and standard deviations of teachers' organizational commitment grouped by services in current school were shown.

**Table 9 Mean Values and Standard Deviations of Each Variable for the Level of Teachers'
Organizational Commitment Grouped by Services in Current School   (N= 200)**

No.	Variables	Services in Current School (years)	N	Mean (SD)	Level of Commitment
1.	Affective Commitment	1-10	120	3.01(.41)	Moderately high
		11-20	49	3.11(.35)	Moderately high
		21 and above	31	3.29(.33)	Moderately high
2.	Continuance Commitment	1-10	120	2.36(.38)	Moderately low
		11-20	49	2.47(.30)	Moderately low
		21 and above	31	2.51(.33)	Moderately high
3.	Normative Commitment	1-10	120	2.88(.31)	Moderately high
		11-20	49	2.94(.24)	Moderately high
		21 and above	31	3.04(.28)	Moderately high
	Teachers' Organizational Commitment	1-10	120	2.75(.25)	Moderately high
		11-20	49	2.84(.18)	Moderately high
		21 and above	31	2.94(.24)	Moderately high

1.00-1.75 = low   1.76-2.50 = moderately low   2.51-3.25 = moderately high   3.26-4.00 = high

Table 10 shows the correlation between principals' talent management leadership and teachers' organizational commitment.

**Table 10 Correlation between Principals' Talent Management Leadership and Teachers'
Organizational Commitment**

Variables	Principals' Talent Management Leadership	Teachers' Organizational Commitment
Principals' Talent Management Leadership	1	.548**
Teachers' Organizational Commitment	.548**	1

Correlation is significant at the 0.01level (2-tailed).

Table 10 proves that there is a positive and significant relationship between principals' talent management leadership (M = 3.14, SD = .37) and teachers' organizational commitment (M = 2.80, SD = .25). There was a significant correlation but the strength of the correlation is moderate (r = .548, p = 0.01). It may be concluded that there is a positive and significant relationship between principals' talent management leadership and teachers' organizational commitment.

The beta coefficients are presented in Table 11. Values dimension significantly predicts teachers' organizational commitment when all five variables are included. The adjusted R square value was .289. This indicates that 28.9% of the variance in teachers' organizational commitment was explained.

Values dimension appears to be the only best predictor of teachers' organizational commitment. However, the effect of principals' personal variables, namely, years of service as a principal, and other dimensions such as strategic acumen, working with others and personal qualities are less striking.

Table 11 Simultaneous Multiple Regression Analysis for Factors Predicting Teachers' Organizational Commitment

Variables	B	Std. Error	Beta
Administrative service	.015	.033	.028
Strategic Acumen	.137	.071	.195
Working with Others	.012	.092	.019
Personal Qualities	.079	.077	.138
Values	.132	.048	.257**
R^2=.289, F (5,194) =17.183, **p<.01			

Findings from Interview

Various responses for interview questions are described as follows.

(1) How do you think about the long-term development of the school by the management and leadership of the principal?

Four teachers from Group I responded that the school developed and improved by their principal, they saw the success of the school and their principal had family-spirit, accountability and responsibility. Four teachers from Group II stated that the development of the school was normal and the principal was weak in managing for the development of the school.

(2) How does the principal cooperate with others?

Four teachers from Group I responded that the principal cooperated fairly and friendly with them like a family, was skillful in organizing others and managed as a united organization. Four teachers from Group II stated that the principal interacted friendly with them but ineffective for cooperation.

(3) Does your principal value and believe your talents?

Four teachers from Group I responded that the principal had the values and beliefs for their talents, the principal made round check, appreciated their efforts and supported their needs. Two teachers from Group II stated that the principal believed in them but was weak in motivating the teachers.

(4) How do you think about the leadership talent of the principal?

Four teachers from Group I responded that the leadership talent of the principal was very good, the school improved and the teachers' talents and performances also improved under the leadership talent of the principal. And they could perform their tasks happily for the long-term with this principal. Four teachers from Group II stated that the leadership talent of the principal was normal.

(5) How do you feel about the organizational commitment in this school?

Four teachers from Group I responded that they were very happy and proud for being a teacher in their school, they satisfied the objectives and values of the school and they get opportunities to show their talents occasionally. Four teachers from Group II stated that they were not happy and excited for being a teacher in their school, they were not satisfied with the school environment and their performance and they did not get chances to perform with their talents but they tried as much as they could.

(6) What are the advantages and disadvantages for being a teacher in this school?

Four teachers from Group I and three teachers from Group II responded that they were satisfied with transportation but one teacher from Group II were not satisfied with transportation. One teacher from Group I stated that all staffs united in a family type environment and another teacher from Group I stated that she can perform the contributions for her natives. One teacher from Group II answered that she can practise to be skillful in academic subject and another teacher from Group II answered that she was weak in performance.

(7) Will you leave this organization if you have a job with a better salary?

Four teachers from Group I and four teachers from Group II responded that they will not leave this organization even if they have a job with a better salary because they did not satisfy the private schools, they had desire to serve for their natives and they believed that teacher job (teaching career) is the noblest profession.

Conclusion, Discussion and Recommendations

Conclusion and Discussion

According to the findings, the result shows that the level of principals' talent management leadership in Basic Education High Schools, Phyu Township was "moderately high" level. There was a significant difference in the levels of principals' talent management leadership grouped by schools. Hughes and Rog (2008) claimed that factors such as respective behavior toward talented staff, feeling of advancement and success and making proper relationships with other colleagues are key factors for talent management in the organizations. In comparing the dimensions of principals' talent management leadership, the mean score of "values" was higher than other variables. It may be interpreted that the principals lead and manage the teachers in respectful behaviours, believe and value their talents and create the school environment with ethical values. Areiqat (2010) pointed out that leaders should have the ability to give freedom of action to his or her talented staff to form the ground of creativity in them, and also the ability to create a proper level of job challenge to motivate the talented staff. The mean score of "personal qualities" was lower than other variables. It may be interpreted that the principals should try to improve their leadership qualities and their leadership and management functions should be systematic and smart.

According to the findings, both groups of principals with administrative service of (1-3 years and 4-6 years) have "moderately high" level of talent management leadership. But, the mean value of the group of principals who have administrative service of "1-3 years" was higher than that of the group of principals whose administrative service are "4-6 years". It may be concluded that even though the more experience they had, the less their talent management leadership qualities. This is because the principals whose administrative service (4-6 years) were weak in cooperation with teachers and their emotional attachment to their job was low. Although the principals have less services, their leadership qualities were not in a bad condition.

In investigating the level of teachers' organizational commitment in five Basic Education High Schools, Phyu Township, the result showed that the level of teachers' organizational commitment is moderately high. The results supported the findings of Nayir (2012) and Coban and Demirtas (2011) who reported that teachers have moderately high level of organizational commitment, while contradicting the results of the study Balay (2001) and Yoruk and Segban (2012), suggesting that teachers have high level of organizational commitment. There was a significant difference in the level of teachers' organizational commitment grouped by schools. In comparing three domains of organizational commitment, affective commitment got higher mean value than others. It may be discussed that the teachers committed their school on an affective basis that means teachers keep working not because they "have to", but because they "want to". The continuance commitment had got the lower mean value than others. It may be interpreted that the teachers' commitment to the school may not be due to perceived costs of leaving the organization that means teachers keep working even if there are alternative job opportunities.

The researcher investigated the level of teachers' organizational commitment by grouping with personal factors such as qualification, age, position, and years of service in current school. Angel and Perry (1981) found that demographic characteristics such as age, tenure, sex and education have been linked to commitment.

According to the findings, the group of teachers who got (B.A., B.Sc.) degree and the group of teachers who got (B.Ed., M.Ed.) degree perceived as having moderately high level of organizational commitment. However, the organizational commitment of the group of teachers who got (B.A., B.Sc.) degree was greater than that of the group of teachers who got (B.Ed., M.Ed.) degree. This may be because teachers who got (B.Ed., M.Ed.) degree mostly transferred to other schools or more higher positions or ranks. The results are consistent with the findings of Camilleri (2002) and found out that teachers who got (B.A., B.Sc.) degree had more organizational commitment.

According to findings, all groups of teachers grouped by age perceived as having moderately high level of teachers' organizational commitment. The organizational commitment of the group of teachers whose age of "51 and above" years was higher than that of other groups and the organizational commitment of the group of teachers whose age of "21-30 years" was lower than that of other groups. The researcher found that the older the teachers, the higher the level of teachers' organizational commitment in their job. The results are consistent with those of Camilleri (2002) who found out that older employees have a higher degree of organizational commitment. The researcher also found that the older the teachers, the higher the continuance commitment of teachers. It seems the older groups committed in schools due to necessity and perceived costs for leaving the organization.

According to the findings, all groups of teachers grouped by position perceived as having moderately high level of teachers' organizational commitment. The organizational commitment of the group of junior teachers was higher than other groups and the organizational commitment of the group of senior teachers was lower than other groups. Moreover, there were significant differences for affective commitment and normative commitment. The group of junior teachers

committed more with affective and normative commitments than senior teachers. This means that the junior teachers performed their duties happily and proudly than senior teachers and the loyalty of junior teachers was greater than that of senior teachers. The reason may be that the transferring rate of senior teachers was higher than that of primary teachers. The results are not consistent with Camilleri (2002) who found out that the higher the position in the organizational hierarchy, the higher the degree of organizational commitment.

According to the findings, all groups of teachers grouped by services in current school perceived as having moderately high level of teachers' organizational commitment. The organizational commitment of the group of teachers whose years of services (21 and above) was higher than other groups and the organizational commitment of the group of teachers whose years of services (1-10) was lower than other groups. It was found that the greater the years of service in current school, the higher the level of teachers' organizational commitment. It can be concluded that when teachers stay longer in organizations, they committed more in their organizations. Moreover, there were significant differences in affective commitment and normative commitment. The group of teachers having more services committed more with affective and normative commitments than that of teachers having less service. This means that the more experienced teachers performed their duties happily and proudly than less experienced teachers and the loyalty of more experienced teachers was greater than that of less experienced teachers. The reason may be that when teachers stay longer in organizations, they committed more on affective and normative basis in their organizations.

Based on findings, principals' talent management leadership influences on teachers' organizational commitment. Teachers' organizational commitment was significantly influenced by some aspects of principals' talent management leadership. Findings of this study indicate that there was a significant moderate relationship between principals' talent management leadership and teachers' organizational commitment. These results are consistent with findings of Ayatac (2015) and Davies and Davies (2011), suggesting that the school leaders' TM leadership has a strong relationship with the teachers' organizational commitment.

Values dimension appears to be the only best predictor of teachers' organizational commitment. However, the effect of principals' personal variables, namely, administrative service, and other dimensions such as strategic acumen, working with others and personal qualities are less striking. According to O'Reilly (1989), organizational commitment is an individual's psychological bond to the organization, including a sense of job involvement, loyalty and belief in the values of the organization. It can be seen that values significantly affect teachers' organizational commitment.

Balay (2001) stated that a bureaucratic school environment and a strict sense of hierarchy reinforce the continuance commitment. This suggests that school managers need to develop their TM leadership skills. According to qualitative results (open-ended and interviews), teachers generally have continuance commitment towards their school. Teachers are committed to work because they consider it a means to gain more or not to lose what they possess (Balay, 2001; Davies & Davies, 2011).

TM leadership focuses to increase the emotional attachment and organizational commitment of teachers (Davies & Davies, 2011). The lack of confidence, respect, accuracy and justice in educational administrators or lack of school administrators to represent these, can negatively affect teachers' organizational commitment (Lewis & Heckman, 2006). As a qualitative result (open-ended and interviews), based on teachers' opinions, when the principals do not possess efficiencies at a desired level, this results in teachers' low level of organizational commitment. Moreover, when the principals possess efficiencies at a desired level, this results in teachers' high

level of organizational commitment. Thus, principals' talent management leadership strongly associates with teachers' organizational commitment.

In conclusion; according to quantitative and qualitative results, it has been observed that principals' talent management leadership is an important variable for teachers' organizational commitment.

Recommendations

On the basis of the analysis of the data and interpretation of the results, the following suggestions and recommendations were drawn to promote the level of principals' talent management leadership and teachers' organizational commitment.

To increase the development of principals' talent management leadership,

- The principals should try to develop the teachers' talents, use their talents appropriately and create a successful and productive school environment with full of talented teachers.
- The principals should have respectful behaviours toward talented teachers, official acknowledgement of talented teachers for their role in organization' success, and proper relationships with teachers.
- The principals should have the ability to give freedom of action to his or her talented teachers to form the ground of creativity in them.
- The principals should provide the teachers with job challenge to motivate the talented staff.
- The principals should delegate authority and responsibility to the relevant persons in accordance with their talents in some areas of managerial functions.

To promote the level of teachers' organizational commitment,

- The teachers should have autonomy, role clarity, opportunity for expressing their talents and use their talents in the right position.
- The principals should give the teachers recognitions, rewards, warmness to reinforce the teachers' value.
- The principals should motivate the teachers to believe that they are important persons for the development of education and they are valued and appreciated.
- The government should provide opportunities for continuous professional development.
- The government should provide the basic needs, support the needs to promote the development of the schools and create a positive education society with full of talented and educated persons.

Need for Further Research

The results may be generalized if further researches with a wider teacher universe are conducted in different areas. Therefore, the need for further study is to conduct the research in more than one state, region and township to represent the whole country.

Acknowledgements

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A STUDY OF SELF-DIRECTED LEARNING READINESS AND SELF-DIRECTED PROFESSIONAL DEVELOPMENT PRACTICES OF TEACHERS

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Abstract

The main aim of this study is to investigate self-directed learning readiness and self-directed professional development practices of teachers from Basic Education High Schools in Myeik Township, Tanintharyi Region. By using proportional stratified sampling method, 83 senior teachers, 130 junior teachers and 57 primary teachers were selected as sample. A set of questionnaire, open-ended questions and interview were used to collect required data. The internal consistency (Cronbach's Alpha) of questionnaire was 0.94. Descriptive statistics, independent samples *t* test, one-way ANOVA, Tukey post hoc mean comparison and Pearson product moment correlation were used to analyse the data. The research finding indicated that the teachers had high level of self-directed learning readiness and often performed the self-directed professional development practices. Moreover, significant differences were not found in self-directed learning readiness level and self-directed professional development practices of teachers according to their personal factors. However, in each area of self-directed professional development practices, there were significant differences according to teachers' personal factors except gender. It was also found that there was a moderately positive correlation between self-directed learning readiness and self-directed professional development practices of teachers (r= .442, p<0.01).

Keywords: self-directed learning readiness, self-directed professional development

Introduction

Teachers are the foundational component in the delivery of quality education. They play as an important role in teaching learning process for improving students' learning outcomes. They need to possess high level of competence and performance, conduct the tasks ethically, and show commitment in teaching. This all can be obtained from professional development. Sparks and Loucks-Horsley (1989) claimed that professional development is a mechanism that foster the professional growth and expertise of educators. Effective professional development programs can improve teachers' skills and attitudes in the classroom. Teachers face different students in classroom situations and their professional needs are different from each other. To meet their individual professional needs, teachers need to learn not only from centralized professional development programs but also through self-directed learning. Self-directed learning is a process in which a learner assumes primary responsibility for planning, implementing and evaluating the learning process (Brockett & Hiemstra, 1991). By incorporation of these self-directed learning principles in professional development, teachers can perform self-directed professional development (Porter, 2014). Then, they feel ownership and success in professional development.

Significance of the Study

Centralized professional development programs can give only standardized knowledge and may not fulfill individual needs of teachers. In these programs, due to time limit, it is difficult to reflect the realities of classrooms and help educators find solution to the day-to-day challenges they faced. To be effective and successful, teacher professional development must be high quality and relevant to teacher's needs. Self-directed learning helps teachers to learn what they need to learn anywhere at any time (Chiang, 1998) to meet individual professional needs. To perform self-directed learning, an individual need to have readiness for self-directed learning. The degree of

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readiness varies in different learning situations and not all adults have the same level of readiness or aptitude for engaging in self-directed learning (Candy, 1991). When individuals know their level of readiness for self-directed learning, they can determine which level of training should be chosen. For administrators and management of education unit, it is also important to know teachers' self-directed learning readiness level to provide suitable supports for teachers' self-directed professional development. Moreover, Knowles (1975) described that self-directed learners learn more than other learner. Therefore, in this study self-directed learning readiness and self-directed professional development practices of teachers were investigated.

Theoretical Framework

In this study, the investigation of teachers' readiness for self-directed learning will be based on: self-directed learning model developed by Garrison (1997) and self-directed learning readiness scale developed by Fisher et al. (2001).

Garrison (1997) developed a self-directed learning model which included: self-management, self-monitoring, and motivation. In 2001, Fisher et al. described that self-directed learning readiness examines the degree that self-directed learner takes personal control and acknowledges the freedom that is associated with learning what the individual considers important. Then, they developed self-directed learning readiness scale with three dimensions: self-management, self-control (self-monitoring), and desire for learning (motivation).

Self-management: self-management is concerned with task control issues. It focuses on the social and behavioral implementation of learning intentions, that is, the external activities associated with learning process. This dimensions concerns the enactment of learning goals and management of learning resources and support.

Self-monitoring: self-monitoring is the process whereby the learner takes responsibility for the construction of personal meaning (i.e., integrating new ideas and concepts with previous knowledge). Responsibility for self-monitoring reflects a commitment and obligation to construct meaning through critical reflection and collaborative confirmation.

Motivation: motivation play a very significant role in the initiation and maintenance of effort toward learning and the achievement of cognitive goals. Motivation reflects perceived value and anticipated success of learning goals at the time learning is initiated and mediated between context (control) and cognition (responsibility) during the learning process.

On the other hand, manageable analysis on teachers' self-directed professional development practices will be conducted in terms self-directed learning practices proposed by Govender (2015). These practices included:

- Learning with others
- Learning through others
- Learning through self
- Teachers' continuing self-directed professional development and change
- Sources of self-directed learning outside the professional schooling community

Learning with others: Learning is a social phenomenon. In schools, teachers learn through professional talks about student learning, teaching and education. They share knowledge about the planning and teaching of their subjects. They also share knowledge and experiences obtained from courses and workshops. They study their teaching subjects collaboratively. They take collaborative research and reflection on the issues related to teaching learning situation.

Learning through others: Teachers also learn through others. They learn through workshops and mentorship. They learn through observing other teachers' teaching, classroom management and creation of teaching aids.

Learning through self: As intellectual adventures, teachers reflect the effectiveness of their teaching practices. They reflect their strengths and weaknesses about teaching and modify their teaching practices. They take research to investigate new teaching methods/ strategies that are best suited to their individual classroom conditions. Then, they share their findings about teaching methods to colleagues and write in journals and publications.

Teachers' continuing self-directed professional development and change: As changes always occur in education, teachers need to take ongoing professional development. Teachers act as both learners and teachers. Not only they engage in formal professional development through registering for post-grade or diploma studies but also they attend trainings, workshops and courses through own ways to enhance their professionalism. They elevate their status by acting as resources for their learners and other colleagues.

Sources of self-directed learning outside the professional schooling community: For their professional development, teachers learn through one's own plan by using internet to search information, reading books and professional literature. They use social media tools and learn from online programs. They engage in community affairs to observe the contextual realities of their students.

Objectives of the Study

General Objective

- To study self-directed learning readiness and self-directed professional development practices of teachers

Specific Objectives

- To investigate the readiness levels of teachers for self-directed learning
- To study the variations of teachers' readiness for self-directed learning in terms of their personal factors
- To study teachers' practices for self-directed professional development
- To study the variations of teachers' practices for self-directed professional development according to their personal factors
- To find out the relationship between self-directed learning readiness and self-directed professional development practices of teachers

Research Questions

(1) What are the readiness levels of teachers for self-directed learning?

(2) Are there any significant differences in teachers' readiness for self-directed learning in terms of their personal factors?

(3) To what extent do the teachers perform self-directed professional development practices?

(4) Are there any significant differences in teachers' practices for self-directed professional development according to their personal factors?

(5) Is there any relationship between self-directed learning readiness and self-directed professional development practices of teachers?

Limitations of the Study

This study will be restricted to the teachers from Basic Education High Schools in Myeik Township, Tanintharyi Region.

Definitions of Key Terms

Self-Directed Learning Readiness

Self-directed learning readiness is the extent to which an individual possesses preferences and attitudes towards learning that are necessary for self-directed learning (Hall-Johnsen, 1985).

Self-Directed Professional Development

Self-directed professional development is defined as professional development that incorporates principles of self-directed learning (Porter, 2014).

Operational Definitions

Self-Directed Learning Readiness

In this study, self-directed learning readiness is the degree to which the teachers possessed abilities, attitudes and preferences that are necessary for self-directed learning. Self-directed learning readiness of teachers will be determined by the mean values of the teachers' responses to the items of self-directed learning readiness questionnaire. The greater the mean value indicates that the teachers have higher self-directed learning readiness level.

Self-Directed Professional Development Practices

In this study, self-directed professional development practices were the practices performed by the teachers through own initiatives to develop skills, knowledge, expertise and other characteristics as teachers. Self-directed professional development practices of teachers will be measured by the mean values of teachers' responses to the items of self-directed professional development practices questionnaire. The greater the mean values that the teachers get, they more perform the self-directed professional development practices.

Methodology

Both quantitative and qualitative methods were used to collect the required data. For quantitative research study, a set of questionnaire was used. For qualitative research study, open-ended questions and interview were applied. By using proportional stratified sampling method, 83 senior teachers, 130 junior teachers and 57 primary teachers were selected as participants. Therefore, totally 270 teachers were participated in this study.

The questionnaire used in this study included four parts. Part one was personal factors of teachers. Part two was 30 items for examining teachers' self-directed learning readiness with three dimensions: self-management, self-monitoring and motivation. Each item was rated with five-point Likert scale (1=strongly disagree, 2=disagree, 3=undecided, 4= agree, 5= strongly agree). Part three was 31 items for examining self-directed professional development practices with five dimensions: learning with others, learning through others, learning through self, teachers' continuing self-directed professional development and change, and sources of self-directed learning outside the professional schooling community which were rated with five-point Likert scale (1=never, 2=seldom, 3=sometimes, 4=often, 5=always). Part four included five open-ended questions. And, interview was also conducted.

Descriptive statistics, independent samples *t* test, one-way ANOVA, Tukey post hoc mean comparison and Pearson product moment coefficient were used to analyse the data. Moreover, answers of open-ended questions and interviews were read and analysed.

Findings

In this section, the results from analysing data regarding with self-directed learning readiness and self-directed professional development practices of teachers were described.

Table 1 Mean Values and Standard Deviations of Self-Directed Learning Readiness of Teachers **(N=270)**

No.	Variables	Mean (SD)	Remark
1.	Self-Management	4.05 (.40)	High
2.	Self-Monitoring	4.12 (.37)	High
3.	Motivation	4.29 (.37)	High
	Teachers' Self-Directed Learning Readiness	**4.15 (.32)**	**High**

Scoring Direction: 1.00-2.00 = low   2.01-3.00 = moderately low 3.01-4.00 = moderately high   4.01-5.00 = high

According to table 1, the mean values of teachers in such dimensions as self-management, self-monitoring and motivation were high. Moreover, the mean value of teachers' self-directed learning readiness was also high. Therefore, it can be said that teachers had *high level* of self-directed learning readiness.

Table 2 Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers **(N=270)**

No.	Variables	Mean(SD)	Practice
1.	Learning with Others	3.81 (.57)	Often
2.	Learning through Others	3.99 (.59)	Often
3.	Learning through Self	3.63 (.59)	Often
4.	Teachers' Continuing Self-Directed Professional Development and Change	3.11 (.64)	Sometimes
5.	Sources of Self-Directed Learning Outside the Professional Schooling Community	3.48 (.59)	Sometimes
	Self-Directed Professional Development Practices of Teachers	**3.59 (.47)**	**Often**

Scoring Direction: 1.00-1.49 = never   1.50-2.49 = seldom   2.50-3.49 = sometimes   3.50-4.49 = often
                                    4.50-5.00 = always

As shown in table 2, teachers *sometimes* learned for their continuing self-directed professional development and change, and from sources of self-directed learning outside the professional schooling community. But, they *often* learned with others, through others, and through self. Then, the mean value 3.59 showed that the teachers *often* performed self-directed professional development practices.

Table 3   Independent Samples *t* Test Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Qualification   (N=270)

Variables	Qualification	N	Mean	SD	*t*	*Df*	*p*
Learning with Others	B.A./ B.Sc./ M.A/M.Sc.	195	3.87	.54	2.806	119.09	.006**
	B.Ed./ M.Ed.	75	3.64	.62			
Learning through Others	B.A./ B.Sc./ M.A/ M.Sc.	195	3.99	.57	-0.03	268	ns
	B.Ed./ M.Ed.	75	3.99	.62			
Learning through Self	B.A./ B.Sc./ M.A/ M.Sc.	195	3.60	.61	-1.61	268	ns
	B.Ed./ M.Ed.	75	3.73	.53			
Teachers' Continuing Self-Directed Professional Development and Change	B.A./ B.Sc./ M.A/ M.Sc.	195	3.09	.61	-0.78	268	ns
	B.Ed./ M.Ed.	75	3.16	.72			
Sources of Self-Directed Learning Outside the Professional Schooling Community	B.A./ B.Sc./ M.A/ M.Sc.	195	3.43	.61	-2.16	268	.031*
	B.Ed./ M.Ed.	75	3.60	.51			
Teachers' Self-Directed Professional Development Practices	**B.A./ B.Sc./ M.A/ M.Sc.**	**197**	**3.59**	**.47**	**-.388**	**268**	**ns**
	B.Ed./ M.Ed.	**75**	**3.61**	**.47**			

 Note: * p<.05, ** p<.01, ns= no significance

In table 3, it was found that there was no significant difference in teachers' self-directed professional development practices between the group of teachers who got B.A./ B.Sc./ M.A/ M.Sc. degree and the group of teachers who got B.Ed./ M.Ed. degree. But, there were significant differences in such areas of self-directed professional development practices as learning with others (*t* (119.09) = 2.806, *p*< 0.01) and sources of self-directed learning outside the professional schooling community (*t* (268) = -2.16, *p*<0.05) between the two qualification groups.

Table 4   One-Way ANOVA Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Age   (N=270)

Variables	Age	N	Mean	SD	*F*	*p*
Learning with Others	≤ 30 years	66	3.62	.53	3.11	.07*
	31-40 years	92	3.87	.55		
	41-50 years	62	3.87	.61		
	≥ 51 years	50	3.86	.52		
Learning through Others	≤ 30 years	66	3.99	.61	2.54	ns
	31-40 years	92	4.10	.59		
	41-50 years	62	3.84	.60		
	≥ 51 years	50	3.98	.51		
Learning through Self	≤ 30 years	66	3.74	.52	1.92	ns
	31-40 years	92	3.67	.58		
	41-50 years	62	3.50	.74		
	≥ 51 years	50	3.60	.48		
Teachers' Continuing Self-Directed Professional Development and Change	≤ 30 years	66	3.17	.64	.59	ns
	31-40 years	92	3.13	.65		
	41-50 years	62	3.03	.58		
	≥ 51 years	50	3.09	.69		
Sources of Self-Directed Learning Outside the Professional Schooling Community	≤ 30 years	66	3.60	.54	3.40	.018*
	31-40 years	92	3.55	.54		
	41-50 years	62	3.39	.62		
	≥ 51 years	50	3.31	.65		
Teachers' Self-Directed Professional Development Practices	**≤ 30 years**	**66**	**3.61**	**.45**	**1.13**	**ns**
	31-40 years	**92**	**3.65**	**.46**		
	41-50 years	**62**	**3.52**	**.53**		
	≥ 51 years	**50**	**3.56**	**.44**		

Note: * p<.05, ns= no significance

As shown in table 4, there was no significant difference in teachers' self-directed professional development practices among the age groups of $\leq$ 30 years, 31-40 years, 41-50 years and $\geq$ 51 years. But, statistically significant differences were found in such areas of self-directed professional development practices as learning with others (F (3, 266) = 3.11, $p<0.0$) and sources of self-directed learning outside the professional schooling community (F (3,266) = 3.40, $p<0.05$) among these age groups.

Table 5 One-Way ANOVA Results Showing Significantly Different Areas in Self-Directed Professional Development Practices of Teachers Grouped by Age   (N=270)

Variables		Sum of Squares	df	Mean Squares	F	p
Learning with Others	Between Group	2.98	3	.100	3.11	.027*
	Within Group	85.21	266	.32		
	Total	88.19	269			
Sources of Self-Directed Learning Outside the Professional Schooling Community	Between Group	3.43	3	1.14	3.40	.018*
	Within Group	89.49	266	.34		
	Total	92.92	269			

Table 6 Tukey HSD Results Showing Significant Difference in Teachers' Self-Directed Professional Development Practices Grouped by Age   (N=270)

Variables	Age (I)	Age (J)	Mean Difference (I-J)	p
Learning with Others	$\leq$ 30 years	31-40 years	-.2464	.037*
Sources of Self-Directed Learning Outside the Professional Schooling Community	$\leq$ 30 years	$\geq$ 51 years	.2971	.034*

Note: * p<.05

As shown in table 6, it can be noted that although the teachers from age group ($\leq$ 30 years) learned with others less than the teachers from the age group (31-40 years), they learned from sources of self-directed learning outside the professional schooling community more than the teachers from the age group ($\geq$ 51 years).

Table 7 One-Way ANOVA Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Teaching Service   (N=270)

Variables	Teaching Service	N	Mean	SD	F	p
Learning with Others	$\leq$ 10 years	94	3.72	.58	1.22	ns
	11-20 years	80	3.85	.56		
	21-30 years	69	3.87	.59		
	$\geq$ 31 years	27	3.82	.53		
Learning through Others	$\leq$ 10 years	94	4.06	.63	.86	ns
	11-20 years	80	3.97	.58		
	21-30 years	69	3.92	.56		
	$\geq$ 31 years	27	3.99	.54		
Learning through Self	$\leq$ 10 years	94	3.76	.54	3.01	.03*
	11-20 years	80	3.51	.62		
	21-30 years	69	3.65	.63		
	$\geq$ 31 years	27	3.51	.54		

Variables	Teaching Service	N	Mean	SD	*F*	*p*
Teachers' Continuing Self-Directed Professional Development and Change	≤ 10 years	94	3.21	.68	1.88	ns
	11-20 years	80	3.00	.58		
	21-30 years	69	3.06	.60		
	≥ 31 years	27	3.20	.71		
Sources of Self-Directed Learning Outside the Professional Schooling Community	≤ 10 years	94	3.62	.52	3.71	.012*
	11-20 years	80	3.49	.56		
	21-30 years	69	3.34	.61		
	≥ 31 years	27	3.33	.72		
Teachers' Self-directed Professional Development Practices	**≤ 10 years**	**94**	**3.66**	**.46**	**.96**	**ns**
	11-20 years	**80**	**3.56**	**.47**		
	21-30 years	**69**	**3.56**	**.48**		
	≥ 31 years	**27**	**3.59**	**.50**		

Note: * p<.05, ns= no significance

According to table 7, it was found that there was no significant difference in teachers' self-directed professional development practices among the teaching service groups (≤ 10 years, 11-20 years, 21-30 years, ≥ 31 years). But, there were significant differences in such areas of self-directed professional development practices as learning through self (F (3,266) = 3.1, $p<0.05$) and sources of self-directed learning outside the professional schooling community (F (3,266) = 3.71, $p<0.05$).

Table 8 One-Way ANOVA Results Showing Significantly Different Areas in Self-Directed Professional Development Practices of Teachers Grouped by Teaching Service
(N=270)

Variables		Sum of Squares	*df*	Mean Squares	*F*	*p*
Learning through Self	Between Group	3.13	3	1.04	3.01	.03*
	Within Group	92.05	266	.351		
	Total	95.28	269			
Sources of Self-Directed Learning Outside the Professional Schooling Community	Between Group	3.73	3	1.25	3.71	.012*
	Within Group	89.18	266	.34		
	Total	92.92	269			

Table 9 Tukey HSD Results Showing Significant Difference in Teachers' Self-Directed Professional Development Practices Grouped by Teaching Service   (N=270)

Variables	Teaching Service (I)	Teaching Service (J)	Mean Difference (I-J)	*p*
Learning through Self	≤ 10 years	11-20 years	.2496	.029*
Sources of Self-Directed Learning Outside the Professional Schooling Community	≤ 10 years	21-30years	.2756	.015*

Note: *$p<.05$

According to table 9, it can be said that the teachers from the teaching service group (≤10 years) learned through themselves more than the teachers from the teaching service group (11-20 years) and learned from sources outside the professional schooling community more than the teachers from the teaching service group (21-30years).

Table 10   One-Way ANOVA Results Showing Mean Values and Standard Deviations of Self-Directed Professional Development Practices of Teachers Grouped by Position   (N=270)

Variables	Position	N	Mean	SD	F	p
Learning with Others	Primary Teacher	57	3.87	.51	3.11	ns
	Junior Teacher	130	3.86	.58		
	Senior Teacher	83	3.68	.59		
Learning through Others	Primary Teacher	57	4.16	.60	4.71	.01*
	Junior Teacher	130	3.89	.55		
	Senior Teacher	83	4.03	.60		
Learning through Self	Primary Teacher	57	3.70	.54	3.56	.03*
	Junior Teacher	130	3.53	.64		
	Senior Teacher	83	3.74	.54		
Teachers' Continuing Self-Directed Professional Development and Change	Primary Teacher	57	3.15	.58	.88	ns
	Junior Teacher	130	3.05	.3		
	Senior Teacher	83	3.16	.69		
Sources of Self-Directed Learning Outside The Professional Schooling Community	Primary Teacher	57	3.58	.55	5.98	.003**
	Junior Teacher	130	3.36	.62		
	Senior Teacher	83	3.61	.52		
Teachers' self-directed professional development practices	**Primary Teacher**	**57**	**3.68**	**.41**	**2.35**	**ns**
	Junior Teacher	**130**	**3.53**	**.49**		
	Senior Teacher	**83**	**3.63**	**.46**		

Note: $* p<.05$, $** p<.01$, ns= no significance

According to table 10, it was not found significant difference in teachers' self-directed professional development practices among senior, junior and primary teacher groups. But, there were significant differences in such areas of self-directed professional development practices of teachers among these position groups as *learning through others* (F (2, 267) = 4.71, $p<0.05$), learning through self (F (2,267) = 3.56, $p<0.05$), and sources of self-directed learning outside the professional schooling community (F (2,267) = 5.98, $p< 0.01$).

Table 11 One-Way ANOVA Result Showing Significantly Different Areas in Teachers' Self-Directed Professional Development Practices Grouped by Position   (N=270)

Variables		Sum of Squares	df	Mean Squares	F	p
Learning through Others	Between Group	3.16	2	1.58	4.71	.01*
	Within Group	89.45	267	.34		
	Total	92.61	269			
Learning through Self	Between Group	2.47	2	1.24	3.56	.03*
	Within Group	92.71	267	.35		
	Total	95.18	269			
Sources of Self-Directed Learning Outside the Professional Schooling Community	Between Group	3.98	2	1.99	5.98	.003**
	Within Group	88.93	267	.33		
	Total	92.91	269			

Table 12   Tukey HSD Results Showing Significant Difference in Teachers' Self Directed Professional Development Practices Grouped by Position   (N=270)

Variables	Age (I)	Age (J)	Mean Difference (I-J)	*p*
Learning through Others	Primary Teacher	Junior Teacher	.2726	.009**
Learning through Self	Junior Teacher	Senior Teacher	-.2063	.035*
Sources of Self-Directed Learning Outside the Professional Schooling Community	Primary Teacher	Junior Teacher	.2263	.038*
	Junior Teacher	Senior Teacher	-.2533	.006**

Note: * p<.05, ** p<.01

According to table 12, it can be interpreted that primary teacher group more learned through others and from sources of self-directed learning outside the professional schooling community than junior teacher group. Similarly, senior teacher group more learned through self and from sources of self-directed learning outside the professional schooling community than junior teacher group.

The Relationship Between Self-Directed Learning Readiness and Self-Directed Professional Development Practices of Teachers

In order to find out the relationship between self-directed learning readiness and self-directed professional development practices of teachers, Person correlation was computed.

Table 13 The Relationship Between Self-Directed Learning Readiness and Self-Directed Professional Development Practices of Teachers   (N=270)

Variables	Self-Directed Learning Readiness of Teachers	Self-Directed Professional Development Practices of Teachers
Self-Directed Learning Readiness of Teachers	1	.442**
Self-Directed Professional Development Practices of Teachers	.442**	1

**Correlation is significant at the 0.01 level (2-tailed)

Table 13 shows that there was a moderately positive correlation between self-directed learning readiness and self-directed professional development practices of teachers (*r*=.442, *p*<0.01).

Qualitative Findings

Findings from open-ended questions

Q1-What kind of abilities do you have to do self-directed learning?

- Able to search out and learn from resources, plan and set goals for their learning, collaborate, do systematically, manage time well (n=146, 78%)
- Always want to learn and have desire to know deeply, diligence and perseverant, and believe in their abilities (n=27, 14%)
- Can reflect their strengths and weaknesses about teaching (n=14, 8%)

Q2- How do you perform to improve your teaching profession?
- Attending trainings, workshops, courses, and by using resources (books, TV, internet) (n=133, 51%)
- Asking advice from experienced teachers (n=42, 16%)
- Reflecting and modifying their teaching, applying knowledge from courses, workshops in their teaching (n=21, 8%)
- Self-study, continuous learning (n=21,8%)

Q3-For your professional development, which one do you more practiced, attending courses and workshops mandated by policy makers or learning through own ways? Give reasons.
- Attending courses and workshops (n=218, 86%)
  - Get teaching methods and guide from mentor teachers
  - Able to collaborate and discuss among teachers
  - Convenient for teachers as stakeholders concerned with education support transportation fees and manage for staying
- Both (n=31, 12%) because both make their teaching effective
- Learning through own ways (n=5, 2%),
  - courses and workshops cannot fulfil individual teacher's unique needs
  - no induction programs, courses and workshop for beginner teachers
  - Time, energy can be saved and more effective

Q4-Describe the courses or practices that can be more effective for your teaching?
- Sharing and discussion among co-workers (n=127, n=52%)
- New curriculum course, subject mastery course, laboratory course, workshops for increasing student achievement rate (n=63, 26%)
- Learning through different ways (n=23,9%)
- Learning by using resources (n=12, 5%)

Q5-What are the challenges that you faced in performing self-directed professional development practices?
- Excess workload and less free time to learn (n=29, 13%)
- Family responsibilities, money and health difficulties (n=24,11%)
- Less access of internet connectivity and resources (n=19,8%)
- Less competency in technology (n=9, 4%)

Findings from Interview

The results of interview indicated that the teachers possessed abilities, attitudes and preferences that are necessary for self-directed learning. For self-directed professional development, the teachers had not often learned with others and observed other teachers' teaching and creation of teaching aids due to many workloads and less free time. They also had never done individual research or collaborative research because they were not familiar with research. Further, they were weak in learning for their continuing professional development due to many barriers. And, they could not frequently learn from sources of self-directed learning outside the professional schooling community because of many difficulties.

Conclusion and Discussion

In this research, the finding revealed that the teachers had high level of self-directed learning readiness. Knowles (1970) said that adults are self-directed in other areas of their lives and therefore, they prefer self-directed learning. According to interview findings, it was found that most of the teachers had high level of self-directed learning readiness.

Regarding with self-directed professional development practices, the finding showed that teachers often performed self-directed professional development practices such as learning with others, learning through others. Collaboration is a goal of all professional learning. Moving out the isolation by working individually in classroom to share ideas and new learning with peers and content experts in a supportive group fosters a sense of collegiality and professionalism among teachers (Loucks-Horsley et al., 2010). However, in interview, the teachers could not often learn through others and with others since they had to do many paper work and their work schedules are not the same with each other.

Moreover, the research finding revealed that the teachers sometimes conducted individual or collaborative research among self-directed professional development practice According to interview results, teachers had never done individual or collaborative research. Conducting action research for solving immediate classroom instructional problems are common practices for teachers who are curious and interested in self-directed professional development (Ribeiro, 2002, cited in Simegn, 2014). Holly (1991) also notes that action research is a major form of professional development and central to the restructuring of schools (cited in Loucks-Horsley et al.,2010).

The teachers sometimes learned for their continuing self-directed professional development and change. According to interview results, teachers faced many difficulties such as lack of time and money, family responsibilities, inadequate teacher resources to learn for their continuing professional development. According to the quantitative finding, the teachers sometimes learned from sources of self-directed learning outside the professional schooling community. The interview results also indicated that the teachers sometimes read journals and others publications as they had many paper work and less free time.

The group of teachers who got B.Ed./M.Ed. degree learned from sources of self-directed learning outside the professional schooling community more than the group of teachers who got B.A./ B.Sc./M.A./M.Sc. degree. And, the group of teachers who were B.A./ B.Sc./M.A./M.Sc. degree holders learned with others more than the group of teachers who were B.Ed./M.Ed. degree holders. According to the interview results, the group of teachers who were B.Ed./M.Ed. degree holders more interested in students' socioeconomic backgrounds as they understand child psychology. Therefore, it can be said that the more teachers understand the child psychology, the more they are interested in students' background.

Huberman (1995) stated the stages of professional life of teachers as career entry, stabilization, diversification, put himself in question, serenity, conservatism, divestment. Teachers' experiences, confidence and professional needs may change throughout their career life. In this study, there were significant differences in such area as "*learning with others*", "*learning through self*" and "*sources of self-directed learning outside the professional schooling community*" according to their age and teaching service.

There was a moderately positive correlation between teachers' self-directed learning readiness and self-directed professional development practices. Knowles (1975) also pointed out self-directed learners will learn more, learn better, retain and make better of learning than do reactive learners.

Recommendations

Depending on the analysis of research findings, the following suggestions were presented as follow.

- As the readiness level of teachers for self-directed learning is high, teachers should practice more self-directed professional development activities by using their high self-directed learning readiness.

- As collegial relationship highly supports professional development of teachers, stakeholders and administrators should encourage collegial relationship among teachers.

- The administrators should create time for professional learning of teachers in school by carefully managing teachers' work schedules.

- Teachers should be encouraged to do action research in order to improve their teaching learning process by sharing necessary knowledge about research and providing required resources.

- Teachers should try to improve technological skills. They need to be informed online sources that can be learned for their professional development.

- Teachers should learn from books and by using internet when time schedule and place of trainings and courses are inconvenient for them.

- The stakeholders and administrators need to examine teachers' level of readiness for self-directed learning and create professional learning opportunities according to their readiness level.

- The stakeholders should provide adequate infrastructure and recruit enough teachers to reduce teachers' workloads which can consume time and energy and help them focus on their professional development practices.

Needs for Further Research

This study investigated the teachers from only Basic Education High Schools. As self-directed professional development practices are important for all teachers, additional studies should be conducted with teachers from both Primary Schools and Middle Schools. This study was conducted in Myeik Township. Future studies could be conducted in other geographical areas of Myanmar. Then, comparison could be made among different geographical areas in Myanmar. In this study, the relationship between self-directed learning readiness and self-directed professional development practices were investigated. Further studies should investigate factors affecting self-directed learning readiness and self-directed professional development practices and build models with these factors.

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A STUDY OF TEACHERS' COMMUNICATION SATISFACTION AND ORGANIZATIONAL COMMITMENT

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Abstract

The main purpose of this research was to study teachers' communication satisfaction and organizational commitment in Basic Education High Schools, Bogalay Township, Ayeyarwady Region. Quantitative and qualitative research methods were used. A total of 235 teachers from Basic Education High Schools in Bogalay Township were selected to participate by using simple random sampling method. Required data were collected using two questionnaires: Communication Satisfaction Questionnaire developed by Downs and Hazen (1977) and Teachers' Multidimensional Organizational Commitment Questionnaire developed by Celep (2000). The reliability coefficient (Cronbach α) were 0.95 and 0.91 respectively. For qualitative study, open-ended and interview questions were used. Interviews were conducted with twelve teachers. Almost all teachers in this study were highly satisfied with the communication practices in their schools. There were no significant differences in the level of teachers' communication satisfaction among teachers grouped by age and teaching service. There were significant differences among teachers grouped by educational qualification and position. Teachers in this study area highly committed to their schools. There were significant differences in teachers' organizational commitment among teachers grouped by age and teaching service. There were no significant differences among teachers grouped by educational qualification and position. There was a moderately significant positive relationship between teachers' communication satisfaction and organizational commitment (r= .467, *p*= .000)

Keywords: communication satisfaction, organizational commitment

Introduction

Today society is changing from isolation to collaboration. It is apparent in many organizations such as companies, hospitals, banks, and schools. Communication is a vital tool in many organizations to perform work effectively. It is important the communication practices in organizations to be effective and meet the goals of particular organizations. Effective communication practices in organizations may lead to employees' satisfaction and organizations' positive outcomes. Redding (1972) defined communication satisfaction as the overall satisfaction of an employee in his communication environment. Communication satisfaction has also been shown to influence an employee's level of job satisfaction, commitment, and work motivation by researches. Success of an organization also depends on the performance, effort and loyalty of its people. Schools are one of the most important organizations for the improvement of a nation. According to Lunenburg and Ornstein (2012), "communication in educational settings is the lifeblood of every school organization and it is a process that links the individual, the group, and the organization". Organizational commitment is one of the determining factors affecting the employees' sense of participation in the organization's activities and performance (Chelladurai, 2009). Commitment represents something beyond loyalty to an organization. Communication satisfaction may help teachers to increase the level of their job satisfaction and organizational commitment. This study will investigate teachers' communication satisfaction and organizational commitment.

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Objectives

General Objective

- To study teachers' communication satisfaction and teachers' organizational commitment

Specific Objectives

- To investigate the level of teachers' satisfaction on the communication practices in Basic Education High Schools
- To find out the variations of teachers' communication satisfaction in terms of their personal factors
- To investigate the level of teachers' organizational commitment in Basic Education High Schools
- To find out the variations of teachers' organizational commitment in terms of their personal factors
- To investigate the relationship between teachers' communication satisfaction and teachers' organizational commitment

Research Questions

- What is the level of teachers' satisfaction on the communication practices in Basic Education High Schools?
- Are there any variations in teachers' communication satisfaction in terms of their personal factors?
- What is the level of teachers' organizational commitment in Basic Education High Schools?
- Are there any variations in teachers' organizational commitment in terms of their personal factors?
- Is there any relationship between teachers' communication satisfaction and teachers' organizational commitment?

Limitations of the Study

This study is related to the teachers' levels of communication satisfaction and their organizational commitment in Basic Education High Schools, Bogalay Township, Ayeyarwady Region.

Theoretical Framework

In this study, teachers' communication satisfaction was investigated with eight factors of communication satisfaction defined by Downs and Hazen (1977).

Communication Climate: It involves communication on the organizational level as well as the personal level. It concerns with the extent to which communication in the school motivates and stimulates teachers to meet the school's goals.

Personal Feedback: It encompasses school members' perceptions pertaining to the extent to which their efforts are being recognized, whether they are being judged fairly by superiors, and whether their principal understands their problems.

Supervisory Communication: It involves upward or downward communication with the principal. It refers to the ability of the principal to listen and pay attention to teachers, as well as

the extent to which adequate guidance and instruction are given in relation to solving work related tasks.

Media Quality: It deals with the extent to which meetings are well organized and written directives are short and clear, and the degree to which the amount of communication is about right.

Organizational Perspective: It includes information about changes within the school, the financial standing of the school, and information about the policies, missions, visions, and goals of the school in general.

Organizational Integration: It encompasses the extent to which teachers perceive that the information they receive that enables them to complete their tasks as well as participate in work-related groups and units is sufficient and of acceptable quality.

Horizontal Communication: It relates to how school teachers perceive the quality of informal communication among peers or colleagues, and the extent to which it is free flowing. **Subordinate Communication**: It focuses teachers' satisfaction on upward and downward communication with students. This dimension measures students' responsiveness to downward communication, and the extent to which students initiate upward communication.

Organizational commitment was investigated by Celep (2000)'s teachers' multidimensional organizational commitment. The dimensions are as follows.

Commitment to Teaching Occupation: This factor is defined as teachers' attitudes towards their profession or vocation and the importance of teaching occupation in their total life.

Commitment to Teaching Work: It maintains the occupied level of a teacher's daily life. Commitment to teaching work is the physical and psychological occupied level of a teacher in his/her daily life.

Commitment to Work Group: It is defined as the teacher's sense of faithfulness and collaboration with other teachers and colleagues within a school.

Commitment to School: It is defined as teachers' belief and acceptance of the goals and values of the school, their efforts for actualization those goals and values, and their strong desires to keep up membership in the school.

Definitions of Key Terms

Communication satisfaction: Communication satisfaction is an individual's level of satisfaction with various aspects of communication in the organization (Downs & Hazen, 1977).

Organizational commitment: It is the relative strength of an individual's identification with and involvement in a particular organization (Mowday, Porter, & Steers, 1982).

Operational Definitions

Teachers' Communication Satisfaction

In this study, teachers' communication satisfaction refers to levels of teachers' satisfaction with the communication practices such as communication climate, personal feedback, supervisory communication, media quality, organizational perspective, organizational integration, horizontal communication and subordinate communication in their schools.

Teachers' level of communication satisfaction was examined by the mean values of teacher's responses to questionnaire rated on four point Likert scale consisting of 40 items. The level of each item was determined by the mean scores valued as: 1.00-2.00=low, 2.01-3.00=moderate, 3.01-4.00=high. The higher the mean value was, the greater the communication satisfaction level it had.

Teachers' Organizational Commitment

In this study, teachers' organizational commitment refers to the belief, attitude and practices of teachers toward teaching occupation, teaching work, work group and the school.

Teachers' organizational commitment was examined by the mean values of teacher's responses to questionnaire rated on four point Likert scale consisting of 26 items. Rating scores have been developed as: 1.00-2.00=low, 2.01-3.00=moderate, 3.01-4.00=high. The higher the mean value was, the greater the organizational commitment level it had.

Methodology

Quantitative methodology

Sample

235 teachers from selected schools in Bogalay Township were chosen by using simple random sampling method.

Instrumentation

To study teachers' communication satisfaction, Communication Satisfaction Questionnaire developed by Downs and Hazen (1977) was modified under the guidance of supervisor. It consisted of 40 items with eight dimensions. To study teachers' organizational commitment, teachers' multidimensional organizational commitment questionnaire developed by Celep (2000) was applied. There were 26 items with four dimensions. Each item of both questionnaires was rated on a four-point Likert scale. **Instrument Validity:** The instruments were developed under the guidance of the supervisor. Prior to pilot study, the questionnaires were reviewed by nine experts. Then, pilot study was conducted by the responses of 52 teachers who were not in the study area. **Instrument Reliability:** According to the results of pilot study, the reliability coefficient (Cronbach α) were 0.95 for Communication Satisfaction Questionnaire and 0.91 for Teachers' Multidimensional Organizational Commitment Questionnaire.

Procedure

Firstly, the related literature was reviewed and analyzed. Next, research instruments were constructed in accordance with the advice of experts and guidance of the supervisor. Then, pilot study was conducted to 52 teachers from No.4 Basic Education High School, Dalla. Data collection time was between 20th November, 2019 and 10th December, 2019.

Data Analysis

In quantitative study, Descriptive Statistics, Independent Samples *t* test, One-way ANOVA and Post Hoc Tukey HSD were used to analyze the data.

Qualitative Methodology

Open-ended questions and interview guides for both variables were developed by the researcher by reviewing related literature under the guidance of the supervisor. Twelve teachers

were participated in this study as interviewees. Interview was conducted during 2th January, 2020 and 8th January 2020. Responses were carefully categorized and interpreted.

Findings

Quantitative Findings

Findings for research question (1) are presented in Table 1.

Table 1 Mean Values and Standard Deviations of Variables for Teachers' Communication Satisfaction (N=235)

No.	Variable	Mean	SD	Remark
1.	Communication Climate	3.02	.27	High
2.	Personal Feedback	2.92	.30	Moderate
3.	Supervisory Communication	3.04	.41	High
4.	Media Quality	2.98	.37	Moderate
5.	Organizational Perspective	3.01	.32	High
6.	Organizational Integration	3.07	.36	High
7.	Horizontal Communication	3.16	.34	High
8.	Subordinate Communication	2.95	.34	Moderate
	Communication Satisfaction	**3.02**	**.26**	**High**

Scoring Direction - 1.00-2.00=Low 2.01-3.00=Moderate 3.01-4.00=High

The level of teachers' satisfaction on the communication practices was high.

Findings for research question (2) are revealed in the following tables.

Table 2 Mean Values and Standard Deviations of Teachers' Communication Satisfaction Grouped by their Age (N=235)

Variable	N	Age	Mean	SD	Remark
Teachers' Communication Satisfaction	38	20-30 years	3.02	.34	High
	80	31-40 years	3.00	.25	Moderate
	54	41-50 years	3.01	.24	High
	63	51 years and above	3.06	.26	High

Scoring Direction - 1.00-2.00=Low 2.01-3.00=Moderate 3.01-4.00=High

Table 3 One-Way ANOVA Results of Teachers' Communication Satisfaction Grouped by their Age

Variable		Sum of Squares	*df*	Mean Square	*F*	*p*
Teachers' Communication Satisfaction	Between Groups	.126	3	.042	.601	ns
	Within Groups	16.157	231	.070		
	Total	16.283	234			

*$p < .05$, **$< .01$, ***$p < .001$, ns=no significance

There was no significant difference between teachers grouped by their age.

Table 4   Mean Values and Standard Deviations of Teachers' Communication Satisfaction Grouped by their Teaching Service   (N=235)

Variable	N	Teaching Service	Mean	SD	Remark
Teachers' Communication Satisfaction	8	1-3 years	3.06	.38	High
	34	4-6 years	3.09	.31	High
	92	7-18 years	2.98	.23	Moderate
	55	19-30 years	3.01	.28	High
	46	31-40 years	3.06	.25	High

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 5   One-Way ANOVA Results of Teachers' Communication Satisfaction Grouped by their Teaching Service

Variable		Sum of Squares	df	Mean Square	F	p
Teachers' Communication Satisfaction	Between Groups	.419	4	.105	1.519	ns
	Within Groups	15.864	230	.069		
	Total	16.283	234			

*$p < .05$, **$<.01$, ***$p<.001$, ns=no significance

There was no significant difference between teachers grouped by their teaching service.

Table 6   Mean Values and Standard Deviations of Teachers' Communication Satisfaction Grouped by their Educational Qualification   (N=235)

Variable	N	Educational Qualification	Mean	SD	Remark
Teachers' Communication Satisfaction	167	BA; BSc; others	3.02	.26	High
	68	BEd; MEd	3.03	.27	High

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 7   Independent Samples *t* test Results of Teachers' Communication   Satisfaction Grouped by their Educational Qualification   (N=235)

Variable	N	Educational Qualification	Mean (SD)	t	df	p
Supervisory Communication	167	BA; BSc; others	3.00 (.408)	-2.289	233	.023*
	68	BEd; MEd	3.13 (.387)			

*$p < .05$, **$<.01$, ***$p<.001$, ns=no significance

By means of participants' educational qualification, BEd and MEd degree holders are more satisfied with supervisory communication than BA, BSc and other degree holders.

Table 8   Mean Values and Standard Deviations of Teachers' Communication Satisfaction Grouped by their Position   (N=235)

Variable	N	Position	Means	SD	Remark
Teachers' Communication Satisfaction	88	Senior Teacher	3.01	.27	High
	103	Junior Teacher	2.99	.24	Moderate
	44	Primary Teacher	3.11	.30	High

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 9   One-Way ANOVA Results of Teachers' Communication Satisfaction Grouped by their Position

Variable		Sum of Squares	*df*	Mean Square	*F*	*p*
Teachers' Communication Satisfaction	Between Groups	.438	2	.219	3.209	.042*
	Within Groups	15.845	232	.068		
	Total	16.283	234			

*p< .05, **<.01, ***p<.001, ns=no significance

There was significant difference with respect to their position.

Table 10 Tukey HSD Results of Teachers' Communication Satisfaction Grouped by their Position

Variable	(I) Position	(J) Position	Mean Difference (I-J)	*p*
Teachers' Communication Satisfaction	Junior Teacher	Primary Teacher	-.117*	.036*

*p< .05, **<.01, ***p<.001, ns=no significance

Primary teachers have a little more satisfaction on the communication practices in their schools than junior teachers.

Findings for research question (3) were presented in Table (11).

Table 11   Mean Values and Standard Deviations of Variables for Teachers' Organizational Commitment   (N=235)

No.	Variable	Mean	SD	Remark
1.	Commitment to Teaching Profession	3.34	.45	High
2.	Commitment to Teaching Work	3.26	.38	High
3.	Commitment to Work Team	3.17	.34	High
4.	Commitment to School	3.13	.34	High
	Teachers' Organizational Commitment	**3.23**	**.30**	**High**

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

By overall mean value (3.23), teachers have high level of organizational commitment.

Findings for research question (4) are revealed in the following tables.

Table 12 Mean Values and Standard Deviations of Teachers' Organizational Commitment Grouped by their Age   (N=235)

Variable	N	Age	Mean	SD	Remark
Teachers' Organizational Commitment	38	20-30 years	3.26	.33	High
	80	31-40 years	3.21	.31	High
	54	41-50 years	3.23	.29	High
	63	51 years and above	3.22	.29	High

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 13 One-Way ANOVA Results of Teachers' Organizational Commitment Grouped by their Age

Variable		Sum of Squares	df	Mean Squares	F	p
Commitment to Teaching Work	Between Groups	1.248	3	.416	2.994	.032*
	Within Groups	32.107	231	.139		
	Total	33.356	234			

*p< .05, **<.01, ***p<.001, ns=no significance

There was significant difference in teachers' commitment to teaching work according to their age.

Table 14 Tukey HSD Results of Teachers' Organizational Commitment Grouped by their Age

Variable	(I) Age	(J) Age	Mean Difference (I-J)	p
Commitment to Teaching Work	20-30 years	41-50 years	.206*	.047*
		51 years and above	.205*	.039*

*p< .05, **<.01, ***p<.001, ns=no significance

The teachers in the age group of (20-30) years are more committed to teaching work than the teachers in the age group of (41-50) years and (51 years and above).

Table 15 Mean Values and Standard Deviations of Teachers' Organizational Commitment Grouped by their Teaching Service   (N=235)

Variable	N	Teaching Service	Mean	SD	Remark
Teachers' Organizational Commitment	8	1-3 years	3.19	.28	High
	34	4-6 years	3.33	.36	High
	92	7-18 years	3.18	.29	High
	55	19-30 years	3.26	.29	High
	46	31-40 years	3.21	.29	High

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 16 One-Way ANOVA Results of Teachers' Organizational Commitment Grouped by their Teaching Service

Variable		Sum of Squares	df	Mean Squares	F	p
Commitment to Work Team	Between Groups	1.253	4	.313	2.842	.025*
	Within Groups	25.357	230	.110		
	Total	26.611	234			

*p< .05, **<.01, ***p<.001, ns=no significance

There was significant difference in commitment to work team between teachers grouped by their teaching service.

Table 17 Tukey HSD Results of Teachers' Organizational Commitment by their Teaching Service

Variable	(I) Teaching Service	(J) Teaching Service	Mean Difference (I-J)	*p*
Commitment to Work Team	4-6 years	7-18 years	.189*	.039*
		31-40 years	.207*	.048*

*p< .05, **<.01, ***p<.001, ns=no significance

       Teachers with the teaching service of (4-6 years) have a little more commitment to work team than those with the teaching service of (7-18 years) and (31-40 years).

Table 18 Mean Values and Standard Deviations of Teachers' Organizational Commitment Grouped by their Educational Qualification   (N=235)

Variable	N	Educational Qualification	Mean	SD	Remark
Teachers' Organizational Commitment	167	BA; BSc; others	3.24	.30	High
	68	BEd; MEd	3.18	.30	High

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 19 Independent Samples *t* test Results of Teachers' Organizational Commitment by their Educational Qualification   (N=235)

Variable	N	Educational Qualification	Mean (SD)	*t*	*df*	*p*
Teachers' Organizational Commitment	167	BA; BSc; others	3.24(.30)	1.411	233	ns
	68	BEd; MEd	3.18(.30)			

*p< .05, **<.01, ***p<.001, ns=no significance

       There was no significance difference between teachers grouped by qualification.

Table 20 Mean Values and Standard Deviations of Teachers' Organizational Commitment Grouped by their Position   (N=235)

Variable	N	Position	Mean	SD	Remark
Teachers' Organizational Commitment	88	Senior Teacher	3.19	.30	High
	103	Junior Teacher	3.23	.28	High
	44	Primary Teacher	3.29	.34	High

Scoring Direction - 1.00-2.00=Low   2.01-3.00=Moderate   3.01-4.00=High

Table 21 One-Way ANOVA Results of Teachers' Organizational Commitment Grouped by their Position

Variable		Sum of Squares	*df*	Mean Squares	*F*	*p*
Teachers' Organizational Commitment	Between Groups	.281	2	.140	1.539	ns
	Within Groups	21.168	232	.091		
	Total	21.449	234			

*p< .05, **<.01, ***p<.001, ns=no significance

       There was no significant difference between teachers grouped by their position.

       The result for research question (5) was described in Table (22).

Table 22 The Relationship between Teachers' Communication Satisfaction and Organizational Commitment

Variable	1	2
Communication Satisfaction	1	.467**
Organizational Commitment	.467**	1

**. Correlation is significant at the 0.01 level (2-tailed).

In Table (22), it was presented that there was a moderately significant positive relationship between communication satisfaction and organizational commitment (r= .467, *p*= .000).

Qualitative Findings

Findings for open-ended questions

Responses for communication satisfaction

Q1. Are there any communication practices in your school that you want to change? Please describe.

The answers include directives from headmaster (n=14, 5.96%), transparencies of school communication (n=12, 5.11%), information about students (n=21, 8.94%), communication between all school members (n=28, 11.91%), communication with the principal (n=37, 15.74%).

Q2. How does your principal manage delivering job-related information to all teachers to get?

Teachers responded that their principal manage delivering job-related information by meetings and order book (n=144, 61.28%), through class leaders, subject leaders and nearby colleagues (n=20, 8.51%), by taking speech twice a day (n=6,2.55%), through meetings, telephoning, direct personal contact (n=15, 6.38%), by any possible way at any time (n=13, 5.53%), by using social medias (n=15, 6.38%).

Q3. Is it important the right and accurate communication between teachers to run the work smoothly? How do you think?

Teachers responded that the right and accurate communication between teachers is important because it helps in accessing actuate job-related facts in time (n=48, 20.43%), in accomplishing works quickly and easily (n=16, 6.81%), in developing ideas and new teaching methods (n=77, 32.77%), in coordinating at any time (n=13, 5.53%), in saving times (n=27, 11.49%).

Responses for organizational commitment

Q1. What kinds of benefit can you get in your life if you continue your career permanently?

Teachers' answers included benefits such as fulfillment of life ambitions (n=18, 7.66%), getting opportunity to produce good citizens (n=9, 3.83%) and opportunity for carrying out benefits for their own life and other people's life (n=18, 7.66%), opportunity to fulfil the living cost of their family including children's education cost (n=15, 6.38%). Getting happiness, self-confidence, success and life assurance (n=75, 31.91%), improving work experiences and interpersonal skills (n=39, 16.6%), getting success and wealth in life (n=30, 12.77 %), and getting more meaningful life (n=14, 5.96%) are also included.

Q2. Do you think the teachers should do the best at their career whether their career choice is consistent or not with their talent? Why?

Teachers think every teacher should do the best at their career for dignity of oneself (n=24, 10.21%), because valuing the work is also valuing self (n=22, 9.36%), because a successful career can possess a successful life (n=26, 11.06%), because they try to keep his/her soul secure and save

and live without regret in life (n=35, 14.89%), because it is concerned with the future of our children and nation (n=60, 25.53%), it is better than dreaming the impossible things (n=17, 7.23%).

Q3. What are the facts that can improve teachers' organizational commitment?

The answers include the following factors such as warmth and unity of school members, fair administration of headmaster, school members who have responsibility and accountability, effective leader, responsive pupils and unity of colleagues, enough salary, free from living cost stress and being a healthy person, enough number of classrooms, support, facilities and teaching aids, consistency of teaching subjects and specialized subjects of teachers, pleasurable conditions of school organization, interests and contributions of local community, pupils who likes schooling and are outstanding in academic, cooperative school family, praising to teachers, giving certificate of appreciation to teachers who put great effort to work.

Findings for interview questions

According to the results of interview findings, all teachers satisfy the communication climate of their schools and they were happy for working in their schools according to their responses. They sometimes get feedback on their performance from their headmaster and colleagues in informal way. Some headmasters make round check at least once a week. Their headmaster frequently checks their paper work. As supervisory communication, some headmasters give right and accurate directives and some are weak in administration skill. As media quality, they want their schools' communication practices to be more effective. As organizational perspective, teachers want to get the changes of work plans accurately. Most of teachers get their job-related information and school visions in time. Almost all teachers satisfy communication skill of their colleagues. Teachers have little authority on students' discipline and sometimes have barriers.

According to their responses to interview questions, almost all teacher love and value teaching profession and they decided to do this career till their retirement. Even if this career was not their inclination, they value this job and try to perform their best. They care about both academic achievement and all-round development of pupils. Some always try to seek the better ways of teaching but some others do not want to put additional effort to make their teaching to be more successful. Most of all teachers have good relationship with their colleagues. A few numbers of teachers like to do only required relation with others. Local teachers were more likely to work only in respective school and teachers who are from other places were more likely to do transference. A few teachers want to transfer because they do not like the headmaster's administration and do not enjoy working conditions. Some others want to transfer because of their promotion.

Discussion

In this study, teachers satisfy the communication practices of their schools at high level. Also, the study done by Varona (1996) showed that school teachers have high level of communication satisfaction. Teachers in this study area also satisfy communication climate at high level. There are few causes of their dissatisfaction. Teachers' satisfaction on personal feedback is at moderate level. In Myanmar, there is no definite system for personal feedback of public school teachers. But, there is checking some paper work as formal ways. Sometimes, there is informal personal feedback from headmaster and colleagues. In the study of Varona (1996) personal feedback was the factor that emerged as the one with which school teachers tend to be the least satisfied.

Hersey and Blanchard (1993), stated that effective communication requires responses that demonstrating interest, understanding and concern for the follower, as well as for the followers'

needs and problems. According to qualitative findings, most of the teachers responded that their principals understand the difficulties they face and take into consideration their view points. Teachers in this study moderately satisfy media quality of their schools. According to qualitative findings, inadequacy of school facilities and school budget affects the quality and effectiveness of their meetings. In Myanmar, there was no access to electricity and electronic facilities in most of urban schools. And the arrangement of their meetings were sometimes unsystematic. So, the principals should try to improve school's media quality as much as possible.

Organizational perspective had the high level of satisfaction in this study. Schools are public organizations and there is no authority to reframe government policies and directives. Almost all teachers know the current Education System and the programs needed to be implemented. As organizational integration, teachers from almost all schools in this study area responded that there were the boards describing the policies and goals of the school, the accomplishment and/or failures of the school, school's financial standing and list of members of Parent Teacher Association, School Council, School Board of Discipline and so on in their principal's office.

According to Hersey and Blanchard (1993), horizontal communication forms a useful link in decision making for task coordination and provides emotional and social support to individual organizational members. According to qualitative findings, almost all teachers were satisfied with the communication skills of their colleagues. Teachers in this study satisfy subordinate communication at moderate level. This is because today students are weak in character and there are many changes in school punishment policy. Teachers have only a little authority to handle the students' misbehaviors and they have some difficulties in controlling students.

There was no significant difference in teachers' communication satisfaction between teachers grouped by their age. This finding was consistent with the finding of Ramirez (2010). There was also no significant difference in teachers' communication satisfaction between teachers grouped by their teaching service. This finding was consistent with the study of Alanezi (2011). Sharma (2015) also found that the staff members' mean scores on communication questionnaire were not related to the number of years in service.

In our country, teachers who are BEd or MEd degree holders are mostly senior teachers and they have more opportunity to participate in school management functions and there is a little more rapport between them and the principal. So they have more satisfaction on supervisory communication than the teachers who are BA, BSc or other degree holders. In overall teachers' communication satisfaction, primary teachers have a little more satisfaction than junior teachers. Primary teachers have only a little responsibility in school administrative functions so they face a little problematic situation and do not have much stress than senior and junior teachers.

Teachers from Basic Education High Schools, Bogalay Township have high level of overall organizational commitment. Among four dimensions, commitment to teaching profession has the highest mean value. Teachers in this study have high commitment to teaching occupation because they have responsibility to do the best at their current position. They think that teaching is the most valuable profession among other careers because it is important for the foundation of the development of every country. They are also proud of being a teacher. But, the teachers in this study area have the lowest mean values in commitment to school. This is because they wanted to make their promotions and professional development. But some teachers do not want to be still at their current schools because of principal's management, weaknesses local community support and unpleasant school climate. Weibo et al., (2010), also proposed that effective influence and attitudes of workers potentially played a larger role in employee retention. According to Chan et al. (2008), teacher efficacy was defined as a teacher's belief in their ability to produced desired student outcomes. Teachers in this study do not commit to their schools because of being inequivalent of

their effort and student achievement. According to Bogler and Somech (2004 cited in Abston, 2015), teachers' self-efficacy predicted organizational commitment and professional commitment.

The teachers in the age group of (20-30) years are more committed to teaching work than those in the age group of (41-50) years and (51 years and above). Butucha (2013) also found that young teachers have the high commitment to teaching in his study. Teachers with the teaching service of (4-6 years) have a little more commitment to work team than those with the teaching service of (7-18 years) and (31-40 years). Teachers with the teaching service of (4-6) years are mostly in the age group of 23-28 years. Cross (1981 cited in Rinaldi 2007), stated that the adults between the age of 23-28 have the following interests, new friendships, increased maturity, contemplation of marriage, exploration of different careers, contemplation of career goals.

There was no significant difference in teachers' organizational commitment with respect to their educational qualifications. Saad and Abd rabou (1016) also found that there is a statistically insignificant difference between organizational commitment mean score as regard participants' qualification. Whether they are senior or junior or primary teachers, all participants in this study love their profession and they satisfy and enjoy what they are doing. And they show greater reluctance to abandon it. Potvin (1991 cited in Varona, 1996) and Downs (1991 cited in Varona, 1996), concluded that no significant differences on commitment levels according to participants' position.

In this study, there was a moderately significant relationship between teachers' communication satisfaction and organizational commitment (r = .467, p = 0.01). Zhen (2013) and Alanezi (2011) had found that there is a significant positive relationship between communication satisfaction and organizational commitment.

It is important that schools have an effective communication system that can create easy flow of information and make changes accordingly. So, principals should nurture the school to be a place where information could easily flow and where the teachers satisfy the communication practices in the school. Principals should also promote teachers' commitment to teaching occupation, commitment to teaching work, commitment to work group and commitment to school, because teacher is the yard-stick that measures the achievement and aspirations of the nation.

Recommendations

Based on the results of this study, recommendations for principals were as follows.

Recommendations to improve Teachers' Communication Satisfaction

Principals should

- provide teachers with updated, relevant and timely information on issues that could affect their jobs.
- acknowledge teachers who are excellent in instructional works, not only by means of material rewards but also by means of verbal and or written recognition (i.e. certificate of appreciation).
- guide teachers in work-related problem solving by encouragement, directing and mentorship.
- observe, listen and pay attention to what teachers need and ask for.
- be taking into consideration all school members' viewpoints, background, mind-set, education level, etc.
- distribute messages through electronic and social media (i.e. e-mail, text messages, Facebook, Viber) effectively.

Recommendations to improve Teachers' Organizational Commitment

Principals should

- create warm and supportive workplace and promote teachers' enthusiasm by encouraging their performance by means of both material and verbal rewards.

- persuade all teachers to participate in appropriate role in all school activities.

- be interested in students' improvements and find the better ways to achieve better students' outcomes because it would help to improve teachers' effort to instructional activities.

- create cooperative relation with local community to get the school's overall well-being.

Need for Further Study

Replications of this study should be conducted in other townships or districts or states or regions extensively. Demographic data on teachers' gender and marital status and demographic characteristics of schools might also be supportive to the additional causes for teachers' communication satisfaction and organizational commitment.

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INTEGRATING EDUCATION FOR SUSTAINABLE DEVELOPMENT IN THE IMPLEMENTATION OF PRIMARY SCIENCE CURRICULUM

Khine Mar Oo[1], Aung Lin[2] and Lily Myint[3]

Abstract

The purpose of this research is to study the integrating Education for Sustainable Development (ESD) in the implementation of primary science curriculum. The research intends to investigate the ESD knowledge level and teaching practices of Grade 3 teachers. It also investigates the variations of teachers' practices on integrating ESD into science curriculum by primary teachers according to their demographic data. Both quantitative and qualitative research methods were used. Census sampling method was used: 110 Grade 3 teachers were selected as participants in Thabeikkyin Township, Mandalay Region. IPC values, independent sample *t* test, one way ANOVA, post hoc test by Tukey HSD were used for the data analysis. The level of teachers' overall ESD practices was moderate. There were statistically significant differences in integrating ESD in Grade 3 science curriculum grouped by class size. A qualitative follow up study was conducted through interviews and observation. The information obtained from the interviews and observations were complementary to the quantitative findings.

Keywords: Education for Sustainable Development (ESD), science curriculum

Introduction

Education for Sustainable Development is 'a vital means of implementation for sustainable development' of all of the Sustainable Development Goals (UN, 2017). ESD aims to transform society towards peace and sustainability through reorienting education and learning. Daw Aung San Suu Kyi (2018) said Myanmar Sustainable Development Plan (MSDP) is the expression of our national development vision that finds resonance in the global sustainable development. The MSDP envisions an education system in Myanmar that will support our country's human resources, our students, to develop their full potential. Thus, the role of the teacher is crucial in fostering students who make informed and conscious decisions for a sustainable future. Teachers can act as key change agents in transforming education and society. By integrating ESD in teacher education, learning methods and content can be reoriented towards sustainability.

General Objective

To study the integrating Education for Sustainable Development (ESD) in the implementation of primary science curriculum

Specific Objectives

1. To investigate the knowledge levels of primary teachers concerning with education for sustainable development

2. To investigate the teachers' practices on integrating Education for Sustainable Development (ESD) in the implementation of primary science curriculum

3. To investigate the variations of teachers' practices on integrating ESD into science curriculum by primary teachers according to their demographic data

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Research Questions

1. What are the knowledge levels of primary teachers concerning with education for sustainable development?

2. To what extent do the teachers practise to integrate Education for Sustainable Development (ESD) in the implementation of primary science curriculum?

3. Are there any significant variations of teachers' practices on integrating ESD into science curriculum implementation by primary teachers according to their demographic data?

Limitations of the Study

The following points show the scope of the study.

1. The study is geographically restricted to Thabeikkyin Township, Mandalay Region.

2. Participants of the study are Grade 3 science teachers from Basic Education schools and Monastic schools of Thabeikkyin Township.

3. This study is designed to investigate the integrating Education for Sustainable Development in the implementation of primary science curriculum.

Theoretical Framework

The theoretical framework was established based on the review of related literature. In this study teachers' ESD knowledge was investigated by (Health and Education Unit of the Commonwealth Secretariat [HEU], 2016) with the 17 SDGs clustered according to three main components of sustainable development: (1) social development, (2) environmental development, and (3) economic development which sit below the overarching theme of peace, justice, equity and gender. This is all underpinned by working in partnership on a global scale.

These dimensions of Education for Sustainable Development are described in details as follows.

Social Development: In the Grade 3 science curriculum, SDG 2 and 3 are closely related to social development. According to SDG 2 (end hunger), teachers should contribute food security through several components such as food availability (e.g. through growing produce in school gardens, proper use of food (e.g. sanitation, hygiene, and nutrition education), and as a safety net, as the provision of school meals helps to keep children in school and thus helps families to educate their children and protect their food security in times of crisis. School meals support children's development so that they become healthy and productive adults, breaking cycles of hunger and poverty. Education and food security interact in multiple, mutually reinforcing ways. For instance, food security improves learning outcomes by resulting in better cognitive function and increased school attendance. And then, SDG 3 (good health and well-being), learning environments can foster academic to healthy transitions. Teachers should practices that influence healthy choices such as the availability of healthy foods. Schools and learning environments that promote health can positively influence learners' knowledge of and attitudes towards a range of health and social issues, and improving not only health but also educational outcomes. Therefore, Grade 3 science teachers should integrate these concepts into science curriculum for social develop of the children.

Environmental Development: In the Grade 3 science curriculum, teachers should integrate the SDG 6 and 13 to science lessons for environmental development of children. To enhance environmental development, teachers need to teach about principle of water abundance and water scarcity, potential effects of dirty water, safe handling of drinking water, and responsible and sustainable consumption. Besides, teacher should understand such as the preparedness for natural

disasters (e.g. floods, tsunami, earthquakes), the causes and effects of climate change, and the impacts of human activities and consequences of personal actions to relate with science curriculum.

***Economic Development*:** In the Grade 3 science curriculum, the SDG 11(sustainable cities and community) and 12 (responsible consumption and production) are mainly concern with the children. Therefore, teachers should teach natural cycles through field trips and gardening, and the importance of sustaining the natural environment. Besides, teachers need to teach about sustainable and unsustainable consumption, including resource use, waste generation and disposal, and environmental and health impacts. In the same way, teachers should understand and practice the "4Rs; reduce, reuse, recycle and recover". They should calculate and compare Ecological Footprints. Furthermore, teachers need to teach distinguishing between and analyzing consumer impacts and risks of different choices (e.g. discovering what products are made of, decomposition times, where waste goes). And then, consumer awareness and commitment to sustainable choices are also important for children. Thus, teachers should relate these concepts into science lessons for economic development.

Moreover, teachers must have thorough knowledge about early childhood development to achieve science curriculum implementation.

According to Jean Paget's cognitive theory, grade 3 students are at concrete operational stage (age 7 to 11) of cognitive development. In the concrete operational stage, children are able to think more logically, but only in practical ways. They can now understand that redistributing material does not affect its mass, number, volume or length. If they have items to manipulate and they have the ability to take the perspective of another person.

According to Urie Bronfenbrenner's sociocultural theories, which emphasis the impact of environment on development. It consists of five systems nested within each other and is represented graphically as concentric circles with the children in the middle circle. These systems are dynamic and interact with each other to shape each unique individual such as personality, values, beliefs, preferences and behavior. The five systems are microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Its implication for teachers of young children include the importance of understanding children within the context of their families and communities, the need to work with families as parents, and the need to advocate for government policies that support families of young children and optimize children's development.

In implementing grade 3 science curriculum, teachers should know the primary science curriculum well. The grade 3 science curriculum consists of 5 learning areas. They are Living Things, Matter, Energy, and Earth and Space, and Environment.

Moreover, grade 3 science teachers should know and practice the following factors in their teaching to be effective.

In lesson preparation, teachers should prepare to describe key concept, learning objectives and outcomes for ESD. Likewise, they need to prepare teaching methods and learning environment for sustainable development. It is equally important that teachers should create low cost no cost teaching aids from their locality. Moreover, teachers should prepare to integrate ESD concept into science lesson plans of Grade 3 Teachers Training Manual, 2019.

In teaching science, teachers should use ESD pedagogies to integrate ESD concept into science curriculum. Pedagogies associated with ESD stimulate children to ask questions, analyse, think critically and make decisions. Such pedagogies move from teacher-centered to student-centered lessons and from rote memorization to participatory learning.

Moreover, teachers should integrate ESD pedagogies that encourage critical thinking, social critique, and analyses of local contexts in science teaching. Thus, they should use teaching

techniques such as simulations, class discussions, issue analysis, storytelling, problem-base and project-base. Therefore, science teachers should know that in ESD, which differs from the traditional teaching which is one-way knowledge transmission from teachers to children. It promotes not accepting things easily, but rather to see and interpret them from more than one perspective.

Moreover, science teachers should have the ESD competencies, which refer to the amalgam of knowledge, skills, values and attitudes. According to Teacher Educators Training Manual (2019): there are eleven indicative lists of ESD competencies as follow:

- Acquiring knowledge
- Solving issues, problems, conflicts
- Thinking critically
- Communicating and negotiating
- Dealing with systems
- Facing the future
- Reflecting on values
- Participating and collaborating
- Changing perspectives
- Thinking and acting inclusively
- Showing solidarity and responsibility

If science teachers have these ESD competencies, the learners will get acquire knowledge, skills, values and attitudes at the end of the successful learning process.

Definition of Key Terms

Education for Sustainable Development (ESD)

Education for sustainable development is an approach to education that prepares students to make informed decisions and responsible actions to protect the environment for present and future generations. It is also about learning how to protect our culture, promote sustainable economic practices, and build a tolerant society. (UNESCO Yangon, 2017).

Operational Definition

In this study, Integrating Education for Sustainable Development into Grade 3 science curriculum refers to the combination of sustainability issues into science curriculum is an important step to develop the learners' knowledge, skills, values and attitude required to promote a sustainable future.

Teacher practices on integrating ESD into Grade 3 science curriculum were examined by the mean values of teachers' responses from Basic Education Schools and Monastic Schools to questionnaire rated on 51 items. The more the mean values, the higher the extent of teachers' practices on integrating ESD into science curriculum.

Methodology

Both quantitative and qualitative methods were used in this study.

(i) Sample

There are one hundred and ten Grade 3 teachers in ninety-four Basic Education Schools and nine Monastic Schools in Thabeikkyin Township, Mandalay Region. By using census survey method, all Grade 3 teachers were chosen as the participants in this study. Among one hundred and three schools in Thabeikkyin Township, six schools (three highest mean score and three lowest mean score) were selected for classroom observation and interview. From selected schools, six Grade 3 teachers were also selected as interviewers and to observe their teaching practices.

(ii) Instrumentation

In this study, questionnaires were used to collect the data for Education for Sustainable Development (ESD) knowledge and practices levels of Grade 3 teachers in implementing science curriculum. It was divided into three parts. The first one included demographic data concerning gender, age, qualification, external training, teaching service, types of schools and class size. The second part included thirteen true or false items and fourteen multiple choice items for teachers' ESD knowledge about Grade 3 children development based on the review of related literature.

The third one was also developed based on review of related literature. This part was also divided into three parts; lesson preparing, teaching and assessing science curriculum. It consisted of 51 items which were related on five-point Likert scales (1= never, 2= seldom, 3= sometimes, 4= often, 5= always). Observation checklist and interview questions were used in qualitative study.

(iii) Procedure

Firstly, relevant literature was obtained from various valid resources. After that, in order to get the required data, the instrument was constructed under the guidance of the supervisor. Expert validity of the questionnaire was obtained from nine experienced educators from Department of Educational Theory, Yangon University of Education. Pilot testing was conducted on the first week of October. The samples for pilot testing were 50 Grade 3 teachers from Thingangyun Township, Yangon Region. After the pilot study, the reliability analysis of the instrument was done by calculating the internal consistency coefficient. The internal consistency (Cronbach's Alpha) of Grade 3 teachers' integrating ESD in the implementation of science curriculum questionnaire was 0.97.

Secondly, the permission from the Thabeikkyin Township Education Officer was taken to do research. The questionnaires were distributed to Basic Education Schools on the first week of November, 2019. Distributed questionnaires were recollected by the researcher after one week later. The respondent rate was 100%. Classroom observation and interview was conducted with six teachers from six selected schools on second week of January, 2020.

Data Analysis

Descriptive Statistics, Independent Samples *t* test, One-way ANOVA, Post Hoc Tukey HSD and Item Percent Correct (IPC) were used for quantitative data analysis. The qualitative data analysis is based on categorizing and interpreting classroom observation and interview.

Findings

Quantitative Findings

Findings for research question (1) are presented in Table 1.

Q.1   What are the knowledge levels of primary teachers concerning with education for sustainable development?

Table 1   Number and Percentage of Teachers' Levels of ESD Knowledge Integrating into Grade 3 Science Curriculum   (N=110)

Scoring Range	No. of Students	Remark
<50%	23 (21%)	Below Satisfactory Level
50%-74%	86(78%)	Satisfactory Level
≥75%	1 (1%)	Above Satisfactory Level

Scoring range: <50%= Below Satisfactory   50%-74% =Satisfactory   ≥75%= Above Satisfactory

Findings for research question (2) are presented in Table 2.

Q.2 What are the practices levels of primary teachers concerning with education for sustainable development?

Table 2   Mean Values and Standard Deviations of Teachers' ESD Practices in the Implementation of Grade 3 Science Curriculum   (N=110)

No.	Variable	Mean	SD	Remark	Level
1	Preparing science lessons	3.41	.69	Sometimes	Moderate
2.	Knowledge	3.05	.72	Sometimes	Moderate
	Skills	2.98	.71	Sometimes	Moderate
	Values	3.11	.73	Sometimes	Moderate
	Teaching	3.04	.72	Sometimes	Moderate
3.	Assessing science lessons	3.70	.84	Often	High
	Integrating ESD in science curriculum	3.39	.66	Sometimes	Moderate

Q.3 Are there any significant variations in science curriculum implementation by primary teachers according to their demographic data?

Table 3 Mean Values and Standard Deviations of Teachers' ESD Practices in Grade 3 Science Curriculum Grouped by Class Size   (N=110)

Variable	N	Class Size	Mean	SD	Remark
Preparing science lessons	49	<30	3.41	.10	Sometimes
	26	30-45	3.48	.14	Sometimes
	27	46-60	3.25	.12	Sometimes
	8	>60	3.71	.25	Often
Teaching	49	<30	2.97	.09	Sometimes
	26	30-45	3.22	.15	Sometimes
	27	46-60	2.87	.12	Sometimes
	8	>60	3.53	.13	Often
Assessing science lessons	49	<30	3.60	.13	Often
	26	30-45	4.05	.14	Often
	27	46-60	3.42	.15	Sometimes
	8	>60	4.15	.16	Often
Integrating ESD in science curriculum	49	<30	3.33	.09	Sometimes
	26	30-45	3.58	.11	Often
	27	46-60	3.18	.11	Sometimes
	8	>60	3.80	.16	Often

Scoring Direction: 1.00-1.49=Never   1.50-2.49=Seldom   2.50-3.49=Sometimes   3.50-4.49=Often
4.50-5.00=Always

Table 4   One-way ANOVA Result Showing Teachers' Integrating ESD in Grade 3 Science Curriculum Grouped by Class Size   (N=110)

Variable	Class Size	Sum of Squares	*df*	Mean Square	*F*	*p*
Preparing science lessons	Between Groups	1.507	3	.502	1.069	ns
	Within Groups	49.806	106	.470		
	Total	51.313	109			
Teaching	Between Groups	3.785	3	1.262	2.941	.036*
	Within Groups	45.469	106	.429		
	Total	49.254	109			
Assessing science lessons	Between Groups	7.388	3	2.463	3.710	.014*
	Within Groups	70.355	106	.664		
	Total	77.743	109			
Integrating ESD in science curriculum	Between Groups	3.661	3	1.220	2.994	.034*
	Within Groups	43.201	106	.408		
	Total	46.862	109			

Note: ns = no significance, *$p<.05$*

According to One-way ANOVA Result from table 4.26, it was significant difference in teachers' teaching, assessing science lessons and integrating ESD in science curriculum (*F*=2.9, *p*=.03) among groups of teachers classified by their class size.

Table 5 Tukey HSD Results of Teachers' Integrating ESD in Grade 3 Science Curriculum Grouped by Class Size   (N=110)

Dependent Variable	(I)Class Size	(J)Class Size	Mean Difference	*p*
Assessing science lessons	30-45	<30	.44	ns
		46-60	.63	.029
		>60	-.09	ns

Note: ns = no significance, **p<.05*

According to the table 5, post hoc Tukey HSD results indicate there is a significant difference between class size, 30-45 and 46-60 in the area of assessing science lessons.

Qualitative Findings

To gather qualitative data, observation checklist and interview questions were used. In order to find out the Integrating Education for Sustainable Development (ESD) in the implementation of Grade 3 science curriculum, six teachers from six selected schools were interviewed and their teaching practices were observed. Findings from observation of each teacher from six schools were presented.

Results from Classroom Observation

The classroom observation was conducted by using observation checklist. It includes three portions: (1) Lesson Preparation, (2) Teaching for ESD Competencies (Knowledge, Skills, and Values), and (3) Assessing in teaching Grade 3 science curriculum.

(i) Lesson Preparation

Researcher observed about the Integrating Education for Sustainable Development (ESD) in the lesson preparation of Grade 3 science teachers. There were differences between teachers (Group A) who had somewhat level of ESD knowledge and practices and teachers (Group B) who had a little level of ESD knowledge and practices. In the observations, all of teachers (n=6, 100%) prepared science lessons according to 5-steps format which was set up from Ministry of Education (MOE), Myanmar. However, teachers (n=2, 33%) from (Group A) prepared and related the environmental, social and economic with the science lessons for sustainable development.

(ii) Teaching for ESD Competencies

Researcher observed the Integrating Education for Sustainable Development (ESD) of teachers in Grade 3 science teaching. The clusters of teaching competences which include the Knowledge, Skills, and Values that children should acquire in relation to each of the 17 SDGs. Moreover, the indicative list of ESD competencies from Teachers Educators Training Manual was used in classroom observation.

The first level of learning outcomes for **Knowledge**, teachers (n=3, 50%) from (Group A) collected data and information from different sources and with the help of various tools; to construct knowledge. Moreover, they (n=2, 33%) from (Group A) used low cost no cost teaching aids (such as water bottle, oil bottle, empty bottle, scale) and real objects (such as banana, orange, egg, rice), teacher (n=1, 17%)) from (Group A) demonstrated to teach the directions (east, west, south, and north). Teachers (n=3, 50%) from (Group B) introduced with the topic, however, they didn't describe key concept and didn't use low cost no cost teaching aids to construct knowledge.

Skills, the second level of learning outcomes, teachers (n=3, 50%) from (Group A) used by taking note on the blackboard, experimental method, group discussion and lecture method. For example, teacher (n=1, 17%) carried out an experiment about "weight and volume", and teacher (n=1, 17%)

related the solving of issues with the problems of local (e.g. causes of soil erosion and deforestation at local), and teacher (n=1, 17%) discussed to analyze "nutritious food types". Although taking note on the blackboard, group discussion and lecture method were used by teachers (n=3, 50%) from (Group B), there were not observed the ability to contribute to the solving of issues, problems, and conflicts at the local.

The highest level of learning outcomes in **Values and Attitudes**, teachers from Group (A) and (B) conducted the ability to reflect upon diverse perspective and to cooperate with people regardless of their gender, religion, ethnic, cognitive and physical precondition. It was not found that ability to show solidarity for others suffering from inequity and to share the responsibility for ecological risks from teachers (n=6, 100%). Moreover, the competencies such as "facing the future" and "reflecting on values" were not found.

(iii) Assessing Science Curriculum

In assessing science curriculum, all teachers from group (A) and (B) used "Item Type" to assess students' knowledge and "Rubric Type" to assess student' practices. It was found that group (A) teachers evaluated students' achievement by using team building, taking turns and sharing fairly more than group (B) teachers. Student portfolios assessment such as "Rubric Type" was observed, however, it is not enough to cover the curricular objectives (e.g. assignment and practical were not observed about sustainable development).

Table 6 Results from Observation Checklist of Integrating Education for Sustainable Development (ESD) in the Science Curriculum

No	Group (A)	Group (B)
1	Teachers from group (A) and (B) prepared science lessons according to 5-steps format.	
2	There were describing key concept, content, learning objectives and outcomes.	There were introducing with the topic and describing learning objectives.
3	There were relating with environmental, economic, social and science lessons for sustainable development.	There were not relating with environmental, social, economic and science lessons for sustainable development.
4	Low cost no cost teaching aids were used.	Taking note on the black board was observed.
5	Group discussion, experimental and lecture method were used.	Group discussion and lecture method were used.
6	System thinking was not observed.	
7	There was the ability to relate the solving of issues with the problems of locality.	There was not the ability to contribute to the solving of issues, problems, and conflicts at the local.
8	There were communicating and negotiating effectively in spoken and written languages.	There were not communicating and negotiating effectively in spoken and written languages.
9	The ability to participate in suitable transformation processes and responsibly collaborate with others was not observed.	
10	The ability to cooperate with people regardless of their gender, religion, ethnic, cognitive, physical and social precondition.	
11	The ability to evaluate multiple future cases and to link innovations with sustainable development goals was not observed.	
12	The ability to reflect upon diverse perspective was observed.	
13	Team building, taking turns and sharing fairly, and understand that groups of students were observed.	Taking turns and sharing was not observed.
14	Assessing students' knowledge by Item Type was observed.	
15	Rubric Type was using to measure students' practices but it is not enough to achieve curricular objectives and sustainable development.	

The Result of Interview

　　　　In order to find out the Integrating Education for Sustainable Development (ESD) in the implementation of Grade 3 science curriculum, six teachers from six selected schools were interviewed. Findings from each teacher from six schools were presented.

Question (1) How do you integrate ESD in preparing science curriculum?

　　　　Researcher investigated about teachers' integrating ESD in preparing grade 3 science curriculum. All teachers (n=6, 100%) said there were no difficulties in lesson planning because lesson plans were presented in Grade 3 teacher's guide. Therefore, they teach according to teacher's guide and they did not need to prepare lesson plans. However, they (n=6, 100%) did not prepare to integrate ESD into science curriculum.

Question (2) Which ESD concept should be integrated in teaching science lessons?

Researcher investigated about teachers' integrating ESD in teaching Grade 3 science lessons. In chapter 1, teachers (n=2, 33%) said that nutrition education was needed   to integrate ESD in three types of food group. Teachers (n=4, 67%) said that chapter 1 would relate social dimension of ESD and teachers (n=2, 33%) related with environmental education.

In chapter 2, teacher (n=3, 50%) said that deforestation would affect weather and climate change. Teachers (n=6, 100%) said chapter 2 would relate with environmental dimension of ESD. Teacher (n=1, 17%) said this chapter would relate with environmental, social and economic.

In chapter 3, noise pollution was integrated in this chapter by teacher (n=1, 17%), the chapter about "light and shadow" and "formation of sound" was difficult to integrate ESD. Teacher (n=1, 17%) said that children were difficulties to understand that 'sound cannot travel in vacuum'. All teachers said that this chapter would relate with social dimension of ESD.

In chapter 4, teacher (n=5, 83%) said to experiment "three types of soil" was difficult. It was not observed all three types of soil in their environment. Teacher (n=1, 17%) said causes of soil erosion and its affect was conducted in this chapter. Teachers (n=6, 100%) said "types of soil" would relate with environmental dimension of ESD.

In chapter 5, "teaching directions: east, west, south and north" by the sun and compass was not easy to integrate ESD. All teachers (n=6, 100%) confused to integrate ESD. They could not make decision to relate this chapter with environmental, social and economic. Teachers (n=5, 83%) were having difficulties because of teaching aids such as magnet bars and compass.

In chapter 6, all teachers (n=6, 100%) conducted "Properties of Matter: floating and sinking" and "Weight and Volume" by doing experiment. This chapter included many science process skills but less ESD concept. Teachers (n= 4, 67%) said to integrate ESD they would relate this chapter with social and teachers (n=2, 33%) relate with economic dimension.

Question (3) What types of assessment are used to integrate ESD?

Researcher investigated about teachers' integrating ESD in assessing Grade 3 science lessons. All teachers (n=6, 100%) used "Item Type" to assess students' knowledge and "Rubric Type" to assess student' practices. However, all teachers' Rubric Type was same with each other. They did not relate students' assignment with local problems such as environmental, social and economic.

Question (4) Are there any difficulty in implementing new science curriculum?

Researcher investigated about teachers' difficulties in implementing new science curriculum. Teachers (n=3, 50%) said that the class size is too large to do activities for science lesson. So, they found that in larger classroom, students were less engaged. Teachers (n=2, 33%) their schools do not have sufficient numbers of teachers. Hence, the teacher shortage affects poor-quality teaching. Moreover, the local Parent Teacher Association is weak to promote the welfare of children and school. Teacher (n=1, 17%) said that she less attention in teaching-learning activities because of her young daughter.

Question (5) What is your opinion about grade 3 science curriculum?

Researcher investigated about teachers' opinion on Grade 3 science curriculum. All teachers (n=6, 100%) said that the content of Grade 3 new science curriculum is very interesting. However, teachers (n=2, 33%) said that some lessons were not engagement in their locality and it

was difficult to get teaching aids (e.g. types of soil). In Grade 3 science lessons, some contents were difficult to understand by the students (e.g. sound cannot travel in vacuum). Teacher (n=1, 17%) stated that taking shadow pictures was a difficult activity. Moreover, teacher (n=1, 17%) discussed that "3Rs: Reduce, Reuse, and Recycle" should be included in Grade 3 science curriculum. Besides, consumer rights and nutrition education activities were also essential for Grade 3 children and should be integrated in the curriculum, teacher (n=1, 17%).

Conclusion

Discussion

In this study, the level of teachers' Education for Sustainable Development (ESD) knowledge concerning with Grade 3 children development, the participant teachers had different levels of knowledge. One teacher was above satisfactory level, eighty-six teachers at satisfactory level and twenty-three teachers at below satisfactory level. Among the three dimensions of ESD knowledge, environmental knowledge was the lowest for teachers. They had difficulties in understanding environmental knowledge such as cause and effect of climate changes, sources of water pollution and air pollution. Most teachers had ESD knowledge of Grade 3 children development. Besides, according to qualitative findings, teachers need to study ESD knowledge because of their locality. Thabeikkyin Township is a gold mining region. In this region, there are various impacts of gold mining on environment such as soil pollution, water pollution, air pollution and noise pollution were observed. So, teachers need ESD knowledge to teach their children about their environment, social and economic for sustainability.

In implementing science curriculum, Grade 3 teachers sometimes practiced in planning for integration of Education for Sustainable Development (ESD) in science lessons. They had sometimes practiced in studying science magazine, books, e-books, and watching educational videos for extended knowledge. In the observations, all of teachers (n=6) prepared science lessons according to 5-steps format which was set up from Ministry of Education (MOE), Myanmar. However, teachers needed to prepare and relate the environmental, social and economic with the science lessons for sustainable development.

In teaching science curriculum, Grade 3 teachers sometimes practiced in teaching for integration of Education for Sustainable Development (ESD) in science lessons.

The clusters of teaching competences which include the Knowledge, Skills, and Values that children should acquire in relation to each of the 17 SDGs. Teachers had sometimes practiced to achieve the learning outcomes of knowledge, skills and value level. They seldom practiced in distinguishing between consumer impacts and risks of different choices, teaching with photos and real objects about recyclable and reusable materials, and the ability to read labels and buying recycle materials. Besides, they also seldom practiced in celebrating science fair and experiment for science activities. To be effective teaching-learning situation, there should be celebrating activities and using low cost no cost teaching aids, and student-center teaching methods should be used in the classroom.

In assessing science curriculum, all teachers used "Item Type" to assess students' knowledge and "Rubric Type" to assess students' practices. It was found that teachers seldom evaluated students' achievement by taking turns and sharing fairly, and understanding that groups of students. Student portfolios assessment such as "Rubric Type" was observed, however, it is not enough to cover the curricular objectives and sustainable development.

According to the results based on grouped by class size, the mean values of above sixty were higher than that of class sizes. Results of One-way ANOVA showed that there were

significant differences in Grade 3 science teaching and assessing science lessons. The largest class size was the highest mean value. It was certain that the large class size of teachers' integrating ESD into science curriculum were higher than that of teachers. This might account for why the effects of class size on teaching are not obviously affecting student achievements (Blatchford et al. 2004). Moreover, the previous research (Evertson & Randolph, 1989), teachers do not always adapt their teaching to take advantage of small classes.

The findings showed that Grade 3 science teachers' ESD knowledge level was satisfactory and then teaching practices was also moderate level. It is certain that teachers could integrate ESD concept into science lessons although they had nothing ESD training. San Aye (2018), indicated that teachers could integrate ESD concepts in the science lessons. The result of the research showed that in order to address ESD, the teachers need to be fully prepared. This will be more easily achieved by teachers if, in addition to having positive attitude towards ESD, they fully understand various aspects of ESD concept and possess teaching skills in integrating ESD concept in their teaching subjects. Therefore, people need basic knowledge from the natural sciences, social sciences, and humanities to understand the principles of sustainable development.

Recommendations

- It is essentially important that preparing science lessons to relate with environmental, economic, and social for sustainable development by teachers.
- It is important that teachers should create low cost no cost teaching aids for ESD lesson plan.
- It is necessary to provide workshops or training for teachers to develop ESD concept.
- There is a need to study such as Self-Study of Teacher Education Practices (S-STEP) for ESD.
- It is crucial that teacher competency framework should be implemented in the professional universities.
- ESD is indispensable for integrating into all levels and types of education and across the curriculum by policy makers.
- It is unavoidable important that to review, develop and strengthen the curriculum to ensure ESD feature at all levels of the education system by Ministries of Education and curriculum developers.
- Government is absolutely vital to support non-formal education opportunities provided by communities, civil society and the media to convey information about ESD.

Needs for Further Research

The study contributed to investigate integrating ESD in the implementation of Grade 3 science curriculum in Thabeikkyin Township, Mandalay Region. Therefore, the result cannot be generalized to any wider population. It is necessary to investigate integrating ESD concept into other subjects and another State and Region of Myanmar.

Acknowledgements

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AN INVESTIGATION INTO PRINCIPALS' LEADERSHIP SOFT SKILLS PRACTICES AMONG BASIC EDUCATION HIGH SCHOOLS

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Abstract

The aim of the study was to study principals' leadership soft skills practices in Basic Education High Schools of Mingalar Taung Nyunt Township, Yangon Region. Quantitative and qualitative methods were used in this study. The target population was all principals and teachers from Basic Education High Schools in Mingalar Taung Nyunt Township. Simple random sampling method was used. A total of 4 principals and 119 teachers in four High Schools were sampled. For quantitative study, questionnaires consisted of 40 items and were rated in a five point Likert Scale. For qualitative study, interview was conducted to 4 principals with 5 interview questions. Descriptive Statistics and Independent Samples *t* Test were used to analyze the data in this study. In studying the principals' leadership soft skills practices, it was found that the principals have moderately high level of leadership soft skills according to teachers' perceptions (M=3.55, SD=.27). Then, there was no significant difference of teachers' perceptions on principals' leadership soft skills according to principals' personal factors as gender, services and qualifications and school related factors as school size, school grade and matriculation pass rate by the results of Independent Samples *t* Test. In qualitative findings, the informations from interview questions were complementary to the quantitative findings.

 Keywords: Soft Skills, Leadership Soft Skills

Introduction

Education is seen as the backbone of development in any nation. Education has been seen as a tool for building a united, independent, wealthy and egalitarian society that can maintain its' tradition and values. The school principals and teachers are the key personnel to facilitate the necessary skills of 21st century demands for students through the teaching learning process. Educational administrators and school principals in current situation have to develop their soft skills while managing human resource and developing staff and teachers so that they committed themselves professionally for the organizational success. The power of soft skills cannot be neglected by educational administrators soft skills are the motivator in encouraging collaboration as a shared learning process and continuous development in order to achieve their school goal.

Significance of the Study

Soft skills can be defined as that related to human skills focusing on the competency in working with other individuals (Wilaipan, 2013). Wilaipan (2013) stated that leadership soft skills for instance thinking skills, interpersonal skills and motivation skills are those basic factors for followers to perform better in their workplace.

As a result educational administrators and principals need to complement both hard and soft skills in order to accomplish organizational goal. In other word, educational administrators not only use their knowledge, modern science, and management skills into many school management process but also participating, focusing on communication skills to develop organizational awareness and continuous improvement.

For decades, the focus of management and leadership was on the so-called hard skills. This means that technical skills are necessary and emphasized, so as to perform effectively within the organization. According to Buhler (2001), nowadays, employers need leaders with critical soft

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skills. These soft skills are more generic in nature and are the key skills to effective performance across all job categories.

In order to realize the aspiration of education, school leaders as a key person should lead the school so that it will function more properly and effectively to enhance the success of the school. However, the issue of leadership weakness among the school leaders is not a new issue. There are still a number of less-skilled school leaders due to lack of soft skills of the individual leaders (Lokman & Hairul Anuar,2011, cited in Tang, K.N, 2012). Educational administration and leadership is the process of functioning with human resources to produce qualified and all round development of human products in teaching learning process. As people, they possess complex needs, strengths, weaknesses, biases, and not to mention, fears.

Nowadays, school principals and teachers try to get high achievement rate and academic and subject mastery for getting high marks in their respective subjects both science and art. Teachers emphasized hard skills and they missed 21st century demand for soft skills integration in teaching learning situations. So, today, many students have deficiency of communication skills, critical thinking skills, creativity and valuable soft skills in learning process. And then the relation between school principals and teacher focus on the completion of tasks and duties and some principals do not have sufficient time to create enjoyable mutual relationship because of numerous workloads. In that time, school principals have to emphasize the integration of soft skills in their management process for organizational effectiveness.

Therefore, this study aims to investigate leadership soft skill practices among Basic Education High Schools in Mingalar Taung Nyunt Township, Yangon region.

Research Objectives

(a) General objective

- To investigate the leadership soft skills practices among Basic Education High School Principals

(b) Specific Objectives

1. To study the level of teachers' perceptions of principals' leadership soft skill practices in Basic Education High Schools
2. To study the significant difference in teachers' perceptions of principals' leadership soft skill practices according to principals' personal factors
3. To study the significant difference in teachers' perceptions of principals' leadership soft skill practices according to school related factors.

Research Questions

This study is focused on the following research questions.

1. To what extent do the teachers perceive their principals' leadership soft skill practices in Basic Education High Schools?
2. Is there any significant difference in the teachers' perceptions of principals' leadership soft skill practices according to principals' personal factors?
3. Is there any significant difference in the teachers' perceptions of principals' leadership soft skill practices according to school related factors?

Theoretical Framework

In this study, the main focus is on the principals' leadership soft skill practices among Basic Education High Schools. Soft skills are a set of personal attributes that enable someone to interact effectively and harmoniously with other people in the organization (Wallapa, A, 2012).Leadership soft skills are a cluster of productive personality traits that leader need to implement for their members to help them become more efficient executives and organizational improvement (Wijian, P, 2012).

Many researchers identified leadership soft skills with different dimensions for leadership soft skills. Wallapha, A (2012) identified seven soft skills. They are;

- Analytical thinking and problem solving skill
- Communication and presentation
- Lifelong learning and information management
- Team work
- Development and construction of innovation
- Morality
- Professional skills

Crosbie, R (2005) suggested leadership soft skills as follows;

- Communication and presentation
- Leadership competency
- Teamwork
- Analytical thinking and creative problem solving
- Professional and morality
- Learning
- Usage of information technology
- Development of interpersonal relationship

Somprach, K (2013) explained leadership soft skills as follow;

- Innovation development
- Thinking skills and problem solving skills
- Communication skills
- Lifelong learning and information management
- Leadership skills
- Teamwork force
- Ethics and professionalism

Somerset, F (2010) identified leadership soft skills as follow

- Communication skills
- Thinking skills and problem solving skills
- Team work force
- Lifelong learning and information management
- Entrepreneur skill

- Ethics, moral and professionalism
- Leadership skills

Among many researchers, leadership soft skill practices of principals theoretically based on Tang, K. N (2012) dimension of leadership soft skills. Tang, K.N (2012) newly developed Crosbie, R (2005) model of leadership soft skills with eight dimensions. These eight dimensions of leadership soft skills are;

- Leadership ability
- Communication skills
- Planning and organizing
- Personal effectiveness/mastery
- Presentation skills
- Initiative
- Collaboration/ team work
- Personal development/ coaching.

Scope of the Study

This study is conducted to Basic Education High Schools in Mingalar Taung Nyunt Township, Yangon Region.

Definitions of Key Terms

Soft Skills

Soft skills are a set of personal attributes that enable someone to interact effectively and harmoniously with other people in the organization (Wallapa, A, 2012).

Leadership soft skills

Leadership soft skills are a cluster of productive personality traits that leader need to implement for their members to help them become more efficient executives and organizational improvement (Wijian, P, 2012).

Review of Related Literature

Definitions of Soft Skills and Leadership Soft Skills

There are two kinds of skills: hard skills and soft skills. Hard skills are the skills that are learned abilities acquired and enhanced through practice, repetition and education. In contrast, soft skills are less tangible and harder to teach. Getting along with others, listening well, and engaging in activities can get soft skills from participation harmoniously (Klaus. P, 2008).

Soft skills are a set of personal attributes that enable someone to interact effectively and harmoniously with other people in the organization (Wallapha. A, 2012).

Leadership soft skills are a cluster of productive personality traits that leader need to implement for their members to help them become more efficient executives and organizational improvement (Wijian, P, 2012).

Leadership soft skills are a combination of interpersonal skills, social skills, communication skills, character traits, attitudes, career attributes and emotional intelligence quotient (EQ) among

others that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals with complementing hard skills (Sarita, R, 2017).

Soft skills are a cluster of productive personality traits that characterize one's relationships in a milieu. These skills can include social graces, communication abilities, language skills, personal habits, cognitive or emotional empathy, time management, and team work and leadership traits (Mangala, R, 2010).

A soft skill is a comprehensive concept with measures the ability and the capability of individuals and an organization's achievements (Erik, R. & Piet, S, 2007).

A soft skill is also defined from the view point of cognitive elements in the non- academic aspects such as positive values, leadership qualities, teamwork, communication skills as well as lifelong learning (Kagan, D. M, 1990).

Dimensions for Leadership Soft Skills

Among many researchers, leadership soft skill practices of principals conceptually based on Tang, K.N (2012) dimension of leadership soft skills. Tang, K.N (2012) newly developed Crosbie, R (2005) model of leadership soft skills with eight dimensions. These eight dimensions of leadership soft skills are;

- Leadership ability
- Communication skills
- Planning and organizing
- Personal effectiveness/mastery
- Presentation skills
- Initiative
- Collaboration/ team work
- Personal development/ coaching.

Leadership ability

Leadership ability refers to administrators provide and communicate strategic vision to employees in order to mobilize others to act, assign individuals suited to the job based on competencies and delegate responsibilities to optimize staff's skills. Apart from that, administrator takes smart risks to achieve innovative and effective solutions encourages wide participation in goal setting, decision making, and problem solving. Leadership ability also refers to administrator gives employees the authority and support to make decisions, appropriately uses and personalizes recognition and incentives to reward, sets a personal example, shows consistency and maintains high standards of integrity and ethical conduct during both good and tough times, learns from experience, gains insights from mistakes, and analyzes both successes and failures for clues to improvement (Tang, K.N, 2012).

Communication skills

Communication skills refer to that administrator adapts communication to listeners' needs, checking listeners' understanding by listening attentively to the complete message, restating and questioning listeners to ensure comprehension. In addition, administrator is considered as seeking to negotiating win- win solutions to issues, clarifying problems and resolving conflicts by being open and using employees productively to enhance quality of decisions (Tang, K.N, 2012).

Planning and Organizing

Planning and organizing refers to administrator defines short and long-range objectives, uses other resources to achieve planned goals, prioritizes quickly in an environment with many variables, pursues tasks and goals with persistence despite daily distractions, achieves established goals by assigned deadlines, meet commitments, fulfills promises, and responds to change with flexibility and appropriate speed (Tang, K.N,2012).

Personal Effectiveness/mastery

Personal effectiveness/mastery refers to administrator seeks to understand and exploits personal strengths and strives to build competency in areas of weakness. Similarly, an administrator having this characteristic is personally committed to and actively works to continuously improve oneself, actively pursues learning/self-development to enhance performance, actively seeks and is open to new information and feedback from others, adjusts one's view point and/or behavior according to the situation, functions effectively, and maintains good relationships even under stressful conditions (Tang, K.N, 2012).

Presentation Skills

Presentation skill refers to administrator has good presentation skills, presenting himself/herself in a professional manner, and creating a good first impression. Apart from that, administrator as effective in presenting ideas to others whether in individual and/or group situations, makes effective use of visual aids in presentations, thinks carefully about effect of words, vocal quality and nonverbal actions, uses appropriate methods of persuasion to convince others to accept an idea, plan, or activity. Presentation skills also refer to administrator having good presentation skills such as invites input/questions from others, encourages open dialogue/exchange of information and ideas, listens actively, and addresses the emotional position of audience members (Tang, K.N, 2012).

Initiative

Initiative refers to that administrator recognizes and reacts to problems, is self-starting, takes actions to achieve goals beyond specific job responsibilities, is not bias in taking action, readily faces up to and takes a stand on difficult issues. Initiative also refers to that administrator makes decisions and takes actions before directed or forced, and does things proactively (tang, K.N, 2012).

Collaboration/teamwork

Collaboration/teamwork refers to that administrator finds common ground and cooperates to solve problems. In the same token, administrator effectively participates in meeting and groups, encourages and values diversity through understanding and appreciation of others' personalities, concerns, feelings, thoughts, motives, needs, skills and competencies. In addition, administrator is considered as establishing consensus through group discussions, helping each person to articulate his/her own option, sensitive to the needs of groups and individuals, open and honest in expressing his/her thoughts, ideas and feelings, while remaining sensitive to the thoughts, ideas and feelings of others (Tang, K.N, 2012).

Personal Development /Coaching

Personal development/coaching refers to administrator recommends and supports appropriate education/training programs, recognizes employee's performance with positive feedback and corrective feedback to motivate employees, and focuses feedback on specific

behavior not on the individual. In addition, administrators with personal development/coaching recognize exceptional contributions, and evaluate employees accurately, consistently, and on time (Tang, K.N, 2012).

Methodology

In this study, quantitative and qualitative research methods were used. A set of questionnaire to collect the required data was developed based on eight dimensions of Soft Skills of Leaders and School Improvement in High Performing Schools of Tang, K.N (2012). For quantitative study, a questionnaire has 40 items and 5 interview questions for qualitative study. The reliability coefficient (Cronbach alpha) was 0.87 for principals' leadership soft skills practices questionnaire which was developed based on literature.

Simple random sampling method was used. The four principals and 119 teachers from Basic Education High Schools in Mingalar Taung Nyunt Township participated in this study. The descriptive statistics and Independent Samples *t* Test was used to analyze data. The level of principals' leadership soft skills practices that perceived by teachers were determined as mean values and standard deviations. Independent Samples *t* Test was used to determine whether there were significant differences in teachers' perceptions on principals' soft skill practices according to principals' personal factors and school related factors.

Findings

Findings on the level of principals' leadership soft skills are based on teachers' perceptions in selected Basic Education High Schools in Mingalar Taung Nyunt Township, Yangon region.

Table 1 Mean Values and Standard Deviations for the Level of Principal's Leadership Soft Skills of Schools in Mingalar Taung Nyunt Township   (N=119)

No	Dimensions	Mean (SD)	Level
1	Leadership ability	3.73(.57)	Moderately High
2	Communication skills	3.56(.67)	Moderately High
3	Planning and organizing	3.90(.41)	Moderately High
4	Personal effectiveness/ mastery	3.63(.41)	Moderately High
5	Presentation skills	3.45(.66)	Moderately High
6	Initiative	3.63(.69)	Moderately High
7	Collaboration/ Team work	3.53(.68)	Moderately High
8	Personal development/coaching	3.81(.54)	Moderately High

Scoring direction: 1.00–1.49 =Low   1.50– 2.49 =Moderately Low   2.50 – 3.49 =Average
3.50 - 4.49=Moderately High   4.50 – 5.00 =High

According to Table 1, principals in Mingalar Taung Nyunt Township has moderately high level of leadership soft skills according to teachers perceptions.

Table 2 Mean Values and Standard Deviations for the Level of Principals' Leadership Soft Skills of Among Schools in Mingalar Taung Nyunt Township (N=119)

No	Schools	Mean(SD)	Level
1	School A	3.65(.43)	Moderately High
2	School B	3.79(.21)	Moderately High
3	School C	3.81(.28)	Moderately High
4	School D	3.69(.13)	Moderately High
	Total	3.75(.27)	Moderately High

Scoring direction: 1.00–1.49 =Low   1.50–2.49 =Moderately Low   2.50 – 3.49 =Average
3.50–4.49=Moderately High   4.50 – 5.00 =High

According to Table 2, the mean scores among schools were slightly different. Therefore, it can be interpreted that the principals of Basic Education High Schools in Mingalar Taung Nyunt Township have moderately high level of leadership soft skills respectively.

The comparison of total mean values for the level of principal's leadership soft skills of Schools in Mingalar Taung Nyunt Township were shown in the following Figure 1.
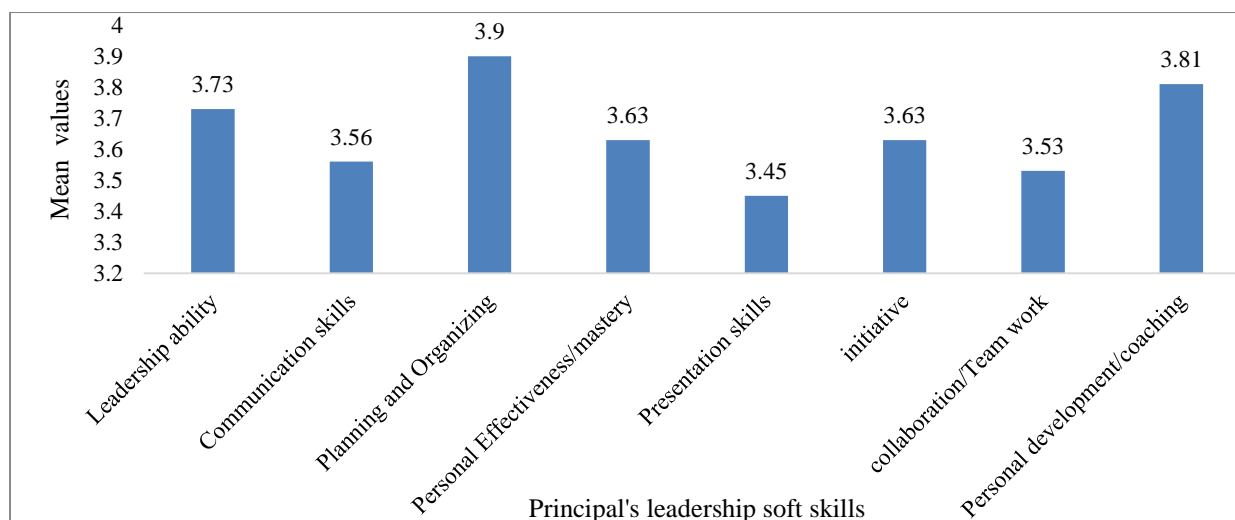

Figure 1	The Comparison of Total Mean Values for the Level of Principal's	Leadership Soft Skills of Schools in Mingalar Taung Nyunt Township.

The comparison of total mean values of principals' leadership soft skills among schools in Mingalar Taung Nyunt Township were shown Figure 2.
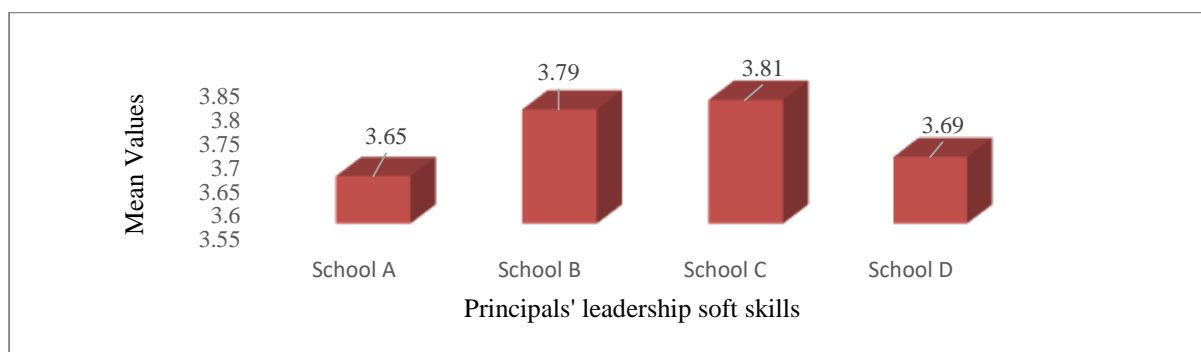

Figure 2	The Comparison of Total Mean Values for the Level of Principals'	Leadership Soft Skills Among Schools in Mingalar Taung Nyunt Township

Findings of the difference of the teachers' perceptions on principals' leadership soft skills according to principals' personal factors were based on gender, services and qualifications and school related factors as school grade, school size and matriculation pass rate were shown below.

**Table 3	Independent Samples *t* Test Result Showing for Teachers' Perceptions of Principals' Leadership Soft Skills Grouped by Gender	(N=119)**

Dimensions	Gender	Mean (SD)	t	df	p	Mean difference
Principals' leadership soft skills	Male	3.75(.23)	.25	117.23	ns	.01
	Female	3.74(.31)				

*p<.05, **p<.01, ***p<.001 at significant level and ns= not significant

According to Table 3, there was no significant difference in principals' leadership soft skills between male group and female group.

Table 4 Independent Samples *t* Test Result showing for Teachers' Perceptions of Principals' Leadership Soft Skills Grouped by Services   (N=119)

Dimensions	Services	Mean (SD)	*t*	*df*	*p*	Mean difference
Principals' leadership soft skills	5-10	3.67(.32)	2.32	75.67	ns	.12
	10 and above	3.79(.23)				

*p<.05, **p<.01, ***p<.001 at significant level and ns= not significant

According to table 4, there was no significant difference in principals' leadership soft skills between services of 5-10 and 10 and above group.

Table 5 Independent Samples *t* Test Result showing for Teachers' Perceptions of Principals' Leadership Soft Skills Grouped by Qualifications   (N=119)

Dimensions	Qualification	Mean (SD)	*t*	*df*	*p*	Mean difference
Principals' leadership soft skills	Education degree	3.72(.31)	1.25	115.01	ns	.06
	Without Education degree	3.79(.22)				

*p<.05, **p<.01, ***p<.001 at significant level and ns= not significant

According to table 5, there was no significant difference in principals' leadership soft skills between qualifications with education degree and without education degree group.

Table 6 Independent Samples *t* Test Result showing for Teachers' Perceptions of Principals' Leadership Soft Skills Grouped by School Grade   (N=119)

Dimensions	School Grade	Mean (SD)	*t*	*df*	*p*	Mean difference
Principals' leadership soft skills	Grade B	3.76(.31)	.98	74.17	ns	.06
	Grade C	3.69(.13)				

*p<.05, **p<.01, ***p<.001 at significant level and ns= not significant

According to table 6, there was no significant difference in principals' leadership soft skills between school grade B and grade C group.

Table 7 Independent Samples *t* Test Result showing for Teachers' Perceptions of Principals' Leadership Soft Skills Grouped by School Size   (N=119)

Dimensions	School Size	Mean (SD)	*t*	*df*	*p*	Mean difference
Principals' leadership soft skills	Below 1000	3.67(.32)	2.12	74.67	ns	.16
	Above 1000	3.79(.23)				

*p<.05, **p<.01, ***p<.001 at significant level and ns= not significant

According to table 7, there was no significant difference in principals' leadership soft skills between school size of below 1000 and above 1000 group.

Table 8 Independent Samples *t* Test Result showing for Teachers' Perceptions of Principals' Leadership Soft Skills Grouped by Matriculation Pass Rate   (N=119)

Dimensions	Matriculation Pass Rate	Mean (SD)	*t*	*df*	*p*	Mean difference
Principals' leadership soft skills	Below group	3.77(.34)	2.32	75.67	ns	.12
	Above group	3.79(.30)				

*p<.05, **p<.01, ***p<.001 at significant level and ns= not significant

According to table 8, there was no significant difference in principals' leadership soft skills between matriculation pass rate of below group and above group.

Discussion

In this study, the levels of principals' leadership soft skills in each school in Mingalar Taung Nyunt Township were moderately high. Therefore, this finding is closely associated with the finding of Tang, K.N (2012).According to the mean values of teachers' perceptions of principals' leadership soft skills among schools, the principals need to have higher level of leadership soft skills.

In this study, the Independent Samples *t* Test results showed that there were no significant differences of teachers' perceptions on principals' leadership soft skills according to principals' personal factors and school related factors such as gender, services, qualification, school size, school grade and matriculation pass rate.

According to Sarita, R (2017), leadership soft skills are a combination of interpersonal skills, social skills, communication skills, character traits, attitudes, career attributes and emotional intelligence quotient (EQ) among others that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals with complementing hard skills. Therefore, leadership soft skills slightly depend on principals' personal factors and school related factors.

Suggestions

Based on the results of this study, the following facts are suggested for principals' leadership soft skills in Basic Education High Schools.

- Principals should provide suitable leadership to teachers in order to mobilize others to act, assign teachers suited to the duties based on competencies and delegate responsibilities to optimize teachers' abilities.
- Principals should communicate teachers by seeking to negotiate win- win situations to problems, clarify problems and resolve conflicts by being open and using teachers productively to enhance quality of decisions.
- Principals should have high level of planning and organizing skills to achieve the tasks and activities of school flexibility and appropriately and pursue tasks and duties with persistence despite daily distractions.
- Principals should seek new information and effective ways to improve school functions, accept others ideas and suggestions for school improvement and imitate the performances

of others experienced principals and adjust these performances according to the real situations of school.

- ▪ Principals should have good presentation skills to motivate and persuade teachers and community members to participate in school activities and open and honest in expressing his/ her thoughts, ideas and feelings.

Needs for Further Research

As the suggestions for further research, it is necessary to study principals' leadership soft skills in other dimensions. This study is limited to study the principals' leadership soft skills in Basic Education High Schools from only one township because of the time constraints. This study should be applied to study principals' leadership soft skills in other Townships, States and Regions extensively and deeply. Further study should expand elementary and middle schools to study principals' leadership soft skills deeply. Further study should focus on integration of soft skills in teaching learning process not only Mingalar Taung Nyunt Township but also other Townships extensively.

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AN ANALYTICAL STUDY OF PARENTING KNOWLEDGE AND PRACTICES

Khaing Yee Mon[1], Phyu Phyu Yin[2], Cho Cho Sett[3]

Abstract

This paper intended to investigate the parenting knowledge levels of parents, to investigate the perceptions of parents on the importance of parenting practices, to investigate the performance levels of parents on parenting practices, to examine the variations of perceptions and performance on parenting practices by the parents' personal factors, and to identify the predictors of parents' personal factors on their parenting practices. Descriptive research design was used in this study. Both quantitative and qualitative methods were used. By using the stratified random sampling method, 420 parents were selected as sample from three strata in Yangon Region. The questionnaire, interview, and observation were used to collect the required data. The internal consistency (Cronbach's alpha) for degree of importance was 0.93 and level of performance was 0.94. Descriptive statistics, One-way ANOVA, Item Percent Correct (IPC), and Multiple Regression Analysis were used to analyze the quantitative data. According to the overall mean value, the findings of the study revealed that parenting knowledge level of parents regarding three areas of knowledge was satisfactory (Mean=0.81, SD=0.14). All the parents perceived that the parenting practices for child physical, emotional, social and cognitive development were important and they often practiced them. Therefore, parents' perceptions on the importance of parenting practices was satisfactory (Mean=3.23, SD=0.31) and level of performance on parenting practices was also satisfactory (Mean=3.10, SD=0.38). There were significant differences in parents' perceptions and performance on parenting practices grouped by level of education, monthly income, strata, and parenting knowledge levels. According to the beta weight of multiple regression analysis, strata was the best predictor for parenting practices (R^2=.07, F(6,413)=5.874). According to the result of qualitative study, it was found that the parents from inner and outer suburban strata had no complete basic parenting knowledge and they could not perform the parenting practices satisfactorily.

Keywords: Parenting Knowledge, Parenting Practices

Introduction

The quality of family life is fundamental to the physical, psychosocial, and cognitive well-being of children. The most important factor to a child's healthy development is to have at least one strong relationship with a caring adult who values and responds to the child's physical, emotional and cognitive needs (Sanders, 1999). Parents are the people who can incorporate all the necessary abilities and competencies of life into their child. The way in which parents bring up their children surely influences their overall development (Durkin, 1995, as cited in George & Rajan, 2012).

Today, attention was focused on the importance of early childhood for the evolution of a person. Most rapid mental growth occurs during infancy and early childhood and thus a child's early years are critical for forming and developing intelligence, personality, and social behaviors (Young, 1997, as cited in Makame, 2001). Parenting during early childhood encompasses adaptation to distinctive transformations in human development that affect not only the current well-being of children, but carry significant implications for later life (Brooks, 2004).

Significance of the Study

Startling transformations have occurred all over the world, particularly on the mode of caring and parenting of children. Parents are the most critical factor for cultivating the children.

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There is a general agreement among experts around the world from developing as well as developed nations that early childhood rearing and training are not only desirable but essential for personality development among the children. Patterns of parenting are significant factors influencing the formation of individual personality (Emmanuel, Akinyemi, & Nimotalai, 2012). Thus there is the need to increase the parenting knowledge and practices among parents in all the societies.

Parents need to be informed and educated in order for all children to benefit in the way of correct care for their health and survival, for a nutrition which is adequate to their physical and psychological development, for the evolution of their intellectual and emotional processes that should lead to the creation of an independent person. If the parents want to be effective caregivers for their children, they should possess certain knowledge, skills, attitudes and interpersonal abilities concerning effective parenting.

More than 200 million children younger than 5 years from developing countries do not achieve their expected level of cognitive development due to poverty, nutritional deficiencies and inadequate early learning opportunities (Bornstein, 2002). More than 32 percent of Myanmar populations live below the poverty line. Rural poverty is twice as high as in urban areas and Myanmar also has the second highest child mortality rate (Khalae, 2018). Therefore, most of the children in Myanmar come from low-income families. The parents cannot spend the engaged time with the children and cannot give adequate care or parenting as they are working parents. Parents today are often uncertain about what is the right thing to do in parenting their children. So, it is clear that large numbers of the children have poor psychosocial and cognitive development in the first few years of life. When they reach schools, they are unable to benefit fully from education. They usually fail to achieve satisfactory levels and subsequently have poor employment opportunities. This has implications for both the individual and national development.

It is safe to assume that parents want the best possible quality of life for their children. However, parents today are often uncertain about what is the right thing to do in parenting their children. If parents are provided with knowledge and supports, they can respond more positively and effectively to their children. This research intends to lead to the changing of old mentalities and the development of good parenting practices adequate to the child's development needs. Findings of the research can be used to make a complex analysis of parenting knowledge and practices, to establish the parents' information needs, and offer to decision makers information based on scientific data. The results can also be used for the purpose of developing educational policies and parenting education programs for parents, aimed at developing the potential of children.

Aims of the Study

Main Aim

The main aim is to study the parenting knowledge and practices of parents.

Specific Aims

The specific aims are

- To investigate the parenting knowledge levels of parents
- To investigate the perceptions of parents on the importance of parenting practices
- To investigate the performance levels of parents on parenting practices
- To examine the variations of perceptions and performance on parenting practices by the parents' personal factors
- To identify the predictors of parents' personal factors on their parenting practices

Research Questions

The research questions are:

1. What are the parenting knowledge levels of parents?
2. To what extent do the parents perceive on the importance of parenting practices?
3. What are the performance levels of parents on parenting practices?
4. What are the variations of perceptions and performance on parenting practices by the parents' personal factors?
5. What are the predictors of parents' personal factors on their parenting practices?

Limitation of the Study

This study was geographically limited to Yangon Region. The subjects of this study were 420 parents from 13 Townships in Yangon Region. Parents who have at least one child between 2 and 8 years old participated in this study.

Theoretical Framework

Based on the related literature, the theoretical framework for this study is established.

Parenting knowledge in this study based on three areas of knowledge. They are: ***Knowledge about child development, Knowledge about health and safety***, and ***Knowledge about strategies to meet the physical, emotional, social, and cognitive needs of children as they develop*** (Bornstein & Ribas, 2005).

Parenting practices in this study cover four areas of child development: physical, emotional, social and cognitive development.

In the area of parenting practices for child physical development, four components of parenting practices are emphasized. They are: ***Supporting Motor Development, Providing Opportunities for Physical Activities, Providing Good Nutrition, and Safeguarding Health*** (Faegre, 1947, Hildebrend, 1985, & Beaty, 2012).

For child emotional development, nine components of parenting practices are emphasized. They are: ***Promoting Close Emotional Relationship, Providing Respect and Encouragement, Providing Opportunities for Outlets, Handling Mistakes, Promoting Empathy, Developing Self-concept, Developing Self-esteem, Coaching Children to Manage Emotion and Cope with Stress, and Identifying and Dealing with Negative Feelings*** (Brooks, 2004).

For child social development, three components of parenting practices will be mainly focused such as ***Promoting Positive Social Relationships with Parents, Promoting Positive Social Relationships with Siblings, and Promoting Positive Social Relationships with Peers*** (Brooks, 2004).

For child cognitive development, three components of parenting practices are mainly emphasized. They are ***Providing Sensory Experiences, Providing Opportunities to Think and Imagine, and Providing Games for Sorting, Counting, Classifying and Comparing Objects*** (Beaty, 2012).

On the basis of this theoretical framework, this study is designed to investigate the parenting knowledge and practices for child physical, emotional, social and cognitive development.

Definitions of Key Terms

Parenting

Parenting is described as a series of actions and interactions on the part of parents to promote the development of children (Brooks, 2004).

Parenting Knowledge

Parenting knowledge is defined as understanding of "development norms and milestones, process of child development, and familiarity with caregiving skills" (Benasich & Brooks-Gunn, 1996).

Parenting Practices

Parenting practices are defined as the specific behaviors that parents use to socialize their children (Anderson, 2011).

Operational Definitions

Parent

A parent in this study is defined as either the biological parent or legal guardian with whom the child lived.

Parenting Knowledge

In this study, parenting knowledge is defined as knowing basic child development principles, basic information about how to promote children's health and to prevent home accidents, and strategies for promoting physical, emotional, social and cognitive development of children.

Parenting Practices

In this study, parenting practices are defined as the behaviors the parents use to promote the physical, emotional, social and cognitive development of their children.

Methodology

Descriptive research design was used in this study. Both quantitative (questionnaire) and qualitative methods (interview and observation) were used. By using the stratified random sampling method, 420 parents were selected as sample from three strata in Yangon Region. The questionnaire was developed based on the theoretical framework of the study. In order to study the parenting knowledge and practices, the questionnaire was composed of three main parts. Demographic data in part I, 30 true-false items in part II, and 60 four-point Likert-type items in part III were developed. The internal consistency (Cronbach's alpha) for degree of importance was 0.93 and level of performance was 0.94. Descriptive statistics, One-way ANOVA, Item Percent Correct (IPC), and Multiple Regression Analysis were used to analyze the quantitative data.

Findings

Research Question (1): *What are the parenting knowledge levels of parents?*

The means and standard deviations of the parenting knowledge levels of parents were presented in Table 1.

Table 1 Means and Standard Deviations of the Parenting Knowledge Levels of Parents
                                                                                                                    (N=420)

Parenting Knowledge Area	Mean	SD	Remark
Child Development	0.82	0.14	Satisfactory Level
Child's Health and Safety	0.86	0.13	Satisfactory Level
Strategies to meet the Physical, Emotional, Social and Cognitive needs of Children	0.76	0.16	Satisfactory Level
Overall	0.81	0.14	Satisfactory Level

Scoring Direction: above 0.95 =above satisfactory level,   between 0.67 and 0.95= satisfactory level

                         below 0.67= below satisfactory level

According to Table 1, the parenting knowledge levels of parents were satisfactory levels in all three areas of parenting knowledge.

The mean values of parenting knowledge levels of parents were shown in Figure 1.
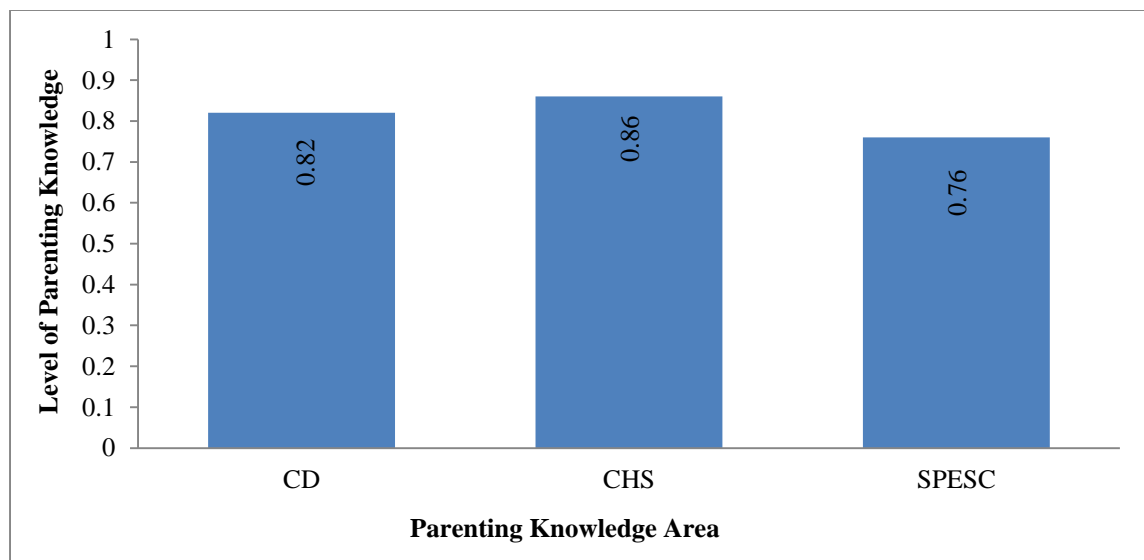
Note: CD = Child Development   CHS= Child's Health and Safety
        SPESC= Strategies to meet the Physical, Emotional, Social and Cognitive Needs of Children

Figure 1 Mean Values Showing the Parenting Knowledge Levels of Parents

And then, the number and percentages of parents according to the parenting knowledge levels concerning child development, child's health and safety and strategies to meet the physical, emotional, social and cognitive needs of children were described in Table 2.

Table 2   Number and Percentages of Parents According to Parenting Knowledge Levels
(N=420)

Parenting Knowledge Area	Number and Percentages of Parents		
	Below Satisfactory Level	Satisfactory Level	Above Satisfactory Level
Child Development	62 (14.8%)	270 (64.3%)	88 (21%)
Child's Health and Safety	31 (7.4%)	255 (60.7%)	134 (31.9%)
Strategies to meet the Physical, Emotional, Social and Cognitive Needs of Children	128 (30.5%)	231 (55%)	61 (14.5%)
Overall Parenting Knowledge	44 (10.5%)	326 (77.6%)	50 (11.9%)

As indicated in the Table 2, 44 (10.5%) of parents was below satisfactory level, 326 (77.6%) of parents was satisfactory level and 50 (11.9%) of parents was above satisfactory level concerning overall parenting knowledge.

Research Question (2): *To what extent do the parents perceive on the importance of parenting practices?*

Research Question (3): *What are the performance levels of parents on parenting practices?*

The means and standard deviations of parents' perceptions and performance on parenting practices for child physical development were described in Table 3.

Table 3 Means and Standard Deviations of Perceptions and Performance of Parents on Parenting Practices for Child Physical Development   (N=420)

No.	Parenting Practices for Child Physical Development	Degree of Importance			Level of Performance		
		Mean	SD	Remark	Mean	SD	Remark
1	Supporting Motor Development	2.94	0.50	Important	2.60	0.67	Often
2	Providing Opportunities for Physical Activities	3.09	0.44	Important	2.76	0.53	Often
3	Providing Good Nutrition	3.50	0.46	Very Important	3.41	0.55	Often
4	Safeguarding Health	3.58	0.41	Very Important	3.61	0.44	Always
5	overall	3.34	0.35	Important	3.19	0.40	Often

Scoring Directions

***Degree of Importance*:** 1.00-1.49=very unimportant   1.50-2.49=unimportant   2.50-3.49= important

3.50-4.00=very important
***Level of Performance*:** 1.00-1.49=never   1.50-2.49=sometimes   2.50-3.49=often   3.50-4.00=always

According to the Table 3, all the parents perceived that the parenting practices for *Child Physical Development* were *important* and they *often practiced* them because the overall mean values were fallen between 2.50 and 3.49.

Table 4 described the means and standard deviations of parents' perceptions and performance on parenting practices for child emotional development.

Table 4 Means and Standard Deviations of Perceptions and Performance of Parents on Parenting Practices for Child Emotional Development   (N=420)

No.	Parenting Practices for Child Emotional Development	Degree of Importance			Level of Performance		
		Mean	SD	Remark	Mean	SD	Remark
1	Promoting Close Emotional Relationship	3.35	0.51	Important	3.34	0.61	Often
2	Providing Respect and Encouragement	3.37	0.52	Important	3.24	0.70	Often
3	Providing Opportunities for Outlets	3.19	0.58	Important	2.87	0.87	Often
4	Handling Mistakes	2.99	0.54	Important	3.15	0.60	Often
5	Promoting Empathy	3.32	0.54	Important	3.05	0.78	Often
6	Developing Self-concept	2.52	0.84	Important	2.95	0.92	Often
7	Developing Self-esteem	3.35	0.58	Important	3.32	0.72	Often
8	Coaching Children to Manage Emotion and Cope with Stress	3.14	0.60	Important	3.45	0.60	Often
9	Identifying and Dealing with Negative Feelings	3.26	0.58	Important	3.08	0.77	Often
	Overall	3.20	0.33	Important	3.19	0.41	Often

Scoring Directions

Degree of Importance: 1.00-1.49=very unimportant   1.50-2.49=unimportant   2.50-3.49= important
                    3.50-4.00=very important
Level of Performance: 1.00-1.49=never   1.50-2.49=sometimes   2.50-3.49=often   3.50-4.00=always

According to the Table 4, all the parents perceived that the parenting practices for *Child Emotional Development* were *important* and they *often practiced* them because the overall mean values were fallen between 2.50 and 3.49.

Table 5 described the means and standard deviations of parents' perceptions and performance on parenting practices for child social development.

Table 5 Means and Standard Deviations of Perceptions and Performance of Parents on Parenting Practices for Child Social Development   (N=420)

No.	Parenting Practices for Child Social Development	Degree of Importance			Level of Performance		
		Mean	SD	Remark	Mean	SD	Remark
1	Promoting Positive Social Relationships with Parents	3.36	0.45	Important	3.37	0.51	Often
2	Promoting Positive Social Relationships with Siblings	3.34	0.52	Important	3.39	0.59	Often
3	Promoting Positive Social Relationships with Peers	3.18	0.45	Important	3.00	0.57	Often
	Overall	3.27	0.40	Important	3.20	0.48	Often

Scoring Directions

Degree of Importance: 1.00-1.49=very unimportant   1.50-2.49=unimportant   2.50-3.49= important

                    3.50-4.00=very important

Level of Performance: 1.00-1.49=never   1.50-2.49=sometimes   2.50-3.49=often   3.50-4.00=always

As indicated in Table 5, all the parents perceived that the parenting practices for *Child Social Development* were *important* and they *often practiced* them because the overall mean values were fallen between 2.50 and 3.49.

Table 6 described the means and standard deviations of parents' perceptions and performance on parenting practices for child cognitive development.

Table 6 Means and Standard Deviations of Perceptions and Performance of Parents on Parenting Practices for Child Cognitive Development   (N=420)

No.	Parenting Practices for Child Cognitive Development	Degree of Importance			Level of Performance		
		Mean	SD	Remark	Mean	SD	Remark
1	Providing Sensory Experiences	3.08	0.45	Important	2.77	0.60	Often
2	Providing Opportunities to Think and Imagine	3.10	0.43	Important	2.75	0.60	Often
3	Providing Games for Sorting, Counting, Classifying and Comparing Objects	3.10	0.41	Important	2.86	0.59	Often
	Overall	3.10	0.39	Important	2.80	0.53	Often

Scoring Directions

***Degree of Importance*:** 1.00-1.49=very unimportant   1.50-2.49=unimportant   2.50-3.49= important
                    3.50-4.00=very important
***Level of Performance*:** 1.00-1.49=never   1.50-2.49=sometimes   2.50-3.49=often   3.50-4.00=always

According to the Table 6, all the parents perceived that the parenting practices for *Child Cognitive Development* were *important* and they *often practiced* them because the overall mean values were fallen between 2.50 and 3.49.

Table 7 described the means and standard deviations of parents' perceptions and performance on parenting practices.

Table 7 Means and Standard Deviations of Perceptions and Performance of Parents on Parenting Practices   (N=420)

No.	Parenting Practices Area	Degree of Importance			Level of Performance		
		Mean	SD	Remark	Mean	SD	Remark
1	Child Physical Development	3.34	0.35	Above Satisfactory	3.19	0.40	Satisfactory
2	Child Emotional Development	3.20	0.33	Satisfactory	3.19	0.41	Satisfactory
3	Child Social Development	3.27	0.40	Above Satisfactory	3.20	0.48	Satisfactory
4	Child Cognitive Development	3.10	0.39	Satisfactory	2.80	0.53	Satisfactory
	Overall	3.23	0.31	Satisfactory	3.10	0.38	Satisfactory

Scoring Direction 1.00-1.75= below satisfactory level   1.76-2.50= moderately satisfactory level

              2.51-3.25= satisfactory level   3.26-4.00= above satisfactory level

As indicated in Table 7, parents' perception on the importance of parenting practices was *satisfactory* level and performance level of parents was also *satisfactory* level because the overall mean values were 3.23 and 3.10 respectively.

Figure 2 showed the mean values of perceptions and performance of parents on parenting practices.
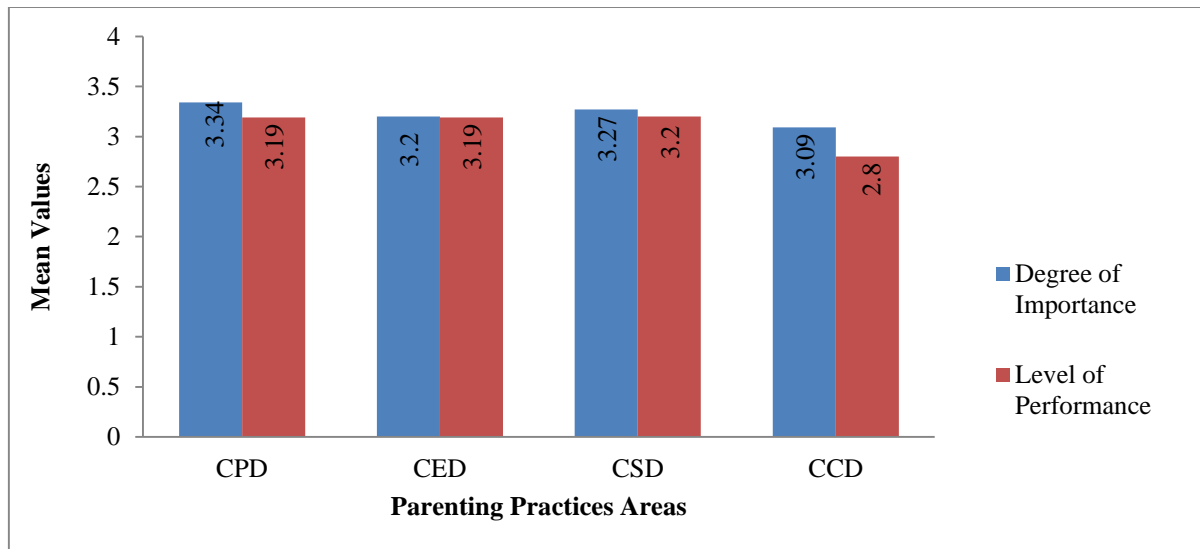
Note: CPD = Parenting Practices for Child Physical Development
CED = Parenting Practices for Child Emotional Development
CSD = Parenting Practices for Child Social Development
CCD = Parenting Practices for Child Cognitive Development

Figure 2 Mean Values Showing Perceptions and Performance of Parents on Parenting Practices

Research Question (4): *What are the variations of perceptions and performance on parenting practices by the parents' personal factors?*

Table 8 showed the One-Way ANOVA result of perceptions and performance of parents on parenting practices grouped by level of education: no schooling, primary, secondary, upper secondary and diploma or degree.

Table 8 **One-Way ANOVA Result of Perceptions and Performance of Parents on Parenting Practices Grouped by Level of Education   (N=420)**

Parenting Practices Area		Groups	Sum of Squares	df	Mean Square	F	p
Overall (Physical, Emotional, Social and Cognitive Development)	Degree of Importance	Between Groups Within Groups Total	3.214 37.476 40.689	4 415 419	.803 .090	8.897	.000***
	Level of performance	Between Groups Within Groups Total	3.441 56.668 60.108	4 415 419	.860 .137	6.300	.000***

***p<.001

As shown in Table 8, there were statistically significant differences in parents' perceptions and performance on parenting practices among five groups of parents because overall degree of importance was ($F(4,415)=8.897$, $p<.001$) and overall level of performance was ($F(4,415)=6.300$, $p<.001$).

Table 9 showed the One-Way ANOVA result of perceptions and performance of parents on parenting practices grouped by monthly income: below 200 thousand kyats, 200 thousand to 500 thousand kyats, and above 500 thousand kyats.

Table 9   One-Way ANOVA Result of Perceptions and Performance of Parents on Parenting Practices Grouped by Monthly Income   (N=420)

Parenting Practices Area		Groups	Sum of Squares	df	Mean Square	F	p
Overall (Physical, Emotional, Social and Cognitive Development)	Degree of Importance	Between Groups	.975	2	.186	5.116	.006**
		Within Groups	39.715	417	.154		
		Total	40.689	419			
	Level of Performance	Between Groups	2.004	2	1.002	7.193	.001**
		Within Groups	58.104	417	.139		
		Total	60.108	419			

**$p<.01$

According to Table 9, there were statistically significant differences in perceptions and performance on parenting practices among three groups of parents because overall degree of importance was ($F_{(4,415)}=5.116$, $p<.01$) and overall level of performance was ($F_{(4,415)}=7.193$, $p<.01$).

Table 10 showed the One-Way ANOVA result of perceptions and performance of parents on parenting practices grouped by strata: downtown, inner suburban and outer suburban.

Table 10 One-Way ANOVA Result of Perceptions and Performance of Parents on Parenting Practices Grouped by Strata   (N=420)

Parenting Practices Area		Groups	Sum of Squares	df	Mean Square	F	p
Overall (Physical, Emotional, Social and Cognitive Development)	Degree of Importance	Between Groups	.633	2	.317	3.296	.038*
		Within Groups	40.056	417	.096		
		Total	40.689	419			
	Level of Performance	Between Groups	2.316	2	1.158	8.36	.000***
		Within Groups	57.792	417	.139		
		Total	60.108	419			

*$p<.05$,   ***$p<.001$

As shown in Table 10, there were statistically significant differences in perceptions and performance on parenting practices among three groups of parents from three strata because overall degree of importance was ($F_{(4,415)}=3.296$, $p<.05$) and overall level of performance was ($F_{(4,415)}=8.357$, $p<.001$).

Table 11 described the One-Way ANOVA result of perceptions and performance of parents on parenting practices grouped by the levels of parenting knowledge: Group A (with below satisfactory level), Group B (with satisfactory level) and group C (with above satisfactory level).

Table 11 One-Way ANOVA Result of Perceptions and Performance of Parents on Parenting Practices Grouped by Parenting Knowledge Levels   (N=420)

Parenting Practices Area		Groups	Sum of Squares	df	Mean Square	F	p
Overall (Physical, Emotional, Social and Cognitive Development)	Degree of Importance	Between Groups	3.392	2	1.696	18.96	.000***
		Within Groups	37.298	417	.089		
		Total	40.689	419			
	Level of Performance	Between Groups	1.406	2	.703	4.995	.007**
		Within Groups	58.702	417	.141		
		Total	60.108	419			

**p<.01,   ***p<.001

As indicated in Table 11, there were statistically significant differences in perceptions and performance on parenting practices among three groups of parents according to their parenting knowledge levels because overall degree of importance was ($F(4,415)=18.96$, $p<.001$) and overall level of performance was ($F(4,415)=4.995$, $p<.01$).

Research Question (5): *What are the predictors of parents' personal factors on their parenting practices?*

Table 12 Simultaneous Multiple Regression Analysis for Parents' Personal Factors Predicting Parenting Practices   (N=420)

Variables	B	SEB	Beta
Level of Education	.01	.02	.04
Monthly Income	.04	.04	.06
Number of family members	.09	.04	.10*
Number of Children	.24	.12	.10*
Parenting Knowledge	.08	.04	.10
Strata	.06	.03	.12*
Constant	1.97	.25	

R=.28,   R²=.07,   F(6,413)=5.874,   *p<.05

The beta coefficients were described in Table 12. According to the beta weights, strata variable was the best predictor of parenting practices. And number of family member variable and number of children variable were the second best predictors of parenting practices.

Summary

Based on the research questions, the findings of this study could be summarized as follows.

1. Regarding *parenting knowledge*, 44 (10.5%) parents possessed below satisfactory level, 326 (77.6%) parents possessed satisfactory level and 50 (11.9%) of parents possessed above satisfactory level.

2. Regarding the *parents' perceptions*, the parents perceived that the parenting practices for child physical, emotional, social and cognitive development were *important*. It was also found that the parents' perceptions on the importance of parenting practices for *Child Physical Development* and *Child Social Development* were *above satisfactory levels* and another two areas such as parenting practices for *Child Emotional Development* and *Child Cognitive Development* were *satisfactory levels*.

3. Regarding the *parents' performance*, the parents *often practiced* on the parenting practices for child physical, emotional, social and cognitive development. It was also found that the parents' performance levels on parenting practices were *satisfactory levels* in all four areas.

4. There were significant differences in parents' perceptions and performance on parenting practices grouped by level of education, monthly income, strata and parenting knowledge levels.

5. The parents' parenting practices were significantly predicted by number of family members, number of children and strata when all six variables were included. According to the beta weights, strata variable was the most striking or potential predictor of parenting practices.

Conclusion and Discussion

Parenting knowledge and practices are vital to the overall well-being of the children, parents and society. It is more difficult to be a parent today than in the past and express a pressing need to know more about the effective parenting knowledge and practices.

Because parents are the main caregivers of young children, the extent and quality of their parenting knowledge is often considered vital to improve children's all-round development and parenting knowledge may inform parenting practices (Donahue et al., 1997, as cited in Bornstein et al., 2012). The quantitative findings of this study revealed that parenting knowledge levels of parents were satisfactory in all three areas: knowledge about child development, child's health and safety, and strategies to meet the physical, emotional, social and cognitive development of children. Specifically, among three areas, the knowledge level on the area of child's health and safety was the highest. But, according to the results of interview, the parents from group B did not fully inoculate their children according to the immunization schedule. They failed to inoculate their children with a reason of being busy at the week of inoculation. This finding pointed out that the parents did not know inoculation as an essential thing for children's health. And, the results of interview described that almost all the parents had a little knowledge concerning how to protect their children against sexual abuse. Therefore, it can be concluded that the parents under this study had a fair but less than complete basic parenting knowledge.

In this study, the parenting practices were analyzed based on four main areas of parenting practices for physical, emotional, social and cognitive development of children. According to the quantitative study, all the parents' perceptions on parenting practices for child physical development was above satisfactory level and the highest category. However, the qualitative findings of this study showed that the parents from group B could not provide their children adequate toys that support motor development. The parents did not surely know the benefits of playing. Almost all children were not provided with the adequate places to play together because parents lived in apartments and terraced houses. It can be concluded that the parents were still weak in implementing them in the real situations.

The strongest potentially factor contributing to the development of behavioral and emotional development of children is the quality of parenting a child receives (Sanders & Morawska, 2014). However, the results of interview described that group B parents neither knew nor practiced the parenting practices for promoting emotional development of children. They did not show love, affection and respect to their children as they believed that children became spoilt through when they were loved. They misunderstood that the children would pay attention to their instruction only when they were afraid to them. These findings did not follow the conceptualization of Utting (2007) that warm, authoritative, and responsive parenting practices are usually crucial in

developing the emotion of the children. Therefore, it can be interpreted that parents did not aware that showing affection to the child was an important factor for emotional development of the child.

The process of comparison leads children to feel that they are not as good as others and undermine self-confidence (Williamsom, 2011). However, the parents from group B under the study compared their children with other children as they believed that comparing was the best way to emulate and imitate the good behaviors of others. Kindlon (2001, as cited in Alegre & Benson, 2012) found that the time mothers spend with their children is a significant influence in their emotional development. But, according to the results of interview, almost all parents under the study did not specially create a family time with their children. This finding pointed out that they did not understand it makes the children emotionally safe and happy. And, they could not devote time for their children as they were working parents. Therefore, it can be interpreted that new economic pressures that increase they work outside the home, often for long hours limit their availability and the quality time they can devote to child care.

According to Utting (2007), the quality of parent-child relationship appears to remain influential into adulthood for social and behavioral outcomes. Although quantitative study described promoting positive social relationship with siblings as an important component, the result of interview pointed out that most of the parents under the study favored the youngest child and they believed that parents should favor the younger child more in any way. The parents did not emphasize the importance of positive social relationship among siblings described by Bryant (1980, as cited in Bornstein, 2002) that parents' treating siblings differently has also been linked to negative relationship among the siblings.

In this study, most of the parents from group B did not understand the importance of cooperative play and they even had the negative attitudes on cooperative play. They believed that children could imitate the bad behaviors of others and they were likely to be rude when they were allowed to participate in group play or activities. This finding opposed the notion of Suryana (2017) that through cooperative play, children show a better ability in activities of cooperation, healthier psychological development, being able to accept the differences that exit between friends of the group.

In addition, among the three components of parenting practices for child cognitive development, providing sensory experiences was the lowest component in perceptions and providing opportunities to think and imagine was the lowest component in performance. The quantitative findings were congruent with the results of qualitative findings. Although parents from group A often took their children on field trips, parents from group B seldom took their children field trips to provide sensory experiences. They could not provide their children such activities because of low socio-economic status. The results of interview and observation pointed out that the parents from group B could not provide their children adequate stories and pictures books that support the child's thinking and imagination. Besides, parents had no ability to read and write as they were illiterate. They could not tell the stories to their children and they did not understand the benefits of storytelling. All these findings described that the parents were unaware of the importance of the concept of Hildebrand (1985) that children continue to use all five senses to experience the world around them during the pre-operational stage and thought provoking games, language and exploration are necessary to provide the brain with stimulation for development.

Also as expected, there were significant differences in parenting practices and perceptions by the parents' educational level, socio-economic status and the location where they lived. These findings were identical the findings of Gross (1993, as cited in Bornstein et al., 2012) that parents higher in socio-economic status and those with more education may possess more knowledge of parenting and more practice them at hand. Poverty causes some parents to be more stressed, depressed or irritable, and this in turn disrupts their parenting practices and styles and produce

poorer long-term outcomes for children (Utting, 2007). This may be one possible explanation for these findings in this study.

Moreover, the findings of the current study were congruent the findings of Williams (2000, as cited in Bornstein & Ribas, 2005) that urban fathers and mothers with more education had higher developmental expectations and could implement earlier the specific parenting practices than the rural mothers and fathers. In this study, the parents from downtown had the highest perceptions and performance on parenting practices and the parents from inner and outer suburban had the lowest perceptions and performance on parenting practices. It could be that the parents from downtown had higher socio-economic status and higher educational level than the parents from inner suburban and outer suburban areas. In addition, residential area was the most potential predictor on parenting practices in this study.

In the study of Sanders and Morawska (2014), when mothers have higher knowledge of child development, they show higher levels of parenting skills and practices. The current study validated the findings of Sanders and Morawska (2014) that there were significant differences in perceptions and performance of parenting practices among the parents groups with regard to their levels of parenting knowledge. It was also discovered that the parents group who had the highest levels of parenting knowledge can perform the parenting practices at hand more than any other groups. Thus, imparting parenting knowledge to parents may be the first priority service needed to be given by the professionals.

This study highlighted the parenting knowledge and practices of parents that were being used in the current society and the most influential factors on parenting practices. Based on the interpretations of this study, it can be concluded that parenting knowledge of parents were not enough to have a complete basic parenting knowledge and they could not fully implement the parenting practices at hand. The data and outcomes in this study pointed out that there is a pressing need to make a cooperation among parents, public authorities, policy makers, professionals in education and health sector, and media partners for implementing appropriate evidence-based interventions, effective early childhood education programs, and parenting education programs aimed at enhancing the parenting knowledge, skills, practices of parents and their life competencies.

Recommendations

Public authorities should

- open evening classes, holiday programs of parenting education for working parents especially in rural and migrant areas in order to increase their parenting abilities.

- establish better correlation and mutual collaboration between Ministries and Departments involved in child health and education, and child protection.

Professionals in Education Sector should

- develop a mini and simple child development guide manual that will describe clearly child development requirements and milestones that can be easily used and interpreted by parents and community facilitator.

- do research, projects, and workshops that will facilitate the development of parenting knowledge, strategies and practices for effective parenting.

Professionals in Health Sector should

- educate the importance of inoculation and encourage the parents to inoculate their children fully according to the immunization schedule.

- inform the parents all hygiene aspects such as food hygiene practices, self-hygiene and environmental hygiene practices.

- establish parents' information centers and health care centers to provide services for children's health.

Media Partners should

- use mass media, especially of radios, television channels, and social media effectively as the mediators to educate the parents about effective parenting.

- use pictures and cartoons effectively to communicate information as the effectiveness of print is limited where illiteracy is high.

Parents should

- study the effective parenting strategies and practices for promoting child physical, emotional, social and cognitive development of children.

- participate actively in meetings, parenting talk, workshops, and debates developed by professionals in community.

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TEACHERS' BELIEF AND TEACHING PRACTICES ON NEW CURRICULUM IN LOWER PRIMARY SCIENCE TEACHING

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Abstract

The purpose of this study is to find out primary teachers' belief about science teaching and learning and their teaching practices to implement the new curriculum in Dala Township and it also investigates the mediation effect of teachers' science teaching efficacy belief on the relationship between teachers' belief about science teaching and learning and teaching practices. One hundred and two primary teachers from the selected schools participated in this study. Simple random sampling technique was used in selecting schools and the primary teachers in the selected schools were chosen for this study. Types of teachers' belief about science teaching and learning and teaching practices, level of science teaching efficacy belief and the relationship between belief and practices were explored. Quantitative method was applied in this study. Questionnaire included four parts; demographic items, belief about science teaching and learning items, science teaching efficacy belief items and teaching practices items. The reliability coefficient (the Cronbach's alpha) of the questionnaire was 0.82. Descriptive statistics, Pearson correlation and mediation analysis were conducted for the analysis of quantitative data. A majority of teachers demonstrated constructivist belief to implement new curriculum. Teachers had moderately high level of science teaching efficacy belief and they strongly believed that they had the capability to implement the new science curriculum. However, they demonstrated moderately low level of efficacy in taking responsibility of the outcomes. A vast majority of the teachers use teaching practices in line with the reforms. Although teachers in this study were familiar with the types of methods that are currently advocated by the New Curriculum reform, there were many contextual factors leading to dissimilarity between belief and practices. According to the findings, teachers should be provided with more resources and effective professional development programs that will reconcile teachers' beliefs with the goals of the new science curriculum.

Keywords: teachers' belief, science teaching efficacy belief, teaching practices

Introduction

The success of a nation fundamentally depends on the knowledge, skills, competences and morale of its people and the provision of quality and equitable education is essential for our country. Myanmar's Education System has been criticized for its examination-oriented system which makes children grow up with less critical thinking skills and is left behind compared with the international community. Thus, the Ministry of Education (MOE) planned to make an educational reform and has been redesigned and launched a new basic education curriculum.

In this critical period, teachers as the major stakeholders, play a central role to bring about an effective implementation of new curriculum. Teachers' belief, practice and attitudes are important for implementing new science curriculum. These are closely linked to teachers' strategies for coping with challenges in their daily professional life, shaping learning environment and influence student motivation and achievement. The way the teachers teach has a greater effect on student learning outcomes than any other factors and the way the teachers teach in turn based on their belief about teaching and learning.

I believe that the first step to successfully implement the new science curriculum is to know how teachers think about science teaching and learning and whether they believe in constructivist ways of teaching and learning. Therefore, teachers' belief and teaching practices and the

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consistency between them is extremely important to bring about the effective curriculum reform. One of my concerns in this study is to investigate science teachers' belief about science teaching

and learning and their teaching practices, and whether they believe in their science teaching efficacy for implementing new curriculum effectively and successfully.

Significance of the Study

The MOE started drawing up a new curriculum in 2012 with the aim of providing the quality, equitable and relevant education to provide all the children with new knowledge and competencies, creativity and critical thinking skills and cultural and ethical values that will enable them to meet the life-long-learning and career aspirations of the 21st century economic development. New curriculum reform would lead to the changes in educational beliefs and practices. To change the curriculum and pedagogy, the most important thing is to change the educational belief of all stakeholders. Thus, teachers' belief plays an important role in bringing about a more effective curriculum reform.

Bryan (2012) stated that teacher's belief is far more influential than academic knowledge in framing, analyzing and solving problems and making teaching decisions. The OECD (2012) stated that instructional practices depend on the teachers' belief about teaching and learning. The American Association for the Advancement of Science (AAAS, 1998) stated that the major goal of the 21st century science education is fostering students' intellectual competencies and science teaching must be shifted from traditional schooling to more constructivist-oriented instruction. Benson (1989) stated that the gap between what teachers say they believe about the nature of science and what they do in practice is apparent as a result of various factors. Ford (1993) stated that the efficacy belief as one of the factors leading to the dissimilarity between beliefs and practices.

This study would provide the teachers' belief about science teaching and learning, teachers' science teaching efficacy beliefs to implement the new curriculum, and the consistency between these beliefs and teaching practices. It would also investigate whether the teachers' science teaching efficacy belief mediates the relationships between teachers' belief about science teaching and learning and teaching practices. This study would be able to point out the factors leading to dissimilarity between teachers' beliefs and the goals of new science curriculum. In addition, curriculum developers will be able to bring about a closer alignment of the intended and enacted curriculum.

Research Objectives

General Objective

- To investigate the teachers' belief and teaching practices on new curriculum in lower primary science teaching

Specific Objectives

- To study teachers' belief about science teaching and learning

- To study the teaching practices of lower primary science teachers

- To study the level of teachers' science teaching efficacy belief to implement the new science curriculum

- To investigate the relationship between the teachers' belief and their teaching practices in implementing the new curriculum

- To investigate whether the teachers' science teaching efficacy belief mediates the relationship between the teachers' belief about science teaching and learning and teaching practices.

Research Questions

- What kinds of belief do the teachers hold about science teaching and learning?
- What is the level of teachers' science teaching efficacy belief to implement new curriculum?
- What types of teaching practices do teachers use in the actual classroom?
- Is there any significant relationship between the teachers' belief and their teaching practices in implementing new science curriculum?
- Is there any mediating effect of the teachers' science teaching efficacy belief between teachers' belief about science teaching and learning and teaching practices?

Conceptual Framework

Teachers' belief about science teaching and learning plays a role in influencing classroom practices related to science instruction. This belief includes the teachers' beliefs about the nature of the science, science curriculum, how students learn science, teachers' role in science class and nature of learning environment. Sampson and Benton (2006) identified the four dimensions of the teachers' belief about science teaching and learning; belief about the nature of science curriculum, belief about the ways the students learn science, belief about the lesson design and implementation, belief about the characteristics of teachers and learning environment. Philosophically, the contemporary reform movement in science education is based on Constructivism.

The essence of constructivism is "that knowledge is not transmitted directly from one knower to another, but is actively built up by the learner" Specifically for learning science, constructivism is seen as a social process that serves as a catalyst for cognitive development. There is an emphasis on student-centered investigations to engage learners and build upon their prior knowledge. The teacher acts as a facilitator and promotes a collaborative environment in the classroom where multiple ideas are encouraged and valued. The curriculum is viewed as being flexible and focuses on depth to promote conceptual understanding.

The reformed perspective of teaching and learning science is in complete opposition to the traditional view, direct transmission. The traditional stance envisions learners as blank slates that accumulate information through teacher-centered instruction. Learners are encouraged to work independently with a heavy reliance on textbooks and learn by rote memorization. There is also a heavy reliance on the teacher as the main dispenser of knowledge where basic skills are emphasized. Furthermore, the curriculum is viewed as a fixed entity that lacks depth.

Teaching practice or instructional practice will be regarded as the collection of interaction of teachers and their teaching in a classroom context which include teaching methods and strategies. In TALIS (2009), OEDC identified teaching practices into three dimensions: structuring practices (correspond to teacher centered teaching); student-oriented practices (Correspond to student-centered teaching); and Enhanced activities (Correspond to student-centered teaching). In this research, teaching practices will be identified into three dimensions: structuring practices, student-oriented practice, and Enhanced activities.Ford (1992) stated three factors that lead to dissimilarity between beliefs and practices are efficacy beliefs, contextual beliefs and goals. Teachers' efficacy beliefs are impacting on how teachers think, feel, and teach. Teachers with a strong sense of efficacy tend to be more organized and generally plan better than those without a strong sense of efficacy. According to Bandura (1997), studies of teachers' efficacy beliefs have

been based on two separate dimensions: the first is personal efficacy and the second is outcome expectancy. Teaching efficacy belief is what teachers think about their ability to teach (personal teaching efficacy) and to have students learn (teaching outcome expectancy). Riggs and Enochs (1990) argued that the elementary teachers with high science teaching self-efficacy belief may have a more reformed view of ideal science teaching than her lower-efficacy colleagues. This study rests on the assumption that, by increasing teachers' science teaching efficacy, their belief about science teaching and learning will become part of their daily teaching practices. Thus, this study aims to investigate whether the teachers' science teaching efficacy belief mediates the relationship between teachers' belief about science teaching and learning and their practices.
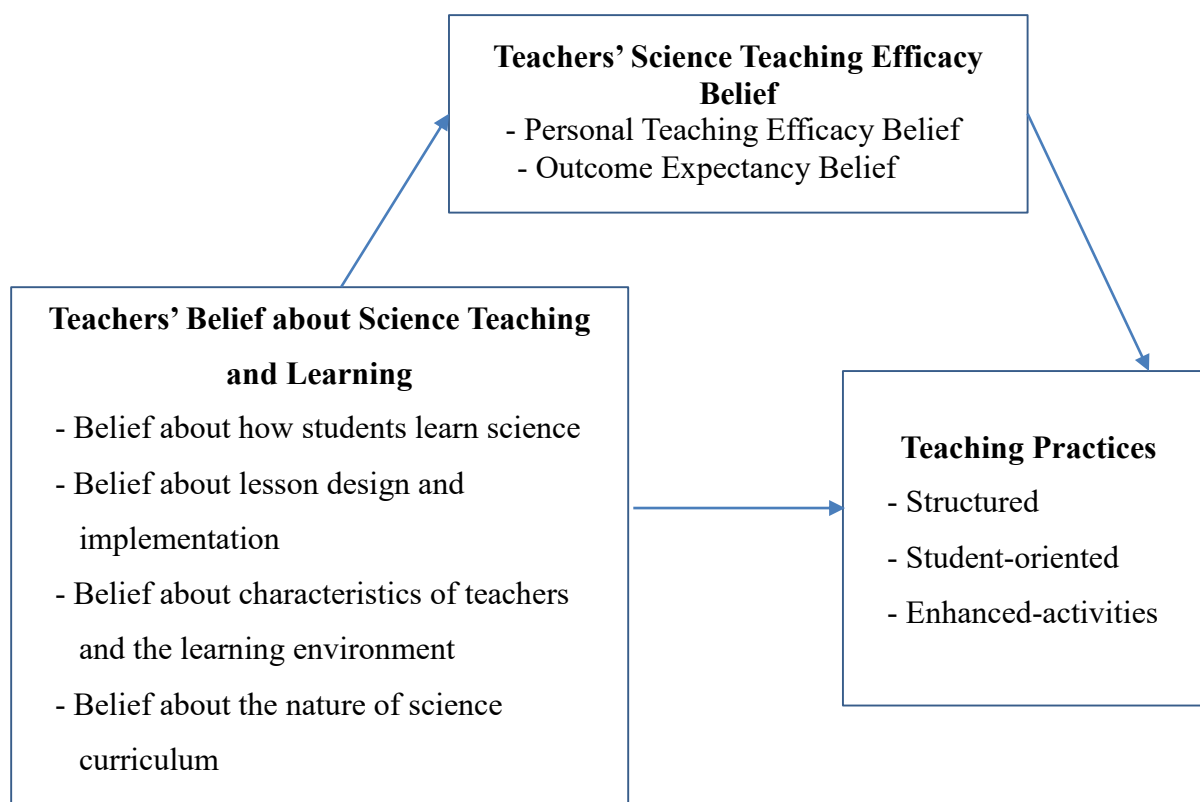
Figure 1 Conceptual Framework for the Study

Definition of Key Terms

Teacher's belief

Teachers' belief is defined as personal constructs that can provide understandings, judgements and evaluations of teachers' practices (Pajares, 1992).

Teacher Efficacy

Teacher efficacy is the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context (Bandura, 1977).

Teaching Practices

Teaching practices or actions are considered to be knowing-in-action or observable pedagogical behavior (Fishbein & Ajzen, 1975).

Operational Definitions

Teachers' Belief about Science Teaching and Learning

Teachers' belief about science teaching and learning is defined as the teachers' unconsciously held assumptions about the nature of science and the ways of students learning science. It is measured on a traditional-reformed pedagogical belief continuum. Higher mean values are reflective of the reformed pedagogical belief and lower mean values are reflective of the traditional pedagogical belief.

Science Teaching Efficacy Belief

Science teaching efficacy belief is the teachers' belief in their teaching capability to successfully implement the new science curriculum in accordance with their belief about science teaching and learning. The Higher mean values describe the higher level of science teaching efficacy belief.

Teaching Practices

Teaching Practices are defined as the observable pedagogical behaviors relating to teaching styles, assessment and feedback to deliver the new science curriculum. The greater mean values represent the more the teacher use of the learner-centered teaching practices.

Review of Related Literature

Curriculum Ideology

Schiro (2008) described the four curriculum ideologies which have exerted the greatest influence on educators' practices and aspirations. Schiro defined each of these ideologies in terms of its conception of the definition of knowledge, the nature of learning, how the learning should be evaluated, the role of the teacher and student in the learning experience, and what instructional strategies are best suited to support such learning.

Scholar Academic ideology

The Scholar Academic ideology defines curriculum through a classical, academic discipline-based approach to education. Knowledge and the manner in which such knowledge should be taught, is defined by the individual academic fields. Roles within this paradigm are hierarchical in nature and the role of the classroom teacher is that of transmitter of knowledge and the students are the recipients of knowledge. The role of public education is to perpetuate the academic disciplines. Teaching approaches within this curriculum ideology are primarily didactic discourse and student learning is assessed through objective, standardized assessments.

Social Efficiency ideology

The Social Efficiency ideology suggests that the purpose of schooling is to meet the needs of society by training youth to function as contributing members of that society. This approach suggests that there is a set of knowledge and skills that society deems important and which members of society must possess in order to function in society. The role of the teacher is as manager, responsible for establishing the learning environment and ensuring mastery of skills around a predetermined set of standards established by those outside the classroom.

Learner-Centered ideology

Learner-Centered ideology has had a consistent presence in the curriculum field for the last hundred years. It has been referred to as Constructivism, Experiential, Humanist and Progressive Education. It assumes that each child is not a blank slate but comes to school with individual

experiences, abilities, interests, and challenges. The role of the teacher is facilitator, tasked with organizing learning while supporting individual students in a process towards self-actualization. Learning is viewed as a social process whereby the learner constructs meaning through interaction with social, physical, and intellectual environments. Learner-Centered ideology suggests that it is the teacher's role to create a constructivist learning environment and then observe and diagnose the needs and interests of the learner in order to effectively facilitate individual growth. Learning goals are individualized in a Learner-Centered environment. Curriculum is not standardized but flexible and learner driven, co-created by teacher and learner. Curriculum is not cleanly divided into distinct academic disciplines but is integrated across disciplines and designed to promote deeper understanding with an emphasis on depth over breadth.

Social Reconstruction ideology

This ideology views schools as institutions of social and political change charged with the responsibility for creating a new and more just society through the education of our youth. This paradigm is commonly used when the current society is problematic and that schools can, and should, play a role in solving such social issues. Critical educators are typically concerned with hidden curriculum. The teacher's role is as facilitator of learning and teachers are viewed as agents of social change, and their role is political within the public sphere of schools. Teaching strategies often include group discussion and learning tasks are problem-based. Sometimes referred to as social justice education, the curriculum in this type of learning environment is intended to be dynamic and action-oriented.

Philosophically, the contemporary reform movement in science education is based on the learner-centered ideology and rely more on one of the most influential theories in science education known as constructivism (Driver, 1989).

Teachers' Beliefs and Teaching Practices

Pajares (1992) stated that "beliefs are the best indicators of the decisions individuals make throughout their lives". Teachers' classroom practices are influenced by their beliefs, there is still a need to examine teachers' beliefs in order to clarify how they affect their practice. Beliefs become personal pedagogies or theories to guide teachers' practices. Teachers' beliefs play a major role in defining teaching tasks and organizing the knowledge and information relevant to those tasks. Bryan (2012) stated that teacher's belief is far more influential than academic knowledge in framing, analyzing and solving problems and making teaching decisions.

Philip (2003) stated three interconnected dimensions of teachers' beliefs are: teachers' expressed beliefs, teachers' entrenched beliefs and teachers' manifested beliefs which are responsible for shaping the curriculum. Teachers' expressed beliefs are those sets of beliefs that were often expressed by the teacher during an interview or focus session but were rarely acted upon. These expressed beliefs later provided valuable insight and explanation for teachers' behavior. Entrenched beliefs are foundational to a person's actions and may also be verbally expressed. The entrenched beliefs are reinforced by the teacher's experience over time. Hence the teacher would often refer to his/her experience as a validation of his/her belief. Manifested beliefs are those sets of beliefs that are acted upon consciously or unconsciously as demonstrated by the strategies of the teachers. The teacher will demonstrate manifested beliefs as part of their daily routine. They are in fact entrenched beliefs being acted upon in a certain manner. Hence manifested beliefs are an outworking of entrenched beliefs.

Teaching Practices

Teaching practices or actions are considered to be knowing-in-action or observable pedagogical behavior (Fishbein & Ajzen, 1975). Teaching practice or instructional practice will be regarded as the collection of interaction of teachers and their teaching in a classroom context which

include teaching methods and strategies. Three main styles of teaching practices are propounded: didactic, Socratic and facilitative under two main philosophical ideas; teacher-centered and student-centered teaching approaches (Jarvis, 2006).

Didactic Teaching Approach

The didactic approach to teaching primarily involves lecturing and is essentially teacher-centered. It is a means of transmitting factual information to a large audience, which rarely creates interest or draws attention of the young people. Here the teacher talks and the class listens; thus, the teacher is the only active individuals in the class and the pupils are passive listeners. Lecturing is one the best representing feature of the non-interactive or authoritative approach of teaching by which teacher presents normative ideas in a monologue. The didactic method relies upon various form of authority.

Facilitative Teaching Approach

Teaching is "no longer seen as imparting knowledge but is redefined as facilitation of self-directed learning. Facilitation is associated with student-centered learning. Literally facilitation means "easing" by which drawing out the wisdom already embedded and lying dormant in the psyche of the learner. Facilitation may thus be seen as re-awakening our latent talents and store of unconscious wisdom. It is the art of helping learners realize their capacity to learn is the hallmark of the facilitator, moving education from a delivery of static knowledge to a dialogical relationship where knowledge is co-created. The facilitator' role is one that encourages students to engage in intellectual analysis, critical thinking, problem solving, describing experiences and challenge learning (Jarvis, 2006).

Socratic Teaching Approach

The Socratic method of teaching emphasizes student-centeredness and strongly opposes didacticism. Socratic teaching emphasizes the importance of seeking evidence, closely examining reasoning and assumptions, and analyzing basic concepts. With Socratic teaching, the focus is on providing students with questions, not answers, by modeling inquiry and probing. As a result, students develop the ability to reason in a disciplined, self-assessing manner. Students also benefit by communicating with their peers through discussion in the classroom setting. Through questioning, teachers help learners to recall pre-conscious learning or tacit knowledge and leading learners through a carefully constructed sequence of questions towards a pre-determined conclusion (Jarvis, 2006).

Three Factors Leading to Dissimilarity between Beliefs and Practices

Ford (1992) stated three factors that lead to dissimilarity between beliefs and practices. These factors are contextual beliefs, goals and capability beliefs.

Context Beliefs

Ford defined contextual beliefs as those sets of beliefs, which have environmental constraints that inhibit a teacher from teaching or implementing the curriculum in a certain expected manner. The teacher reasons, that given appropriate conditions, he/she will be able to implement a certain approach. This reasoning represents what the teacher believes.

Goals

A second factor that may contribute to teachers not making expressed beliefs part of their entrenched and manifested beliefs is the need to provide a goal or purpose. A goal is a future state that an individual is striving to attain. Ford (1992), in his motivational strategy theory, argued that the link between goals and personal agency beliefs (capability and contextual beliefs). If there is no goal, emotion and personal agency beliefs, a person may produce short-term effects, but in the

long run they are likely to fail or backfire. Teachers, like every other individual, do not change unless they have a compelling reason to do so.

Capability Beliefs

Capability beliefs described as perceived self-efficacy beliefs. It is the perceived ability and judgment of the individual to undertake a certain task. Bandura (1982) defined self-efficacy belief as the judgements of how one can execute coursed of action required to deal with prospective situations. The person's perceived ability is based upon positive and negative past experience and knowledge. People's belief in their self-efficacy or capability beliefs will have varying effects on their behavior and actions. Teachers with a strong sense of efficacy tend to be more organized and generally plan better than those without a strong sense of efficacy. They also tend to be more open to new ideas and innovations, more willing to experiment with new teaching methods, are better in meeting the needs of their students, and are more likely to use powerful but potentially difficult to manage methods such inquiry and small-group work (Ashton & Webb,1986).

Methodology

Quantitative method was used to collect the required data in this study. By using simple random sampling technique, three middle schools, five post primary schools and sixteen primary schools in the Dala Township were selected and all the primary teachers in the selected schools having more than one year of science teaching experiences were selected as the sample. The questionnaire includes four parts; demographic items, belief about science teaching and learning items, science teaching efficacy belief items and teaching practices items. The questionnaire was based on the literature, the BARSL and STEBI questionnaires and modified in accordance with the Myanmar curriculum reform. The reliability coefficient of Teachers' Beliefs about Science Teaching and Learning is 0.65, that of science teaching efficacy beliefs is 0.63 and that of teaching practices is 0.77. The total reliability coefficient (the Cronbach's alpha) of the questionnaires is 0.82. Descriptive statistics, Pearson correlation and mediation analysis were used to analyze the quantitative data.

Findings

The purpose of this research is to find out primary teachers' belief about science teaching and learning and their teaching practices to implement the new curriculum effectively and it also investigate the mediation effect of teachers' science teaching efficacy belief on the relationship between teachers' beliefs and teaching practices. One hundred and two primary teachers from the selected schools participated in this study.

To investigate the types of teachers' belief about science teaching and learning, primary teachers from selected schools were asked to give the answers related to their beliefs about science teaching and learning. The Beliefs about Reformed Science Teaching and Learning (BARSTL) questionnaire was used and it consists of four sub-scales; belief about how students learn science, belief about the lesson design and implementation, belief about the characteristics of teachers and learning environment, and belief about the nature of science curriculum.

Table 1 Mean Values and Standard Deviations Showing the Types of Teachers' Belief about Science Teaching and Learning

No.	Sub-Scales	N	Mean (SD)	Type of Belief
1.	Beliefs about the ways of students learn science	102	2.71 (.57)	Reformed Belief
2.	Beliefs about the lesson design and implementation	102	3.21 (.63)	Reformed Belief
3.	Beliefs about the characteristics of teachers and learning environment	102	2.98 (.62)	Reformed Belief
4.	Beliefs about the nature of science curriculum	102	2.80 (.54)	Reformed Belief
	Teachers' Beliefs about Science Teaching and Learning		2.95 (.61)	Reformed Belief

Scoring Direction: Traditional < 2.5 < Reformed

According to the overall mean score of belief about science teaching and learning, a majority of teachers demonstrated constructivist belief to implement new curriculum (*M*=2.95). They strongly believed that constructivist way of teaching and learning make students developed the 21st century skills and their potential.
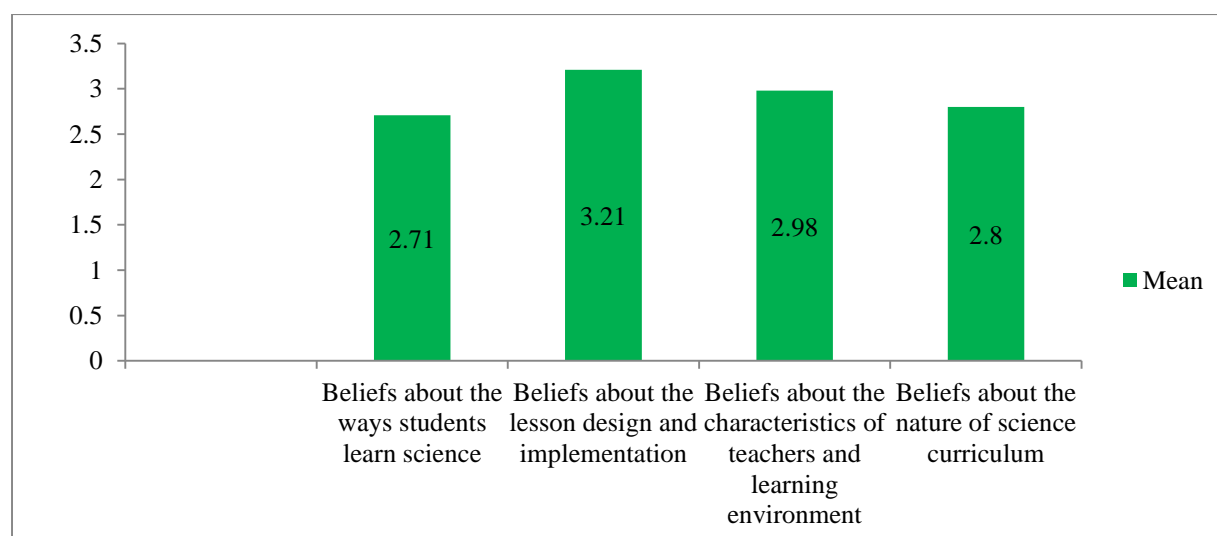
Figure 2 Mean Values of Teachers' Belief about Science Teaching and Learning

Figure 2 displays the mean scores of teachers' belief about science teaching and learning. According to figure, teachers' belief about science teaching and learning is composed of four sub-scales namely belief about how students learn science, belief about lesson design and implementation, belief about characteristics of teachers and learning environment, and belief about the nature of science curriculum. Among the four sub-scales, lesson design and implementation sub-scales was slightly higher in mean values than the others because teachers believed that students learn best through experiment, exploration, inquiry and group discussion. They also believed that formative assessment is the best way to know how students understand about the material covered in the class.

Mean scores of teachers' belief about how students learn science is the lowest among four scales. This is because some teachers believed in constructivist way of teaching and learning but some teachers still had believed the lecturing method as effective ways of teaching and learning and they believed that student achievement in science is a reflection of their natural ability. Some teachers demonstrated the traditional belief in which students know very little about science before they learn science at school.

To conduct the mediation analysis, primary teachers in the selected schools were asked to give the answers related to their science teaching efficacy belief. The Science Teaching Efficacy Belief Instrument (STEBI) was used to investigate the level of teachers' science teaching efficacy belief.   In this study, the concept of teachers' efficacy was composed of two concepts such as personal teaching efficacy belief and outcome expectancy belief.

Table 2 Mean Values and Standard Deviation Showing the Level of Teachers' Science Teaching Efficacy Belief

Science Teaching Efficacy Belief		Mean	Level of Efficacy
Personal Teaching Efficacy Belief	Classroom Teaching Practice	2.95 (.60)	Moderately High
	Interactions with Students	3.08 (.47)	Moderately High
	Science Content Knowledge	2.98 (.45)	Moderately High
	Science Experiments	2.72 (.66)	Moderately High
Outcome Expectancy Belief	Expected outcome	2.97 (.51)	Moderately High
	Responsibility	2.48 (.65)	Moderately Low
	Total	2.86 (.55)	Moderately High

Scoring Direction: 1.00 – 1.49 = low   1.50 – 2.49 = moderately low
                   2.50 – 3.49 = moderately high   3.50 – 4.00 = high

In classroom teaching practices items, teachers presented their capability to teach students by using various methods in their teaching. The teachers in this study demonstrated that they continued to find better ways to teach science and they had high efficacy in using various teaching methods to explain students who were confused in the lesson till they have understood (M=2.95) .When interactions-with -student items were investigated, it was found that teachers had moderately high efficacy in their ability to interact with students (M=3.08). They presented that they always welcome students' questions, stimulate discussion and prompt questions and they act as facilitators, motivator and resource persons. According the mean scores of science content knowledge items, teachers had the confidence in their content knowledge and had knowledge in scaffolding steps (M=2.98). According to table 2, teachers had the moderately high efficacy in monitoring science experiments (M=2.72). Teachers had moderately high level of outcome expectancies (M=2.97) because they presented that teachers' effort, extra attention and effective teaching approaches could improve the students' achievement, overcome the inadequacy of students' science background. Teachers presented moderately low level of efficacy in responsibility (M=2.48). They believed that the low science achievement of students were not probably due to the performance of the teachers and they had only little desire to take responsibility for the achievement of students in science.
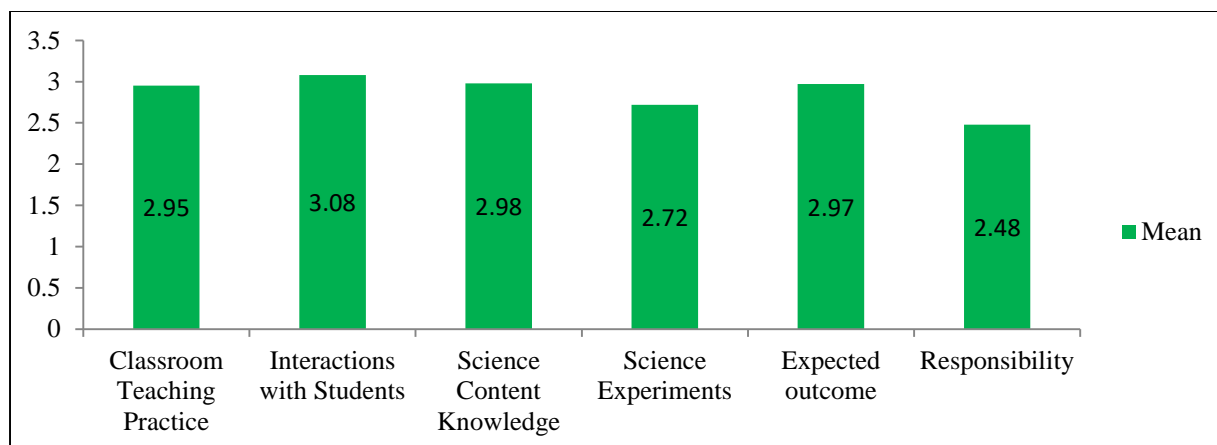
Figure 3 Mean Values of Teachers' Science Teaching Efficacy Belief

A majority of teachers had moderately high level of efficacy (*M*=2.86) because they strongly believed that they had the capability to implement the new science curriculum. However, they demonstrated moderately low level of efficacy in taking responsibility of the outcomes.

Types of Teaching Practices

Primary teachers from selected schools were asked to give the answers related to their teaching practices. The conceptual development of the inventory drew on the philosophy of constructivism and direct transmission. Teaching practices questionnaire was composed of three domains: structuring practices, student-oriented practices and enhanced activities.

Table 3 Mean Values Showing of Teaching Practices

Teaching Practices	Mean	Types of Teaching Practices
Structuring	3.04	Learner-centered
Student-oriented	3.15	Learner-centered
Enhanced Activities	3.12	Learner-centered
Total	3.11	Learner-centered

Scoring Direction: Didactic Practices < 2.5 < Learner-centered Practices

A vast majority of the teachers use teaching practices in line with the reforms such as open-ended questions, class discussion, group work, inquiry-based learning, applied activities, teacher demonstration, games, hand on activities and opportunities for students to express their own ideas and opinions. There were also some teachers who still used lecture, memorization and recitation, drill and choral response and assigning homework which are considered to be consistent with traditional examination oriented education. Teacher self-reports of classroom practice differed markedly from observation reports of teachers' classroom practice. However, it was found that teachers were familiar with the types of teaching methods that are currently advocated by the New Curriculum reforms.

Mediation Analysis

The mediation model utilizes three variables with two causal paths leading into the outcome variable. This study was partially designed to examine whether teachers' science teaching efficacy belief mediates the relationship between teachers' beliefs about reformed science teaching and learning and teaching practices. Teachers' belief about science teaching and learning represents the predictor variable. The teaching practices are dependent variable. Teachers' Science Teaching Efficacy Belief represents the mediator through which teachers' belief about reformed science

teaching and learning affect their teaching practices. Bivariate analysis were conducted to assess correlations among the three target variables.

Table 4 Correlations Among Belief about Science Teaching and Learning, Science Teaching Efficacy Beliefs and Teaching Practices

Variables	Belief about Science Teaching and Learning	Science Teaching Efficacy Belief	Teaching Practices
Belief about Science Teaching and Learning	1		
Science Teaching Efficacy Belief	.559**	1	
Teaching Practices	.332**	.402**	1

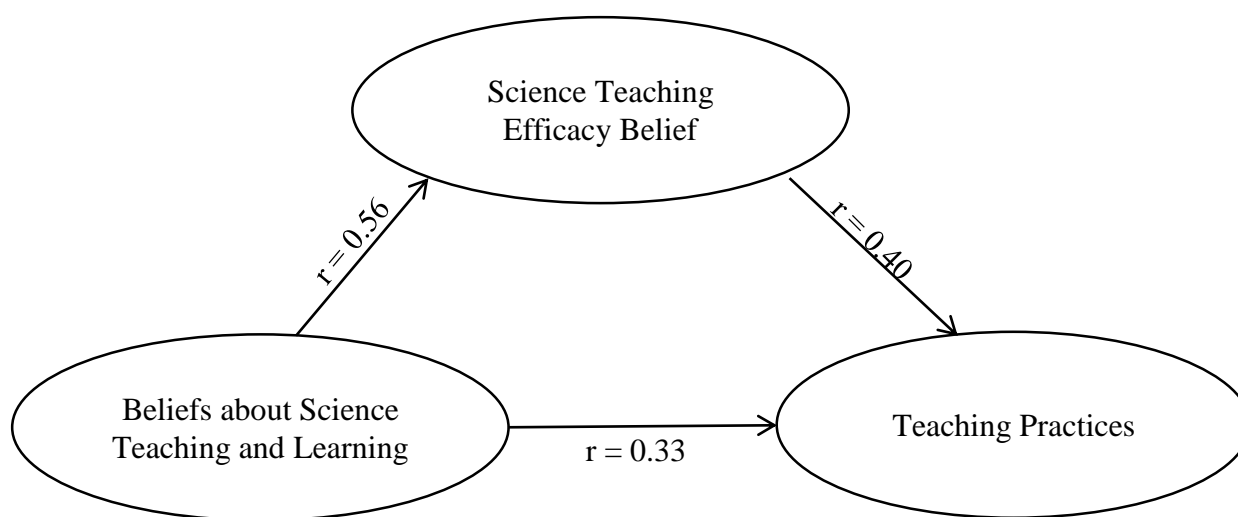**. Correlation is significant at the 0.01 level (2-tailed).

Figure 4 Mediation Analysis Among Belief about Science Teaching and Learning, Science Teaching Efficacy Beliefs and Teaching Practice

In accordance with the above table and figure, predictor and mediator were related to the dependent variable. Thus it can be said that the core conditions for testing the mediation had been met. Teachers' science teaching efficacy beliefs and Teachers' beliefs about science teaching and learning were moderately correlated with the correlation coefficient r = 0.56. Teachers' science teaching efficacy beliefs and Teachers' teaching practices were also moderately correlated with the correlation coefficient r = 0.40 while the Teachers' beliefs about science teaching and learning and teaching practices are poorly correlated (r = 0.33). The correlation coefficient of teachers' science teaching efficacy beliefs with teachers' beliefs about reformed science teaching and learning and teaching practices was significantly higher than the direct correlation coefficient of beliefs about reformed science teaching and learning and teaching practices. Thus teachers' science teaching efficacy belief could partially mediates the relationship between teachers' beliefs about reformed science teaching and learning and teaching practices.

Conclusion and Discussion

Based on the related literature and findings of this research study, it would be concluded as follows.

In the study of the types of teachers' belief about science teaching and learning, it was found that majority of the teachers demonstrated the constructivist belief for implementing the new science curriculum.

The overall mean score of the teachers' beliefs about science teaching and learning was 2.95. The mean scores of teachers in this study appeared to be hovering around the middle of a traditional-reformed belief continuum. Their scores were not remarkably polarizing towards the traditional or the reformed perspective of teaching and learning science. Although the teachers in this study demonstrated the shift of their beliefs to constructivism, they did not completely believe in constructivism and they still sometimes demonstrated the traditional way of science teaching and learning. However, they are familiar with the constructivist ways of science teaching and learning which is becoming their idealist belief and they need more training and experience relating to new curriculum to make their idealist belief into the transition beliefs for their daily practices.

Ford (1992) stated three factors that lead to dissimilarity between beliefs and practices are efficacy beliefs, contextual beliefs and goals. Thus, teachers' science teaching efficacy beliefs was also investigate in this study to determine whether the efficacy belief mediates the relationship between teachers' belief and teaching practices. In this study, the concept of teachers' efficacy was composed of two concepts such as self-efficacy and outcome expectancies. It was found that teachers had moderately high level of personal teaching efficacy belief. They presented their capacity to teach students in constructivist way of teaching and learning, their ability to interact positively with students and their roles as facilitators, motivators and resources persons. It can be concluded that teachers believed in their own capability to implement the new curriculum.

In the investigation of teaching practices, teaching practices were classified into teacher-centered teaching practices corresponding to traditional belief, and student-oriented teaching practices corresponding to constructivist belief. It was found that a vast majority of the teachers use teaching practices in line with the reforms. There were also some teachers who still used traditional ways of teaching and learning. Teacher self-reports of classroom practice differed markedly from observation reports of teachers' classroom practice. It can be concluded that although teachers were familiar with the types of methods that are currently advocated by the New Curriculum reforms, their daily practices were not consistent with the new curriculum trend. The inconsistency between belief and practices may be due to the contextual factors such as class size, inadequacy of resources and teachers.

In the mediation analysis, it was found that the teachers' beliefs about science teaching and learning and teaching practices are poorly correlated ($r = 0.33$). Teachers' science teaching efficacy beliefs and Teachers' beliefs about science teaching and learning were moderately correlated with the correlation coefficient $r = 0.56$ and teachers' science teaching efficacy beliefs and teachers' teaching practices were also moderately correlated with the correlation coefficient $r = 0.40$. The correlation coefficient of teachers' science teaching efficacy beliefs with teachers' beliefs about reformed science teaching and learning and teaching practices was significantly higher than the direct correlation coefficient of beliefs about reformed science teaching and learning and teaching practices. Thus teachers' science teaching efficacy belief could partially mediates the relationship between teachers' beliefs about reformed science teaching and learning and teaching practices.

To sum up, the main factors that lead to the inconsistency between teachers' belief about science teaching and learning and their teaching practices are contextual factors such class size, inadequacy of teachers and resources. Teachers' efficacy belief plays a key role to overcome such contextual factors because the teachers in this study create additional resources on their own and they are trying to implement the new curriculum effectively.

Needs for Further Research

This study concerned with finding out the lower primary science teachers' beliefs about science teaching and learning and their teaching practices to implement the new curriculum. It also aimed to investigate whether the teachers' efficacy belief mediates the relationship between their beliefs and teaching practices. The collected data were based on the teachers' perception of their own belief, teaching efficacy and teaching practices. But it is still needed to investigate students' and principals' perceptions of their teachers' teaching practices. This research work was conducted only in the Dala Township. Researchers who are interested in the areas of teachers' belief and practices can be conducted in other townships. Further research should be conducted by mixed method and observation is strongly recommended. Further researchers are recommended to investigate the transformation of teachers' beliefs throughout the curriculum transform.

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TEACHERS' INFORMAL MENTORING ON ENGAGEMENT OF AT-RISK STUDENTS

Tin Nilar Aye[1], Aung Lin [2]

Abstract

The main purpose of the study was to study teachers' informal mentoring on engagement of at-risk students in Hlaing Township, Yangon Region. Quantitative method and qualitative methods were used in this study. The questionnaire included two parts; at-risk students' perception on teachers' informal mentoring and their engagement. Teachers' informal mentoring portion was modified by the researcher under the guidance of supervisor, and at-risk students' engagement portion was based on Student Engagement Instrument (SEI) and refined under the guidance of supervisor. The reliability coefficients (the Cronbach's alpha) were 0.92 for teachers' informal mentoring and 0.89 for at-risk students' engagement. One hundred and ninety-four Grade 9 students from Basic Education High Schools in Hlaing Township participated in the study. Descriptive statistics and one-way ANNOVA and interviews were used in exploring the levels of students' perceptions on teachers' informal mentoring and engagement of at-risk students. The teachers in Hlaing Township often performed their mentoring on at-risk students. Therefore, their students' engagement is moderately high. After that, in comparing the students who receive teachers' informal mentoring and those who are not receiving, the students who receive teachers' informal mentoring is higher engaged in their learning than those who are not receiving. In qualitative findings, the information from interview questions were complementary to the quantitative findings. Therefore, educators and education policy makers should consider the findings of the research work in improving teachers' informal mentoring and students' engagement.
Keywords: informal mentoring, at-risk students' engagement

Introduction

Education is productive and beneficial for a person. Education can transform a person to be a better person in a social well-being. Education can produce successful people. Most successful people have a caring adult who helped them face the challenges of life when they were in their youth. This caring person may have been a person who have a special interest in them and served as a guide for them. These successful people cannot achieve success without the help of this mentor figure. Throughout the history, a mentor has been defined as a trusted counselor or guide. They have the ability to profoundly impact those with whom they are able to form emotional bonds (O'Shea, 2014).

Mentoring is essential in education especially for at-risk students. At-risk students are those who hinder academic success and these lead to drop-out. Students who are at-risk may need a caring adult to serve as a secondary attachment figure in place of parents or family who may have failed to provide adequate developmental support connections. (Van Ryzin, 2010). If teachers are able to form informal mentoring relationships with students who are at-risk, then students may become behaviorally, cognitively and emotionally engaged in learning.

In education, the success of the students depends upon the teachers' pedagogical knowledge, instructional strategies and the relationship between teachers and students. The effect of the teacher-student relationship has the effect on the engagement of students, especially at-risk students. Students and teacher relationships create school environments that can facilitate student engagement and reduce rates of dropout (Lee & Burkam, 2003, as cited in Van 2010). Therefore, it is necessary to investigate teachers' informal mentoring on engagement of at-risk students.

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Significance of the Study

In our country today, there is a huge emphasis on education. It plays an important part in social and personal advancement. Therefore, in our country, EFA program is implemented all over the country. However, students' drop- out rate rises because of the socio-economic status of the people. It is recognized by the MoE as a major issue to be solved. According to NESP data, the secondary students' drop-out rate is higher than any others.

In order for teachers to help students who are at-risk, it is important to first understand the factors that lead to students' difficulties in school. Students who are at-risk often arrive at school with problems. These problems can cause them to be disengaged emotionally and decrease behavioral or cognitive engagement.

The students who are at-risk for dropping out have no caring adult who can provide the support and care necessary to become successful. Thus, in a school setting, the teachers should serve as caring adults for students (McCluskey, et.al, 2004; as cited in O'Shea, 2014).

The effects of informal mentoring relationship can have on students can be described in terms of student engagement (O'Shea, 2014). Thus, this study is going to investigate teachers' informal mentoring on at-risk students' engagement in Hlaing Township, Yangon Region. The result from the study would be useful to increase the engagement of at-risk students and reduce the drop-out rate in Hlaing Township.

Aim of the Research

Main Aim

- To investigate teachers' informal mentoring on engagement of at-risk students at Grade (9).

Specific Aim

- To identify the level of teachers' informal mentoring as perceived by at-risk students at Grade (9) in Hlaing Township.

- To investigate the level of engagement of at-risk students at Grade (9).

- To compare engagement of Grade (9) at-risk students who are receiving teachers' informal mentoring with those who are not receiving.

Research Questions

- What is the level of teachers' informal mentoring as perceived by at-risk students at Grade (9)?

- What is the level of engagement of at-risk students at Grade (9)?

- What is the comparison of the engagement of Grade (9) at-risk students who are receiving teachers' informal mentoring with those who are not receiving?

Theoretical Framework

In this study, teachers' informal mentoring was investigated with five dimensions based on informal mentoring dimensions developed by O'Shea (2014). These five dimensions are (1) respect all students, (2) prove trustworthiness to students, (3) demonstrate care, (4) demonstrate interest, and (5) maintain high expectations. At-risk students' engagement was investigated with three dimensions which were developed by Bloom (1956). These are (1) emotional engagement, (2) behavioral engagement and (3) cognitive engagement.

Respect all students

Before an informal mentoring relationship can be built, teachers must first respect the students and believe that they have the ability to be successful. The teachers must have a positive attitude and never treats at-risk students differently based on personal interests. The teachers do not ignore the students because students' successes have been linked to their teacher's beliefs about their ability (Davis &Dupper, 2004).

Prove trustworthiness to students

The establishment of trust is an essential component in mentoring relationship between teachers and students. The authority of the teacher, having the ability to influence student's behavior, is earned through the establishment of trust. The teacher must be honest and consistent to students. The teachers stand up for the students. They cannot build trust with their students if they are constantly disciplining them for minor infractions. In order for a student to trust a teacher and allow for that teacher to have a say in what behaviors they will engage in, he or she must first believe that this teacher has his or her best interests in mind.

Demonstrate care

Behaviorally or academically at-risk students need more than just kind words from a teacher to succeed in school. Teachers must demonstrate their care for students through specific actions for it to be received (Shevalier& McKenzie, 2012, as cited in O'Shea, 2014). The goal of all teachers, which is the basis for demonstrating care, should be to have warm, positive interactions with students (Bergin & Bergin, 2009). The teachers must be friendly with the students, notice and appreciate them, provide relaxed classroom atmosphere, allow students to know the teachers and create a safe environment.

Demonstrate interest

Before students will be interested in what a teacher is saying to them, they must know that the teacher is interested in them. Most of all, students desire a teacher who is interested in and will listen to whatever it is they have to say (Knesting, 2008). The teachers must have informal conversations and personal attention to the students.

Maintain high expectations

The teachers must have high expectations for students. In order to meet those expectations, the teacher must work hard and they are communicating care. The idea of holding students to high academic standards is related to the previous concept of believing that all students have the ability to achieve. However, in order for a mentor teacher to truly support a student who is struggling, they must hold them to a high academic standard, then provide support which will build student resilience (Lessard et al., 2009) and provide high-level learning activities.

Emotional engagement

The emotional engagement of students is important because it can effect to behaviors. The emotional engagement of a student refers to how the student feels about school, their teachers, and the work provided (Fredricks et al., 2004, as cited in Van, 2010. The actions of teachers directly influence this emotional engagement and have been shown to be related to feelings of school satisfaction in students (Baker, 1999). The existence of external or internal problems in students' lives results in them having less closeness to their teachers (Nurmi, 2012, as cited in O'Shea, 2014).

Behavioral engagement

Behavioral engagement can be considered as the student's willingness to engage in the activities that the teacher presents. A positive relationship between teacher and student has been shown to have a significant effect on this behavioral engagement (Roorda, et.al., 2011). The concept of behavioral engagement is often described in terms of effort or motivation. For students to display behavioral engagement, they actively participate in the activities that the teacher provides, increase in compliant behavior, and in effort in academic tasks. Moreover, they decrease in classroom disruptions, office referrals and risky behaviors.

Cognitive engagement

Cognitive engagement is the way that students think and is measured by their level of academic achievement. If the teachers have positive relationships with the students, the students will behaviorally engage and put effort in academic tasks. This lead to academic achievement of the students. When academic achievement does not follow student effort, the support from the teacher becomes even more important in supporting resilience and encouraging the student to keep trying until success is achieved (Lessard et al., 2009, as cited in Van, 2010).

Definition of the Key Terms

Informal mentoring

- a natural component of relationships that occurs throughout the society, in the workplace, as well as in social, professional and family activities (Inzer,2005).

At-risk students

- A student who demonstrates behaviors that hinder academic success: poor grade-point average, excessive absences, chronic discipline referrals in one school year (Schorr, 2000).

Student Engagement

- Participation in educationally effective practices, both inside and outside the classroom which leads to a range of measurable outcomes (Kuh et.al., 2007, as cited in O'Shea, 2014).

Operational Definitions

Informal mentoring

- Informal mentoring means the natural relationship between teachers and students that involve respect, care, trust, interest and maintain high expectation. The higher the mean values means the higher the teachers practice informal mentoring on at-risk students.

Student Engagement

- Student engagement means the emotionally, behaviorally and cognitively engaged in activities inside and outside of the classroom. The higher the mean values describes the higher the engagement of at-risk students.

Limitations of the Study

Due to the time constraint, this study is geographically restricted to Hlaing Township, Yangon Region. The participants in this study were (194) Grade (9) at-risk students from (4) Basic Education High Schools in Hlaing Township, Yangon Region. This study was confined to teachers' informal mentoring on engagement of at-risk students.

Review of Related Literature

Mentoring

Mentoring is a relationship. It is a relationship between the mentor and the mentees. Mentoring is defined as a one-to-one relationship in which an expert or a senior person voluntarily gives time to teach, support, and encourage another (Santamaria, 2003). According to Zachary (2002), mentoring passes on knowledge of subjects, facilitates personal development, encourages wise choices, and helps the protégé to make transitions.

Informal mentoring

Informal mentoring is the natural relationship coming together of a mentor and mentee (O'Shea, 2014). This is done through personal and professional respect and admiration of each other. It is usually a long-term relationship. According to McDonald et.al. (2007), informal mentoring as the relationship that occurs naturally among youth and the adults with whom they come in contact. Both parties are motivated to enter the relationship in order to meet developmental needs. Informal relationships occurred as a result of interpersonal comfort and through unstructured social interactions and are not time bound or governed with external or internal rules (Hansman, 2000).

Characteristics of informal mentoring relationship

An informal mentoring relationship between a teacher and student can be characterized by the teacher

1. Supporting student progress,

2. Knowing and caring for the student,

3. Promoting open communication,

4. Being a listener and advice giver,

5. Improving student academic performance (Shulkind& Foote, 2009).

Engagement

Engagement is more than involvement or participation – it requires feelings and sense making as well as activity (Harper & Quaye, 2009, as cited in O'Shea, 2014). Student engagement has been defined as "participation in educationally effective practices, both inside and outside the classroom, which leads to a range of measurable outcomes" (Kuh *et al.*, 2007, as cited in Van, 2010). Coates (2007) describes engagement comprises the following characteristics: active and collaborative learning, participation in challenging academic activities, formative communication with academic staff, involvement in enriching educational experiences.

Methodology

Quantitative and qualitative methods were used to collect the required data in this study. The sample was 194 at-risk students from 4 schools in Hlaing Township, Yangon Region. For quantitative study, two sets of questionnaire were used in this study. One set of questionnaire was intended to investigate teachers' informal mentoring on Grade (9) at-risk students. This questionnaire was based on the literature review under the guidance of supervisor. Another set of questionnaire was based on Student Engagement Instrument (SEI) and refined under the guidance of supervisor. The reliability coefficients (the Cronbach's alpha) were 0.92 for teachers' informal mentoring and 0.89 for at-risk students' engagement. Descriptive statistics was use to analyze the

data with the Statistical Package Science (SPSS) version 22. For qualitative study, interview was used to collect the data.

Findings

Mean Values and Standard Deviations Showing the Level of Teachers' Informal Mentoring

No	Teachers' Informal Mentoring Variables	N	Mean (SD)	Level of Teachers' Informal Mentoring
1	Respect	194	3.762(1.31)	Often
2	Trust	194	3.41(1.34)	Sometimes
3	Care	194	3.41(1.34)	Sometimes
4	Interest	194	3.55(1.57)	Often
5	Maintaining high expectation	194	3.13(1.39)	Sometimes
	Teachers' Informal Mentoring		3.59(0.785)	Often

Scoring Direction: 1.00-1.49=never, 1.50-2.49=Seldom   2.50-3.49=Sometimes,
3.50-4.49=Often, 4.50-5.00*=Always

The table shows mean and standard deviation of the level of teachers' informal mentoring in Hlaing Township, Yangon Region.

For teachers' informal mentoring in schools, the mean value was 3.59. The teachers in the schools often performed informal mentoring on their at-risk students. The mean values for respect, trust, care, interest and maintaining high expectation were 3.762, 3.41, 3.41, 3.55 and 3.13. Therefore, the teachers in Hlaing Township often performed respect and interest to the students and sometimes performed trust, care and maintaining high expectation to the students.

Mean Values and Standard Deviations Showing Teachers' Informal Mentoring Grouped by Schools

No	Schools	N	Mean	Standard Deviation
1	School A	49	3.64	0.64
2	School B	59	3.16	0.92
3	School C	36	3.91	0.83
4	School D	50	3.61	0.69
	Teachers' Informal Mentoring	194	3.59	0.79

The table shows mean and standard deviation of teachers' informal mentoring in each school.

For teachers' informal mentoring, the mean values for School A, School B, School C and School D were 3.64, 3.16, 3.91 and 3.6. The results showed that teachers' informal mentoring in School C was the highest among all the other schools

Mean Values and Standard Deviations Showing Teachers' Informal Mentoring by Specialization

Specialization	N	Mean	Standard Deviation
Specialization 7	82	3.6	0.69
Specialization 1	92	3.52	0.86
Specialization 2	20	3.66	0.79

According to table, the mean values were 3.6, 3.52 and 3.66. It was found that the at-risk students perceived that their teachers' informal mentoring on Specialization 2 students was the highest among all the at-risk students.

Mean Values and Standard Deviations Showing Teachers' Informal Mentoring by Gender

Gender	N	Mean	Standard Deviation
Male	89	3.6	0.4
Female	105	3.58	0.75

According to table, the mean values of male and female were 3.49 and 3.24. It was found that teachers' informal mentoring on male students was higher than female students.

Findings on the Level of At-risk Students' Engagement

To investigate the level of at-risk students' engagement, mean values were used. The tables are shown as below.

Mean Values and Standard Deviations Showing the Level of At-risk Students' Engagement

No	At-risk Students' Engagement	N	Mean (SD)	Level of Students' Engagement
1	Emotional Engagement	194	3.6(0.75)	High
2	Behavioral Engagement	194	3.1(0.7)	Moderate
3	Cognitive Engagement	194	3.3(0.83)	Moderate
	At-risk Students' Engagement		3.3(0.76)	Moderate

Scoring Direction: 1.00-1.49=very low,   1.50-2.49=low,   2.50-3.49=moderate,
                           3.50-4.49=high,   4.50-5.00*=very high

The table shows mean values and standard deviations showing the level of students' engagement in Hlaing Township, Yangon Region.

For at-risk students in schools, the mean value was 3.3. The at-risk students in the schools moderately engaged in their learning. The mean values for emotional engagement, behavioral engagement and cognitive engagement were 3.6, 3.1 and 3.3. Therefore, the at-risk students in Hlaing Township highly engagement in emotional engagement and moderately engaged in behavioral and cognitive engagement.

Findings on the Variations Showing At-risk Students' Engagement Grouped by Schools, Specialization and Gender

To investigate at-risk students' engagement grouped by schools, specialization and gender, mean values were used to compare the variations.

Mean Values and Standard Deviations Showing the Level of At-risk Students' Engagement Grouped by Schools

No	Schools	N	Mean	Standard Deviation
1	School A	49	3.5	0.74
2	School B	59	3	0.52
3	School C	36	3.83	0.61
4	School D	50	3.38	0.6
At-risk students' engagement		194	3.39	0.67

The table shows mean values and standard deviations showing the level of students' engagement in each school.

For at-risk students' engagement, the mean values for School A, School B, School C and School D were 3.5, 3, 3.83 and 3.38. The results in the table indicated that the at-risk students in School C and school A highly engaged in their learning. The at-risk students in rest of the schools moderately engaged in their learning.

Mean Values and Standard Deviations Showing At-risk Students' Engagement by Specialization

Specialization	N	Mean	Standard Deviation
Specialization 7	82	3.4	0.58
Specialization 1	92	3.3	0.71
Specialization 2	20	3.5	0.8

According to table 4.3, the mean values were 3.4, 3.3 and 3.5. It was found that the engagement of at-risk students in specialization 2 was higher than the at-risk students in specialization 1 and 7.

Mean Values and Standard Deviations Showing At-risk Students' Engagement Grouped by Gender

Gender	N	Mean	Standard Deviation
Male	89	3.49	0.65
Female	105	3.24	0.67

According to table, the mean values of male and female were 3.49 and 3.24. It was found that teachers' informal mentoring on male students was higher than female students.

Findings on the significant differences of at-risk students who receive teachers' informal mentoring and those who do not receive

To investigate the significant differences of at-risk students who receive teachers' informal mentoring and those who do not receive, mean values were used. The table is shown as follows.

Results of Independent Sample t-test for At-risk Students who receive teachers' informal mentoring and those who do not receive (N=194)

Content	Students	N	Mean	SD
Teachers' Informal Mentoring	Receiving	100	3.5	0.65
	Not Receiving	94	2.8	0.42

According to the table, the mean value of at-risk students who are receiving teachers' informal mentoring (3.5) is higher than those who are not receiving (2.8). It could be reasonably interpreted that at-risk students who are receiving teachers' informal mentoring have higher engagement than those who are not receiving.

Conclusion, Discussion and Suggestions

The primary purpose of this study was to study teachers' informal mentoring on engagement of at-risk students in Basic Education High Schools of Hlaing Township, Yangon Region. Questionnaires have also been developed for this research to find out teachers' informal mentoring on engagement of at-risk students occurred. A total of 194 at-risk students from 4 schools participated in this study. Based on the findings of quantitative study, the conclusion can be drawn as follows.

In this study, the teachers in the schools often performed informal mentoring on their at-risk students. The teachers in Hlaing Township sometimes performed trust, care and maintaining high expectation on at-risk students but they often performed the dimensions of interest and respect. Being a good listener and advice giver to at-risk students build a trusted relationship between teachers and at-risk students. According to Baker (1999), the actions of teachers directly influence this emotional engagement in students, the teachers in Hlaing Township should highly perform in all dimensions of informal mentoring.

The at-risk students in Hlaing Township moderately engaged in their learning. Among the dimensions of at-risk students' engagement, emotional engagement of at-risk students is higher than behavioral engagement and cognitive engagement. Therefore, the at-risk students in Hlaing Township feel positive feelings about school and teachers. The teachers should help the at-risk students to improve their behavioral and cognitive engagement. According to O'Shae (2014), a mentoring relationship with a teacher can result in the student experiencing positive feelings about school and the teacher, which in turn can lead to more effort and an increase in achievement. The teachers in Hlaing Township should encourage more informal mentoring to improve at-risk students' engagement.

According to the results, the at-risk students who receive informal mentoring have higher engagement in their learning. There was significant difference between at-risk students who are receiving teachers' informal mentoring and those who are not receiving. Therefore, we can conclude that high informal mentoring leads to high students' engagement. It can enhance the positive feeling about the school, teachers and schools, enhance resilience and engagement and produce higher academic performance. To reduce drop-out rate from schools, the teachers in Hlaing Township should encourage informal mentoring on at-risk students.

Today, our country has faced students' drop-out problem which is one of the issues in education. According to O' Shea (2014), informal mentoring was one of the solutions for reducing students' drop-out rate. In my study, at-risk students in Hlaing Township perceived that their teachers often performed informal mentoring on at-risk students. Therefore, the at-risk students

moderately engaged in their learning. The qualitative findings were complementary the quantitative findings.

In helping the at-risk students to actively engage in their learning, the teachers should provide academic and social support to students who are in need of significant help. In doing so, teachers and at-risk students interact with each other easily, actively engage in their learning, produce better learning outcomes, and gradually reduce the drop-out rate.

On the basis of the study, the following suggestions are made to enhance teachers' informal mentoring on engagement of at-risk students.

- Teachers should know and care for at-risk students.

- They should promote open communication, be a listener and advice giver, support students' progress.

- Teachers should engage in psychosocial activities such as counseling, facilitating social interactions, role modeling and providing friendship.

- As the expectation of the teachers is critical for students, the teachers should maintain high expectation for all students.

- The teachers should foster positive relationship with the students by conveying respect and compassion for students, responding to their needs and feelings, listening carefully to them, and recognizing students' strength and contributions.

- Teachers should encourage the students to discuss in their teaching-learning process.

- Teachers should promote open and free communication out of class time.

- Teachers should give more interest to the students.

- Although emotional engagement of at-risk students in Hlaing Township is high, cognitive and behavioral engagement is moderate. Therefore, teachers should try to promote cognitive and behavioral engagement by improving informal mentoring.

- Professional development programs concerning teacher-student relationship should be arranged according to school level, township level and national level for improving teacher-student relationship.

- Policy makers should emphasize teacher training programs in order to strengthen teachers' mentoring on students.

- Teacher educators should collaboratively put effort to develop the teacher manuals which enhance teachers' mentoring on students.

Needs for Further Research

This study intended to study teachers' informal mentoring on engagement of at-risk students. In this study, 194 Grade 9 at-risk students from 4 Basic Education High Schools of Hlaing Township, Yangon Region were sampled. It is necessary to investigate teachers' informal mentoring on engagement of at-risk students from schools in other townships, states and regions to represent the whole country. This study was based on five areas of informal mentoring: respect, trust, care, interest and maintain high expectation, three areas of students' engagement: emotional engagement, behavioral engagement and cognitive engagement. Therefore, for the improvement of education system, further studies needed to explore teachers' informal mentoring in different areas of engagement.

Acknowledgements

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A STUDY OF THE STUDENTS' ATTITUDES TOWARDS COOPERATIVE LEARNING IN SCIENCE AT YANGON UNIVERSITY OF EDUCATION

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Abstract

The main purpose of this study was to study the students' attitudes towards cooperative learning in science at Yangon University of Education. Quantitative and qualitative research methods were used to study students' attitudes towards cooperative learning in science at Yangon University of Education. In this study, purposive sampling was used. The participants in this study were (217) fifth year (first semester) students (68 male students and 149 female students) who specialize in science within the (2018-2019) academic year. As a research instrument, "Attitudes towards cooperative learning" questionnaire was used to study the students' attitudes towards cooperative learning. The instrument was based on Borich (1996) components of a cooperative learning activity. Students' attitudes towards cooperative learning questionnaire included (40) items on five-point Likert-scale described by five responses: strongly agree, agree, undecided, disagree and strongly disagree. Descriptive and inferential statistics were employed for the analysis of the quantitative data. This study indicated that there was no significant difference between the attitudes of students towards cooperative learning in science in terms of gender. There was also no significant difference between the attitudes of students towards cooperative learning in science in terms of state (or) region. It can be concluded that no difference between boys and girls on grades according to the questionnaire. There was also no difference between state (or) region according to the questionnaire.

Keywords: attitude, cooperative learning, science

Introduction

The world is changing rapidly in the twenty-first century. Education is a life-long process and it goes on from birth to death. It is also the greatest investment that a country can make for the quick development of its economic, political, sociological, technological, and human resources. Education enables an individual to make his life better both as an individual and a member of his society. Teachers at the university environment have often struggled with motivating and actively engaging students in the classroom. Cruickshank, Bainer and Metcaft (1999) expresses that the ultimate goal of formal education is to help students learn how to learn. The goals of cooperative lesson in science include the clarification of a basic concept or technique that is foundational to science and the reinforcing of an area of particular difficulty. Cooperative activities generally encourage peer interaction within class and out of class peer study groups. One of the main benefits of student-student interaction is in concept formulation through teaching opportunities which results in improved student performance and perseverance.

Background of the Study

Twenty-first century is a knowledge-driven age. Information comes to students from the wider ranges. In cooperative learning, group activities are carefully planned to maximize students' interaction and to facilitate students' contributions to each other's learning. Cooperative learning, therefore, would seem to deserve more attention from educators for academic achievement, personal growth and the development of social and learning skills. Hand, Treagust, & Vance (1997) revealed that students had mostly positively perceptions of cooperative learning. Cooperative learning is a teaching approach in which students work cooperatively in a small team with individuals of different talents, abilities and background to complete a common goal.

Therefore, the present study is intended to investigate the students' attitudes towards cooperative learning in science at Yangon University of Education.

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Purposes of the Study

The main purpose of this study is to study students' attitudes towards cooperative learning in science at Yangon University of Education. The specific objectives are as follows:

a. To investigate students' attitudes towards cooperative learning in science at Yangon University of Education

b. To compare students' attitudes towards cooperative learning in terms of gender

c. To compare students' attitudes towards cooperative learning in terms of state (or) region

Research Questions

1. Are there positive attitudes towards cooperative learning in science at Yangon University of Education?

2. Is there a significant difference in students' attitudes towards cooperative learning in terms of gender?

3. Is there a significant difference in students' attitudes towards cooperative learning in terms of state (or) region?

Scope of the Study

This study is conducted at Yangon University of Education.

1. The participants of this study are fifth year (first semester) students within the academic year (2018-2019).

2. This research includes only students' attitudes towards cooperative learning in science.

3. To study the students' attitudes towards cooperative learning, the instrument was based on Borich (1996) components of a cooperative learning activity.

Definition of Key terms

Attitude

An attitude is the tendency to think, feel or act positively or negatively toward objects in our environment (Eagly & Chaiker, 1993; Petty, 1995, cited in Salta & Tzougraki, 2004).

Cooperative Learning

Cooperative learning is a group learning activity organized so that learning is dependent on the socially structured exchange of information between learners in groups and in which each learner is held accountable for his or her own learning and is motivated to increase the learning of others (Olsen & Kagan, 1992, cited in Richards & Rodgers, 2001).

Science

Gagne defines science as a search for explanations of events in nature (Gagne, 1965).

Significance of the Study

If teachers know students' favorable or unfavorable attitudes towards cooperative learning in science, they can perform teaching and learning process more effectively. Students' positive attitude towards cooperative learning is one of the vital factors for teaching and learning process that promotes academic achievement in students' learning. Understanding of students' attitudes towards cooperative learning method could also help teachers and school administrators, in particular for understanding the feedback of students for the implementation of the cooperative

learning method. At the end of this study, this research can further help to give comments and recommendations for school teachers and administrators.

Theoretical Framework of the Study

Components of a Cooperative Learning Activity

In planning a cooperative learning activity, you need to decide on the following:

- The type of interactions you will have with your students
- The type of interactions your students will have with one another
- The task and materials you will select
- Role expectations and responsibilities you will assign

Teacher – Student Interaction

One purpose of teacher-student interaction during cooperative learning is to promote independent thinking. Much like student response - teacher reaction sequences during self-directed inquiry, exchanges between you and your learners in the cooperative classroom focus on getting learners to think for themselves, independently of the text. To accomplish this goal, you will model and collaborate with learners in much the same way as in the self-directed classroom. The goals of cooperative and self-directed inquiry are complementary.

However, the way you establish teacher-student interaction during cooperative learning is different from self-directed and large group instruction (Burbules & Bruce, 2001). In self-directed inquiry, the interaction usually is one on one, with verbal messages directed to individuals one at a time and adjusted to their zones of maximum response opportunity. In contrast, cooperative learning occurs in groups that share a common purpose and task, so you must broaden interactions to fit the zone of maximum response opportunity that is common to most group members. Your goal is to help the group become more self-reflective and aware of its own performance.

Your role is to intervene at critical junctures and then to retreat, allowing the group to grapple with the new perspective or information given. In this manner, you monitor and collaborate with the group during brief but focused interventions, keeping them on course and following a productive line of reasoning.

Student – Student Interaction

Interaction among students in cooperative learning groups is intense and prolonged. Unlike self-directed inquiry, in cooperative learning groups, students gradually take responsibility for each other's learning. The effect may well be the same as in self-directed learning strategies, with one reinforcing the skills acquired in the other.

During cooperative learning, the feedback, reinforcement, and support come from student peers in the group, as opposed to coming from you. Student-student interaction constitutes the majority of time and activity during cooperative learning, unlike the modest amount of direct student-student interaction that occurs in large group instruction. Groups of four or five, working together in the physical closeness promoted by a common task, encourage collaboration, support, and feedback from the closest, most immediate source-one's peers. An essential ingredient of cooperative learning is each learner's desire to facilitate the task performance of fellow group members.

Task Specialization and Materials

Cooperative learning typically uses **task specialization**, or division of labor," to break a larger task into smaller subparts on which separate groups work. Eventually, these efforts come together to create the whole, to which each member of the class has contributed. Therefore, each group may be asked to specialize, focusing its efforts on a smaller yet meaningful part of some larger end product for which the entire class receives credit.

Groups may even compete against one another with the idea of producing a better part or higher-quality product than other groups. However, the purpose is not the competition that produces the final product, but the cooperation within groups that the competition promotes. Cooperative task structures have the goal of dividing and specializing the efforts of small groups of individuals across a larger task whose outcome depends on the sharing, cooperation, and collaboration of individuals within groups.

Role Expectations and Responsibilities

In addition to groups being assigned specialized tasks, individuals often are assigned specialized roles to perform within their groups. Some of the most commonly assigned roles include researcher, runner, recorder, and summarizer, whose specific functions will be defined in the sections ahead.

The success of a cooperative learning activity depends on your communication of role expectations and responsibilities and modeling them when necessary. This is another reason why cooperative learning has little resemblance to loosely formed discussion group; not only must you divide labor among learners and specialized tasks, but you also must designate the roles that foster the orderly completion of a task.

If someone's duties are unclear, or a group's assignment is ambiguous, cooperative learning quickly degenerates into undisciplined discussion, in which there may be numerous uninvolved and passive participants. Uninvolved and passive participants are individuals who successfully escape sharing anything of themselves. This defeats the purpose of cooperative learning.

Review of Related literature

Review of related literature for this study is presented in this section. It includes, major schools of thought in cooperative learning, importance of science education, establishing a cooperative task structure in the classroom, team-oriented cooperative learning activities, outcomes of cooperation, promoting the goal of cooperative learning in the culturally diverse classroom, components of a cooperative learning activity and previous related researches.

Major Schools of Thought in Cooperative Learning

Major schools of thought in cooperative learning are social learning theory, cognitivism and constructivism.

Social Learning Theory

Cooperative learning and social learning theory are connected. Moreover, collaborative teaching and learning is directly connected to social learning theory. Reciprocal learning is extremely important to understand where learning is dependent on several factors – cognition, environment, and behavior – and all of the influences within each of those. Social learning theory is a theory of learning process and social behavior which proposes that new behaviors can be acquired by observing and imitating others.

Cognitivism

Cognitivism, which was born as a reaction to behaviorism, was influential during the periods of 1960s, 1970s, and 1980s. Views of figures like David Ausubel, Jerome Bruner, and Noam Chomsky played important roles in the formation of cognitivism (Brown, 2007). Cognitive learning theory dismissed the focus on habit formation and stressed the cognitive dimension that is composed of the learners' reasoning and mental processes. That is, while behaviorists consider learning as a change in behavior cognitivists take it as a change in mental behavior. Losing its prevalence in the 1980s, cognitivism was gradually replaced by its advanced version, constructivism.

Constructivism

Constructivism, the way to which was paved by cognitivism, can be defined as "a theory which regards learning as an active process in which learners construct and internalize new concepts, ideas and knowledge based on their own present and past knowledge and experiences" (Cohen, Manion, & Morrison, 20004: 167). Its reign covers the periods of 1980s, 1990s, and 2000s. Brown (2007) describes constructivism as a multidisciplinary approach that brings linguistic, psychological, and sociological paradigms together on a common ground. Along with this multidisciplinary dimension, constructivism is characterized by its core principle that learners are encouraged to get the ownership of their learning.

Importance of Science Education

University education is important to national development because it builds on the educational gains of basic education. Science education is expected to contribute not only to the personal development of individual but also to ultimately nation building. The goal of science education is to achieve the broader goals of education through science.

Understanding science is essential in today's society. The public's understanding of science is largely influenced by its experiences in science classrooms. It is, therefore, important that science teachers understand science and give an accurate representation of it in their classroom.

In the process-oriented science, the focus will be on

1. The nature of science

2. The nature of learning

3. The nature of the child

Information gleaned from each of these areas provides the teacher with valuable criteria and the rationale needed in making decision about what to teach and how to teach it.

Establishing a Cooperative Task Structure in the Classroom

Establishing a **task structure** for a cooperative learning activity involves five specific steps:

1. Specify the goal of the activity.

2. Structure the task.

3. Teach and evaluate the collaborative process.

4. Monitor group performance.

5. Debrief.

Team-Oriented Cooperative Learning Activities

Research indicates that teams of heterogeneous learners can increase the collaborative skills, self-esteem, and achievement of individual learners (Slavin, 2001). Four team-oriented cooperative learning techniques have been particularly successful in bringing about these outcomes: Student Teams Achievement Division, Teams-Games-Tournaments, Jigsaw II, and Team-Assisted Individualization. A brief summary of these follows, based on the work of Slavin (1993).

Outcomes of Cooperation

Cooperative learning activities instill in learner's important behaviors that prepare them to reason and perform in an adult world (Jacobs, Power, & Loh, 2002; Johnson & Johnson, 1994; Marzano, Pickering, & Pollock, 2001).

(1)   Attitudes and values

(2)   Prosocial behavior

(3)   Alternative perspectives and viewpoints

(4)   Integrated identity

(5)   Higher thought processes

Previous Related Researches

Cooperative learning is now widely recognized as one of the most promising practices in the field of education. In 1981 meta-analysis of 122 achievement related studies reported that cooperative learning promotes higher achievement than competitive or individualistic learning across all age levels, subject areas and all tasks except rote and decoding kinds of tasks (Johnson et al., 1981, cited in Kessler, 1992).

Putnam (1997, cited in Seng, 2006) compared cooperative learning with traditional learning group. Research indicated that "a well-planned strategy promotes content learning, trust in others and social development".

Moryadee (2001, cited in Chukwuyenum et al., 2014) studied the effects of cooperative learning using Student Team-Achievement Divisions (STAD) technique on self-efficacy and English learning achievement of students. The results indicated that the students who studied through STAD have higher self-efficacy and English learning achievement after the treatment period.

Seetape (2003, cited in Wichadee, 2005) studied the effects of cooperative learning on English reading achievement and the students' behavior toward this learning method used in the English classroom. According to research findings, the posttest scores were higher than the pretest scores. Most of the students displayed very good behavior in cooperating in their tasks.

Neo (2005). carried out a research on a group-based cooperative learning class to determine its impact on student learning and the reactions of these learners towards this instructional method. Results of the study showed that in group-based learning, students learned to cultivate teamwork, communication, management and interpersonal skills.

Murray (2008) studied student attitudes towards cooperative learning in education. The experimental group exposed to cooperative learning thus experienced more positive attitudes and perceptions than the groups exposed only to a lecture-based teaching and learning format.

Kiran Akhtar et al (2012) set out this study to examine the views about cooperative learning in domain of group projects of graduating students of the departments of statistics and economics

of Arid agriculture university Rawalpindi. The results of the study suggested that students could be developed different attitudes toward teamwork from their educational experiences.

Naomi Watetu Mbacho (2013) studied the effects of Jigsaw cooperative learning strategy on students' achievement in secondary school mathematics in Laikipia east district, Kenya. Findings of this study showed that learners who were taught by using Jigsaw cooperative learning strategy performed better than those who were taught by using conventional learning methods.

Su Mon Htike (2016) carried out a research to investigate the effectiveness of cooperative learning techniques on grade ten students' English reading comprehension. Results of the study showed that the performance of the experimental groups were better than that of the control groups in all the selected schools.

According to the researches, there are a lot of benefits concerning cooperative learning. In my opinion, there are still needed to do more researches on cooperative learning. It is also essential to investigate effects of cooperative learning on students and give suitable suggestions to all educators in Myanmar. It is crucial to move traditional teaching method (teacher-centered instruction) to learner-centered instruction as much as we can. We, Myanmar, will surely reach to the international standard by using cooperative learning effectively in the near future.

Research Methodology

In this study, fifth year (first semester) students' attitudes towards cooperative learning at Yangon University of Education were examined. This section summarizes research design and procedure, instrumentation, population and sample size and data analysis.

Research Design and Procedure

The research design of the study was descriptive research design, in which the researcher tried to analyze students' attitudes towards teacher-student interaction, student-student interaction, task specialization and materials and role expectation and responsibilities in science at Yangon University of Education.

First of all, the relevant literature was explored. Secondly, the researcher constructed the questionnaire to get the required data. After preparing the instrument, content validity was determined by four experienced teachers from department of methodology, Yangon University of Education. After getting the validity of the instrument, pilot testing for the instrument was conducted at Yangon University of Education, in the fourth week of December 2018. Based on the pilot test, the major survey was conducted in the first week of January, 2019. The modified questionnaire was distributed to all participants (fifth year, first semester students) in the first week of January, 2019. After all instruments were collected, the data were analyzed by using the Statistical Package for the Social Science (SPSS 23).

Instrumentation

In this study, a questionnaire for fifth year (first semester) was used as an instrument. Questionnaire developed by Borich (1996) "components of a cooperative learning activity" was adapted to investigate students' attitudes towards cooperative learning. The questionnaire included 4 sub-scales: (1) Teacher-student interaction (2) Student-student interaction (3) Task specialization and materials (4) Role expectation and responsibilities.

The questionnaire of (40) items on five point Likert-scale were described by five responses: strongly agree, agree, undecided, disagree, and strongly disagree. Arbitrary scoring weight (1,2,3,4, and 5) was assigned for negative items and (5,4,3,2, and 1) was assigned for positive items. The development of students' attitudes towards cooperative learning was formed relevantly

with students. After preparing the measuring scale, content validity was carried out by expert judgment. The pilot testing was done with a sample of (40) fifth year (first semester) students who specialize in science from Yangon University of Education. According to pilot study, some items were modified to adapt students' understanding. The internal consistency of the questionnaire was (0.93) by Cronbach's Alpha. Moreover, sample student interview questions were used to get more information from the students.

Population and Sample Size

All the participants in the sample were fifth year (first semester) students who specialize in science. This study was conducted at the Yangon University of Education. The total number of students participated in this study were 217 (68 males and 149 females). The students in this study were selected by using purposive sampling method to collect the data.

Data Analysis

The data were analyzed by using a descriptive statistic (mean score and standard deviation). Moreover, the independent sample *t*-test was used to describe the students' attitudes towards cooperative learning in terms of gender and state/region.

Research findings for this study will be presented in the next section.

Findings

This section concerned with the findings and interpretations based on the data taken from the study. The collected data were analyzed in order to get the accurate results and make appropriate interpretation. This includes three parts in this study. First, students' attitudes towards each dimension were presented. Second, students' attitudes towards cooperative learning in science in terms of gender and state/region were compared. Finally, the findings and interpretations of the results were discussed.
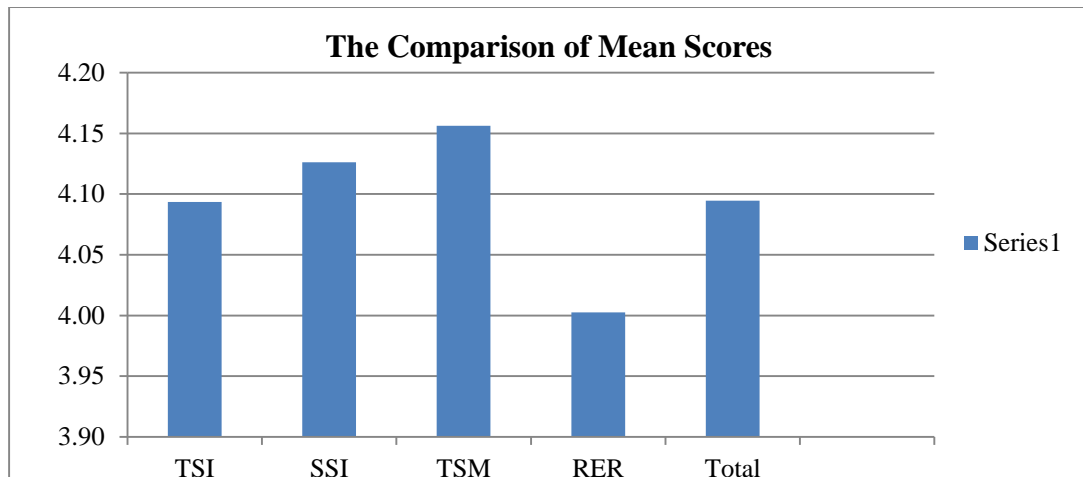
1. Findings of Mean and Standard Deviation of Students' Attitudes for all Dimensions

Table 1 The Comparison of Mean Scores for Students' Attitudes in all Dimensions

No.	Dimensions	N	Mean	Std. Deviation
1	TSI	217	4.09	.31
2	SSI	217	4.13	.34
3	TSM	217	**4.16**	.30
4	RER	217	**4.00**	.35
	Total	217	**4.09**	.25

Note: TSI = Teacher-Student Interaction
SSI = Student-Student Interaction
TSM = Task Specialization and Materials
RER = Role Expectation and Responsibilities

Table 1 indicated that mean scores of students' attitudes towards each dimension. It showed that total mean score for students' attitudes towards cooperative learning in science in all dimensions is (4.09). Among them, the mean score of students' attitudes towards task specialization and materials in science (4.16) is the highest score in all dimensions and the mean score of students' attitudes towards role expectation and responsibilities (4.00) is the lowest score in all dimensions. The results, therefore, are above satisfactory.

Note: TSI = Teacher-Student Interaction
SSI = Student-Student Interaction
TSM = Task Specialization and Materials
RER = Role Expectation and Responsibilities

Figure 1 The Comparison of Mean Scores for Students' Attitudes in all Dimensions

## Findings of *t*-Values for the Students' Attitudes in all Dimensions in Terms of Gender

The independent sample *t*-test was used to find out whether students' attitudes towards cooperative learning in science differ according to gender. The results are given in Table 2.

Table 2 The Comparison of *t* Values for Students' Attitudes in all Dimensions in terms of Gender

No.	Gender		N	Mean	Std. Deviation	MD	*t*	*df*
1	TSI	Male	68	4.08	.31	-.013	-.287	127.022
		Female	149	4.10	.31			
2	SSI	Male	68	4.13	.34	.007	.143	124.475
		Female	149	4.12	.34			
3	TSM	Male	68	4.13	.30	-.032	-.729	131.229
		Female	149	4.17	.31			
4	RER	Male	68	4.04	.38	.056	1.039	116.285
		Female	149	3.99	.34			
	Total	Male	68	**4.10**	.25	.004	.114	126.785
		Female	149	**4.09**	.25			

Note: TSI = Teacher-Student Interaction
SSI = Student-Student Interaction
TSM = Task Specialization and Materials
RER = Role Expectation and Responsibilities

Table 2 shows that there was no significant difference between the attitudes of students towards cooperative learning in science in terms of gender. This indicated that the total mean scores for male and female students' attitudes towards cooperative learning in science in all dimensions are (4.10) and (4.09).
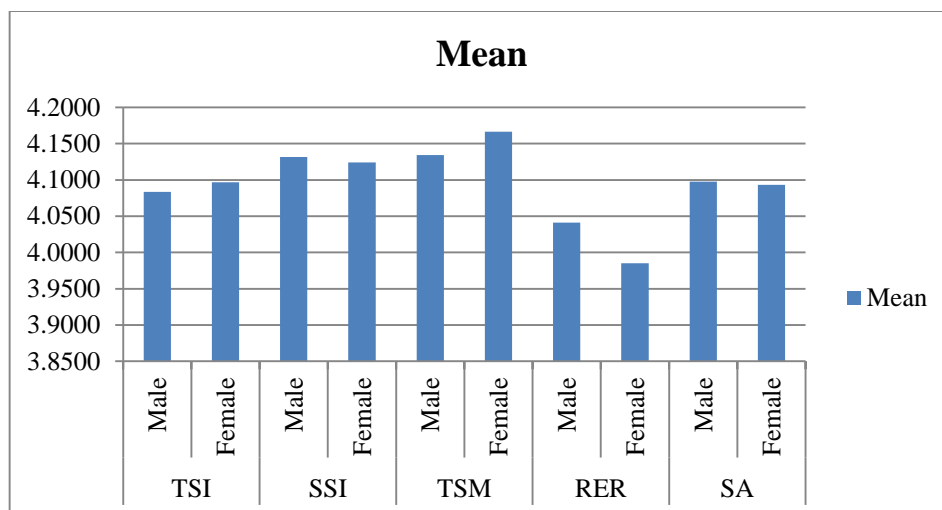
Note: TSI = Teacher-Student Interaction
SSI = Student-Student Interaction
TSM = Task Specialization and Materials
RER = Role Expectation and Responsibilities

Figure 2 The Comparison of Mean Scores for Students' Attitudes in all Dimensions in terms of Gender

According to figure 2, it can be interpreted that there was no significant difference in terms of gender.
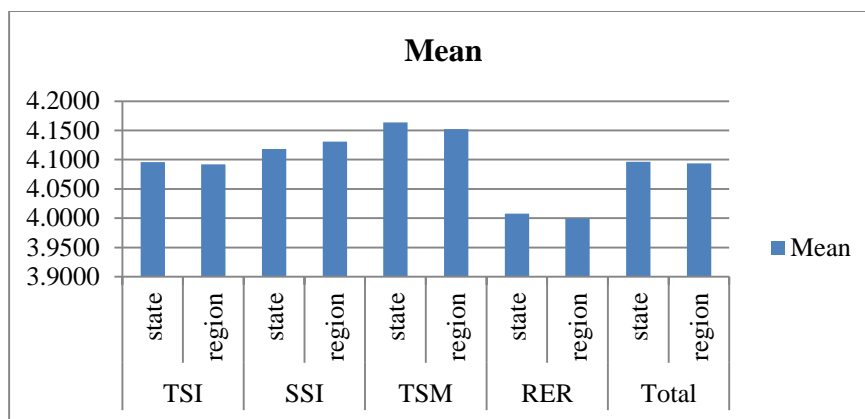
Findings of *t*-Values for the Students' Attitudes in all dimensions in terms of State/Region

Table 3 The Comparison of *t* Values for Students' Attitudes in all Dimensions in terms of State/Region

No.	Dimensions	State/Region	N	Mean	Std. Deviation	MD	*t*	*df*
1	TSI	state	77	4.10	.30	.030	.390	60.303
		region	140	4.09	.31			
2	SSI	state	77	4.12	.34	.008	.104	54.332
		region	140	4.13	.34			
3	TSM	state	77	4.16	.32	-.020	-.289	60.018
		region	140	4.15	.29			
4	RER	state	77	4.01	.38	.089	1.099	60.986
		region	140	4.00	.34			
	Total	state	77	**4.10**	.27	.027	.511	60.293
		region	140	**4.09**	.24			

Note: TSI = Teacher-Student Interaction
SSI = Student-Student Interaction
TSM = Task Specialization and Materials
RER = Role Expectation and Responsibilities

The mean scores of these two groups in each dimension were presented in Table 3. when Table 3 is examined, it can be seen that the attitudes of students towards cooperative learning in science indicate no significant difference in terms of state/region. The total mean scores for students' attitudes towards cooperative learning in science in all dimensions in terms of state and region are (4.10) and (4.09).

Note: TSI = Teacher-Student Interaction
SSI = Student-Student Interaction
TSM = Task Specialization and Materials
RER = Role Expectation and Responsibilities

Figure 3 The Comparison of Mean Scores for Students' Attitudes in all Dimensions in terms of State/Region

It can be interpreted that there was no significant difference in terms of state/region.

Conclusion

There are three sections in this part. They are discussion, suggestions and conclusion of the study.

Discussion

The purpose of the study is to study students' attitudes toward cooperative learning in science at Yangon University of Education. In this study, 68 male students and 149 female students participated willingly and enthusiastically. They are fifth year (first semester) students who specialize in science during (2018-2019) academic year. The researcher developed the Science Attitudes Questionnaire to study the students' attitudes towards cooperative learning in science. The instrument was based on Borich (1996) components of a cooperative learning activity. The five-point Likert scale evaluated the students' attitudes towards cooperative learning in science.

According to the finding of the students' attitudes towards each dimension, the total mean score of students' attitudes towards cooperative learning in science for all dimensions is (4.09). Task specialization and materials is the highest score (4.16) in all dimensions. But role expectation and responsibilities is the lowest score (4.00) in all dimensions. The results, therefore, are satisfactory.

According to the finding of the students' attitudes towards cooperative learning in science in terms of gender, the total mean scores of male and female students' attitudes towards cooperative learning in science for all dimensions are (4.10) and (4.09). It can be interpreted that there was no significant difference in terms of gender.

According to the finding of the students' attitudes towards cooperative learning in science in terms of state/region, the total mean scores of students' attitudes towards cooperative learning in science for all dimensions in terms of state and region are (4.10) and (4.09). It can be interpreted that there was no significant difference in terms of state/region.

Papanastasiou and Zembylas (2002, cited in Mogane, 2010) concluded that students' attitudes towards science influence their actual performance in science. So, the teachers should communicate the benefits and importance of science in the society to the students.

According to the findings of the study, the following suggestions can be drawn out. The teacher should encourage students to do practical activities concerning science. Science teacher should be given proper training to uplift their qualities. The science teachers should know and communicate the importance and usefulness of science to the students. Students should be nurtured very well to get 21st century skills for preparing for their real life situations. Science teachers should have good communication skills in the society.

Science teachers should study the science textbooks as well as magazines, journals and other relevant books in order to update their teaching styles. Students should be informed the rules and regulations of the university and they can obey them very well. The teacher should give feedbacks if necessary after students had taken the weekly or monthly examinations. Science assessment system should include the practical examination to improve the motor skill of students. In order to get good attitudes for students, teachers should also have good attitudes towards cooperative learning in science.

Suggestions

It is necessary to conduct more research concerning students' attitudes towards cooperative learning in science. One of the purposes of science education is to develop positive attitudes towards science. So, it is essential to carry out more studies concerning the effective ways and means for the development of positive attitudes towards science. Some recommendations are provided for future research.

This research consisted of only four dimensions. Further research, therefore, should be conducted with many other dimensions. Although, this study was conducted with small sample size, further research should be conducted with large sample size. Further research should also be conducted to study the relationship between students' attitudes and their learning outcomes. Moreover, further research should be conducted in other universities and other states (or) regions.

Conclusion

Jacobs and Asokan (2003) asserted that education is the process of passing on to future generations in a concentrated and abridged form the essence of knowledge accumulated by past generation. Education opens new horizons for the individual, releases new aspirations and develops new values. It strengthens competencies and develops commitment. Education generates in an individual a critical outlook on social and political realities and sharpens the ability for self-examination, self-monitoring and self-criticism.

Science is a way of thinking and a way of understanding of the world. This study was the survey type of the descriptive research. On the basis of this research finding, it was found that there are positive attitudes towards teacher-student interaction, student-student interaction, task specialization and materials and role expectation and responsibilities in science at Yangon University of Education. But there is no significant relationship between gender and state/region.

Teachers should use the appropriate teaching techniques according to the real life situations, needs and interests of the students, instructional objectives and the demand of the society. Like academic achievement, attitude is an important product of education system. Knowing our students' attitudes towards science and the effect of attitudes on their learning outcomes can enhance the quality of teaching. This study can be used to provide guidelines to the policy makers and assessment standards authorities as to how positive attitudes of students should be developed. By doing so, our country can uplift its education to the international standard and teachers will be able to nurture students to become good citizens and educators in the near future.

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AN ANALYTICAL STUDY ON INDIVIDUAL-LEVEL DETERMINANTS OF TEACHERS' ORGANIZATIONAL CITIZENSHIP BEHAVIOUR

Moe Moe Aye[1], Htay Khin[2], Cho Cho Sett[3]

Abstract

This paper intended to study the levels of individual-level determinants and the levels of teachers' organizational citizenship behaviour, to investigate the variations of individual-level determinants and teachers' organizational citizenship behaviour in terms of their personal factors, to study the relationship between individual-level determinants and teachers' organizational citizenship behaviour, and to reveal the best predictor of teachers' organizational citizenship behaviour. Both quantitative and qualitative methods were conducted. For quantitative study, questionnaires for individual-level determinants and teachers' organizational citizenship behaviour for high school teachers were used. A total of 756 teachers (252 primary teachers, 252 junior teachers and 252 senior teachers) from fourteen townships in Ayeyarwady Region were selected by using equal stratified random sampling method. Interview form and observation checklist were used for qualitative study. The internal consistency (Cronbach's alpha) for individual-level determinants, and teachers' organizational citizenship behaviour were 0.94 and 0.95 respectively. Descriptive statistics, independent sample *t* test, One-Way ANOVA, Pearson product moment correlation, and multiple regression analysis were used to analyze the data in the study. Individual-level determinant especially in job satisfaction varies depending on teachers' personal factors such as qualification and professional qualification. Moreover, teachers' organizational citizenship behaviour varies in terms of their personal factors such as qualification and professional qualification. There was an association between individual-level determinants and teachers' organizational citizenship behaviour (r=.42, p<.01). Teachers' self-efficacy was the best predictor of teachers' organizational citizenship behaviour (R^2=.17, $F_{(4,751)}$ =41.14). The qualitative result also revealed that individual-level determinants had an influence on teaches' organizational citizenship behaviour.

Keywords: Individual-Level, Determinants, Teachers' Organizational Citizenship Behaviour

Introduction

Everybody has his own unique capability and talent. The essence of education is nurturing the unique capability of every human being to become a good citizen who has high self-discipline and who can contribute his skill and ability to his own society and to his country with all his might. Teachers are essential persons to implement the progress of education system. The national goals of education will come true only when the teachers are ever promoting themselves by continuous learning to be able to take part in education with new ideas. Therefore, the educational authorities need to produce prospective teachers by using some criteria and providing some special training. After training, they need to be entrusted and empowered according to their skills and abilities. To cope with the changing world, it is necessary for teachers to go beyond their duties for the development of their environment by engaging in teachers' organizational citizenship behaviour.

Significance of the Research

No education system can ever be better than its teachers (Dr. Khin Zaw, 2001). Teachers should carry out their responsibilities on their own beyond the instructions given to them. Organizational citizenship behavior is the most important foundation in this rapidly advancing technological age. Therefore, the study of teachers' organizational citizenship behaviour is needed to develop strategies for guiding or directing educational authorities, school administrators, teacher

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educators, and teachers on how to promote teachers' organizational citizenship behaviour in schools.

Aims of the Research

The main aim of this research is to study individual-level determinants of teachers' organizational citizenship behaviour.

The specific aims of this study are as follows:

(1) To study the levels of individual-level determinants of teachers' organizational citizenship behaviour

(2) To study the levels of teachers' organizational citizenship behaviour

(3) To investigate the variations of individual-level determinants of teachers' organizational citizenship behaviour in terms of their personal factors

(4) To investigate the variations of teachers' organizational citizenship behaviour in terms of their personal factors

(5) To study the relationship between individual-level determinants and teachers' organizational citizenship behaviour

(6) To identify the best predictor(s) of teachers' organizational citizenship behaviour

Research Questions

The research questions of this study are as follows:

(1) What is the level of individual-level determinants of teachers' organizational citizenship behaviour?

(2) What is the level of teachers' organizational citizenship behaviour?

(3) What are the variations of individual-level determinants of teachers' organizational citizenship behaviour in terms of their personal factors?

(4) What are the variations of teachers' organizational citizenship behavior in terms of their personal factors?

(5) Is there any significant relationship between individual-level determinants and teachers' organizational citizenship behaviour?

(6) What are the best predictor(s) of teachers' organizational citizenship behaviour?

Theoretical Framework

Individual-level determinants of teachers' organizational citizenship behaviour were found in existing literature developed by Somech and Oplatka (2015) and Organ, Podsakoff & Makenzie, (2006). Altogether four individual-level determinants of teacher organizational citizenship behaviour are chosen for this research. These dimensions are personality, organizational commitment, self-efficacy, and job satisfaction.

Personality

Five-Factor Model of personality (Big-Five Model of Personality) is widely used in assessing individual differences. The aspects of these five categories consist of openness to experience, extroversion, agreeableness, conscientiousness, and neuroticism (emotional stability) (Costa & McCrae, 1992, cited in Chamorro-Premuzic & Furnham, 2010).

In this study, big five personality traits include openness (open to new experiences), extraversion, agreeableness, conscientiousness, and neuroticism (emotional stability). Openness

comprises the subscales of imaginative, curious, and outgoing. Extraversion comprises the subscales of friendly, sociable, self-confident and enthusiastic. Agreeableness includes the subscales of reliable, forgiving, and enthusiastic. Conscientiousness comprises the subscales of competent, orderly, dutiful, and achievement oriented. Neuroticism (emotional stability) comprises the subscales of well prepared, calm, and self-assured (Costa and McCrae, 1992, cited in Chamorro-Premuzic & Furnham, 2010).

Organizational Commitment

Meyer and Allen (1991) developed a three component model that consists of affective commitment, continuance commitment, and normative commitment. Affective commitment refers to "an employee's emotional attachment to, identification with, and involvement in the organization" (Khan, et al., 2013).

Continuance commitment refers to "an awareness of the costs concerned with leaving the organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so" (Meyer & Allen, 1991).

Normative commitment reflects "the feeling of responsibility to continue employment. The employees who have a high level of normative commitment feel that they ought to remain with the organization (Meyer & Allen, 1991).

Concerned about the school welfare, preference for working at school organization, strong sense of belonging to school being proud of working in school organization, envision the future of the school are behavioural tendencies associated with affective commitment. Staying in school as a matter of necessity, a great difficulty to resign the job, the scarcity of alternatives, working in school organization because of the investment of time, money, and education are behavioural tendencies associated with continuance commitment. Feeling a sense of moral obligation to remain, feeling of responsibility for the occupation, and assuming teaching profession is noble and the need to devote a great deal of effort are behavioural tendencies associated with normative commitment.

Self-Efficacy

Self-efficacy refers to "person's perceived expectation of succeeding at a task or obtaining a valued result through personal effort" (Bandura, 1986, cited in Somech & Oplatka, 2015). "Self-efficacy is a person's judgment his or her capability to organize and execute a course of action that is required to attain a certain level of performance" (Bandura, 1986, 1991, 1997, 2005, cited in Hoy & Miskel, 2013).

Efficacy to do unfamiliar work, to involve as an essential person for the growth of school, to have good relationship with colleagues, to face the obstacles without giving up to achieve goals, to encourage the student excitement and creativity, to accept one's ideas and advice for the improvement of school, to perform daily task competently and systematically, to guide student follow or obey the classroom rules respectfully and to plan the lessons and choose the methods relevant to students and strong sense of instructional efficacy are important construction of self-efficacy in this study.

Job Satisfaction

Job satisfaction validated to be the most robust correlate of extra-role behaviour. Many studies have focused on the relationship between job satisfaction and extra-role behaviour towards individuals inside and outside the organization (Somech & Drach-Zahavy, 2000). Herzberg's two-

factor theory (also called motivation-hygiene theory) proposes that intrinsic factors are related to job satisfaction and motivation, whereas extrinsic factors are associated with job dissatisfaction.

According to Herzberg's two factors theory, job satisfaction can be divided into two categories: motivation factors and hygiene factors. These factors can be expressed in terms of content of the work itself (i.e. challenging work, opportunities to use teacher skills, ability, and experience), equitable rewards, the security of work environment, position relevant to capacity, salary, recognition, responsibility, opportunity to growth (i.e. promotion), interpersonal relations, opportunity for professional development, styles of leadership and management.

There are three dimensions of teachers' organizational citizenship behaviour developed by Somech and Oplatka (2015). These dimensions are teachers' organizational citizenship behaviour toward the students, teachers' organizational citizenship behaviour toward the team, and teachers' organizational citizenship behaviour toward the school.

Organizational Citizenship Behaviour toward the Students

Organizational citizenship behaviour toward the students is behaviour directly and intentionally aimed at improving the quality of teaching (e.g. learning new subject that contribute to the work) and supporting students to develop their accomplishments (e.g. staying an extra hour, helping disadvantaged students) (Somech & Oplatka, 2015).

In this study, teachers' organizational citizenship behaviour toward the students is behaviour that is intentionally aimed at encouraging the students to attain their achievement in learning lessons. Teachers who engage in organizational citizenship behaviour are intimate with students and give attentive care to students understanding their perceptions that affect their students' willingness to participate actively in school lessons and activities. This behaviour includes staying extra hour to help students, acquiring expertise in new subject, developing creative method of teaching, providing emotional support, preparing innovative teaching, developing creative method of teaching, and caring the social context with student.

Organizational Citizenship Behaviour toward the Team

Organizational citizenship behaviour toward team member is behavior purposefully aimed at supporting a specific teacher (e.g. orienting a new teacher, assisting a teacher with a heavy work load) (Somech & Oplatka, 2015).

In this study, teachers' organizational citizenship behaviour toward the team is behaviour aimed at helping colleagues within the school. This behaviour includes working collaboratively with others, providing professional advice and assisting teaching materials, avoiding complaining about others' behaviour or undesirable situation, and preserving positive work environment.

Organizational citizenship behaviour toward the School

Organizational citizenship behaviour toward the school constitute a more impersonal form of behaviour that does not render immediate aid to any one specific person but benefit the entire team or the school as a unit (Somech & Oplatka, 2015).

In this study, teachers' orgaizational citizenship behaviour toward the school is behaviour that is intentionally aimed at providing support directed toward the benefits of the school. This behaviour includes participating in school activities, making innovative suggestion, attending work above the norm, conserving and protecting organization property, getting support from local people, assisting the work of school leader in free hour, avoiding personal business on school time, and exhibiting enjoyment at work.

Limitation of the Study

This study is geographically limited by fourteen townships in Ayeyarwady Region. The seven hundred and fifty six teachers including primary teachers, junior teachers, and senior teachers were selected as participants for questionnaire survey; the twenty four (eight primary teachers, eight junior teachers, and eight senior teachers) participated in qualitative study.

This study is designed to investigate individual-level determinants of teachers organizational citizenship behaviour which is composed of seven areas such as personality, organizational commitment, self-efficacy, job satisfaction, organizational citizenship behaviour toward the students, organizational citizenship behaviour toward the team, and organizational citizenship behaviour toward the school. Individual-level determinants of teachers" organizational citizenship behaviour are analyzed through teacher's self-evaluation, general and classroom observations and interview.

Definitions of Key Terms

(1) **Organizational Citizenship Behaviour** refers to **"**individual behaviour that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization" (Organ, 1988, cited in Somech & Oplatka, 2015).

(2) **Personality** refers to **"**the totality of those aspects of behaviour which give meaning to an individual in society and differentiate him from other members in the community" (Edward Sapir & Dr. khin Zaw, 1956, cited in Dr. Khin Zaw, 2001).

(3) **Organizational Commitment** refers to "the relative strength of the individual's identification with and involvement in a particular organization" (Mowday, Porter & Steers, 1982, cited in Somech & Oplatka, 2015).

(4) **Self-Effficacy** refers to "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments" (Bandura, 1997).

(5) **Job Satisfaction** is "how people feel about their jobs and different aspects of their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs" (Spector, 1997).

Operational Definitions

(1) **Individual-Level Determinants of Teachers' Organizational Citizenship Behaviour** refers to predicting factors, reasons or antecedents such as personality (big five personality), job satisfaction, organizational commitment, and self-efficacy that will enable teachers to engage in organizational citizenship behaviour. The higher the mean values of responses, the greater the level of perceived individual-level determinants of teachers' organizational citizenship behaviour.

(2) **Teachers' Organizational Citizenship Behaviour** refers to voluntary behaviour which spontaneously acts to achieve school objectives beyond the assigned task and activities. And those behaviours on one's own with active involvement never expect an award. Teachers' organizational citizenship behaviour includes three components: teachers' orgaizational citizenship behaviour toward the students, teachers' orgaizational citizenship behaviour toward the team, and teachers' orgaizational citizenship behaviour toward the school**.** The higher the mean values of responses, the greater the level of perceived teachers' organizational citizenship behaviour.

Methodology

Descriptive analysis techniques were used to tabulate mean values and standard deviations for individual items and group of items. The levels of individual-level determinants and the levels of teachers' organizational citizenship behaviour were determined by the mean values arranged in descending order based on (1.00-1.49=very low, 1.50-2.49=moderately low, 2.50-3.49=satisfactory, 3.50-4.49=moderately high, and 4.50-5.00=very high). Independent sample *t*-test was used to investigate whether there was significant difference between two groups. To investigate the significant differences between three or more groups, One-Way ANOVA and Tukey HSD test were used. Moreover, multiple regression analysis was also conducted to determine the best predictor(s) of teachers' organizational citizenship behaviour. For qualitative study, purposive sampling method was used to select the participant teachers in this study in order to keep the sample size manageable. Therefore, the teachers from eight schools (four highest mean scored schools and four lowest mean scored schools) were selected to interview in this study. The researcher purposefully chose three teachers from each selected school including primary teacher, junior teachers and senior teachers based on the two levels of individual-level determinants and teachers' organizational citizenship behaviour such as moderately high level and moderately low level indicated by the result of quantitative data analysis.

Research Findings

Table 1 Mean Values and Standard Deviations of Individual-Level Determinants (N=756)

No.	Variables	Mean	SD	Remark
1.	Personality	4.02	.29	Moderately high
2.	Organizational Commitment	4.00	.25	Moderately high
3.	Self-Efficacy	3.67	.33	Moderately high
4.	Job Satisfaction	3.93	.32	Moderately high
Overall Individual-Level Determinants		**3.97**	**.25**	**Moderately high**

Scoring direction: 1.00-1.49= very low   1.50-2.49=moderately low
                        2.50-3.49= satisfactory   3.50-4.49=moderately high
                        4.50-5.00=very high

As shown in Table 1, mean value for overall individual-level determinants of teachers' organizational citizenship behaviour was 3.97. Thus, the level of individual-determinants of teachers' organizational citizenship behaviour was moderately high.

Table 2 Mean Values and Standard Deviations of Teachers' Organizational Citizenship Behaviour (N=756)

No.	Variables	Mean	SD	Remark
1.	Teachers' Organizational Citizenship Behaviour toward the Students	3.65	.57	Moderately high
2.	Teachers' Organizational Citizenship Behaviour toward the Team	4.02	.73	Moderately high
3.	Teachers' Organizational Citizenship Behaviour toward the School	4.16	.61	Moderately high
Overall Teachers' Organizational Citizenship Behaviour		**3.94**	**.58**	**Moderately high**

Scoring direction: 1.00-1.49= very low   1.50-2.49=moderately low
                      2.50-3.49= satisfactory   3.50-4.49=moderately high
                      4.50-5.00=very high

Table 2 shows the level of teachers' organizational citizenship behaviour. According to the scoring direction for mean values, it was found that the levels of teachers' organizational citizenship behaviour were moderately high in such area as teachers' organizational citizenship behaviour toward the students (Mean=3.65), teachers' organizational citizenship behaviour toward the team (Mean=4.02), and teachers' organizational citizenship behaviour toward the school (Mean=4.16).

Table 3 Independent Samples *t* Test Result Showing Individual-Level Determinants Grouped by Qualification

Variables	Qualification	*t*	*df*	*p*
Job Satisfaction	BA/BSc	-3.08	400.09	0.002**
	BEd/MEd			

Note: *p*<.05, **p*<.01

As shown in Table 3, it was found that there was significant difference in overall individual-level determinants of teachers' organizational citizenship behaviour between the groups of teachers who got BA/BSc degree and the group of teachers who got BEd/MEd degree (*t*(1,754)= -2.41,*P*<0.05). Moreover, there was also a significant difference in the area of job satisfaction (*t*(1,754) =-3.08, *P*<0.01).

Table 4   Independent Samples *t* Test Result Showing Teachers' Organizational Citizenship Behaviour Grouped by Qualification

Variables	Qualification	*t*	*df*	*p*
Teachers' Organizational Citizenship Behaviour toward the Students	BA/BSc	-2.51	754	.012*
	BEd/MEd			
Teachers' Organizational Citizenship Behaviour toward the Team	BA/BSc	-3.69	628.14	.000***
	BEd/MEd			
Teachers' Organizational Citizenship Behaviour toward the School	BA/BSc	-3.32	626.47	.001**
	BEd/MEd			
Overall Teachers'Organizational Citizenship Behaviour	**BA/BSc**	**-3.52**	**587.10**	**.000***
	BEd/MEd			

Note: *p*<.05, **p*<.01, ***p*<.001

According to Table 4, it was found that there was significant difference in overall teachers' organizational citizenship behaviour between the two groups (*t* (1,754) =-3.52, *P*<0.001). Moreover, there was also significant differences in such areas as'teachers' organizational citizenship behaviour toward the students' (*t*(1,754)=-2.51, *P*<0.05), 'teachers' organizational citizenship behaviour toward the team' (*t*(1,754)=-3.69, *p*<0.001), and 'teachers' organizational citizenship behaviour toward the school'(*t*(1,754)= -3.32, *P*<0.01)

Table 5 One-Way ANOVA Result Showing Individual-Level Determinants Grouped by Professional Qualification

Variables	Group	Sum of Squares	*df*	Mean Square	*F*	*p*
Job Satisfaction	Between Groups	1.31	4	.33	3.18	.013*
	Within Groups	77.31	751	.10		
	Total	78.62	755			

Note: *p*<.05

As shown in Table 5, statistically significant differences were found among the group of teachers who attended PTTC, the group of teachers who attended JTTC, the group of teachers who attended DTEC/PPTT/PGDT, the group of teachers who attended DTEd, and the group of teachers who got BEd/MEd degree in the area of job satisfaction (*F* (4,751) = 3.18, *p*<0.05).

Table 6 Tukey HSD Result Showing Individual-Level Determinants Grouped by Professional Qualification

Variables	(I) Professional Qualification	(J) Professional Qualification	Mean Different (I-J)	*p*
Job Satisfaction	BEd/MEd	DTEC/PPTT/PGDT	.14	.028*

Note: **P* < .05

   Table 6, indicates that the group of teachers who got BEd/MEd degree significantly differed with the group of teachers who attended DTEC/PPTT/PGDT training course in the area of job satisfaction.

Table 7 One-Way ANOVA Result Showing Teachers' Organizational Citizenship Behaviour Grouped by Professional Qualification

Variables	Group	Sum of Squares	*df*	Mean Square	*F*	*p*
Teachers' Organizational Citizenship Behaviour toward the Team	Between Groups	7.39	4	1.85	3.54	.007**
	Within Groups	391.59	751	.52		
	Total	398.99	755			
Teachers' Organizational Citizenship Behaviour toward the School	Between Groups	6.38	4	1.60	4.44	.001**
	Within Groups	270.11	751	.36		
	Total	276.49	755			
Overall Teachers' Organizational Citizenship Behaviour	**Between Groups**	**4.83**	**4**	**1.21**	**3.68**	**.006****
	Within Groups	**246.75**	**751**	**.33**		
	Total	**251.58**	**755**			

Note: ***p<.01*

   According to Table 7, statistically significant differences were found among the group of teachers who attended PTTC, the group of teachers who attended JTTC, the group of teachers who attended DTEC/PPTT/PGDT, the group of teachers who attended DTEd, and the group of teachers who got BEd/MEd degree inoverall teachers' organizational citizenship behaviour (F (4,751) =3.68, $p<0.01$).Moreover, there was also significant differences in such area as teachers' organizational citizenship behaviour toward the team (F (4,751) =3.54, $p<0.01$), and teachers' organizational citizenship behaviour toward the school (F (4,751) =4.44, $p<0.01$).

   Table 8 indicates that the group of teachers who got BEd/MEd degree significantly differed with the group of teachers who attended PTTC in the area of teachers' organizational citizenship behaviour toward the team, the group of teachers who attended JTTC significantly differed with the group of teachers who attended PTTC training course, and the group of teachers who got BEd/MEd degree significantly differed with the group of teachers who attended PTTC training course in the area of teachers' organizational citizenship behaviour toward the school. In addition, the group of teachers who got BEd/MEd degree significantly differed with the group of teachers who attended PTTC training course in overall teachers' organizational citizenship behaviour.

Table 8 Tukey HSD Result Showing Teachers' Organizational Citizenship Behaviour Grouped by Professional Qualification

Variables	(I)Professional Qualification	(J)Professional Qualification	Mean Different (I-J)	*p*
Teachers' Organizational Citizenship Behaviour toward the Team	BEd/MEd	PTTC	.30	.005**
Teachers' Organizational Citizenship Behaviour toward the School	JTTC	PTTC	.23	.010*
	BEd/MEd	PTTC	.25	.004**
Overall Teachers' Organizational Citizenship Behaviour	BEd/MEd	PTTC	.24	.005**

Note: *$P< .05$, **$P< .01$

Table 9 Means, Standard Deviations, and Inter-correlations for Teachers' Organizational Citizenship Behaviour and Predictors Variables

	Variable	M(SD)	1	2	3	4
	Teachers' Organizational Citizenship Behaviour	3.94 (.58)	.32**	.33**	.39**	.34**
	Predictor variables					
1.	Personality	4.02 (.29)		.55**	.65**	.43**
2.	Organizational Commitment	4.00 (.25)			.60**	.71**
3.	Self-Efficacy	3.66 (.33)				.56**
4.	Job Satisfaction	3.93 (.32)				

Note:**Correlation is significant at 0.01 level (2-tailed).

According to Table 9, it was found that teachers' organizational citizenship behaviour was positively and significantly correlated with personality (r= .32, *p*<0.01), organizational commitment (r=.33, *p*<0.01), self-efficacy (r=.39, *p*<0.01), and job satisfaction (r=.34, *p*<0.01).

The beta coefficients were presented in Table 10. Personality, organizational commitment, self-efficacy, and job satisfaction significantly predicted teachers' organizational citizenship behaviour when all four variables were included. The adjusted R squared value was .17(*R*=.42). This indicates that 17% of the variance in teachers' organizational citizenship behavior was explained by the model, and this is a typical effect according to Cohen (1998).

Table 10 Simultaneous Multiple Regression Analysis for Personality, Organizational Commitment, Self-Efficacy, and Job Satisfaction Predicting Teachers' Organizational Citizenship Behaviour

Variables	B	SEB	Beta	*P*
Personality	.18	.08	.09	.037*
Organizational Commitment	.08	.05	.03	ns
Self-Efficacy	.40	.08	.22	.000***
Job Satisfaction	.27	.07	.15	.002**

*R= .417, R^2=.174, Adjusted R^2=.170, $F(4,751)$=41.14, *p<.05, **p< .01, ***p< .001
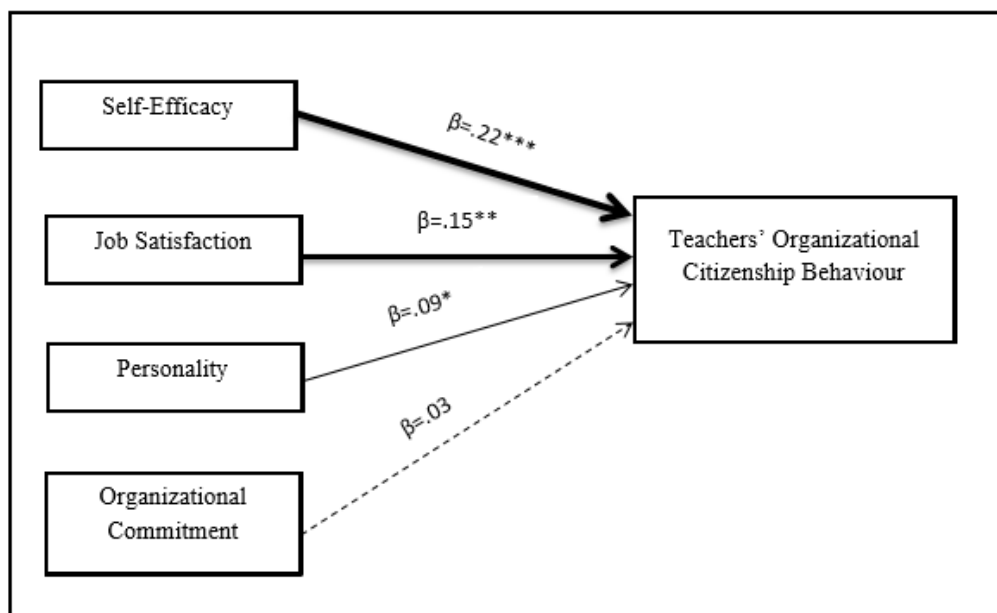
Figure 1 Potential Factors Affecting Teachers' Organizational Citizenship Behaviour

⟶ Predicting on teachers' organizational citizenship behaviour (Statistically Significant)

┈┈▶ Predicting on teachers' organizational citizenship behaviour (Not Significant)

According to the beta weights, self-efficacy variable (β=.22, $p<0.001$) appears to be the best predictor of teachers' organizational citizenship behaviour. Job satisfaction variable (β =.15, $p<0.01$) appears to be the second predictor of teachers' organizational citizenship behaviour. Moreover, personality variable (β=.09, $p<0.05$), appears to be third predictor of teachers' organizational citizenship behaviour. However, organizational commitment is less striking.

Discussion

According to the quantitative finding, the levels of individual-level determinants of teachers' organizational citizenship behaviour and the levels of teachers' organizational citizenship behaviour were moderately high.

In addition, there were significant differences in individual-level determinants in the area of job satisfaction and overall individual-level determinants in terms of their qualification. In addition, there were significant differences in three areas of teachers' organizational citizenship behaviour such as teachers' organizational citizenship behaviour toward the students, teachers' organizational citizenship behaviour toward the team, and teachers' organizational citizenship behaviour toward the school in terms of their qualification. Thus, it can be concluded that the group of teaches who got BEd/MEd degree had higher level of teachers' organizational citizenship behaviour than those of teachers who got BA/BSc degree.

With regard to professional qualification, it can be concluded that the group of teachers who got BEd/MEd degree had high level of job satisfaction more than the group of teachers who attended DTEC/PPTT/PGDT training course. Moreover, according to significant differences found in the area of teachers' organizational citizenship behaviour toward the team, teachers' organizational citizenship behaviour toward the school, and overall teachers' organizational citizenship behaviour, it can be concluded that the group of teachers who got BEd/MEd degree could engage in organizational citizenship behaviour toward the team and toward the school more than the group of teachers who attended PTTC training course. Besides, according to significant

difference found in the area of teachers' organizational citizenship behaviour toward the school, it can be noted that the teachers who attended JTTC training course could engage in teachers' organizational citizenship behaviour toward the school more than those of teachers who attended PTTC training course.

According to the results of Pearson product-moment correlation, it was found that all ratings on four components of individual-level determinants were related to each other. Moreover, it was found that all ratings on three components of teachers' organizational citizenship behaviour were related to each other. In addition, it was found that there was a significant relationship between individual-level determinants and teachers' organizational citizenship behaviour. Thus, it can be noted that the more the level of individual-level determinants is high, the more the level of teachers' organizational citizenship behaviour is also high.

According to the result of simultaneous multiple regression, it can be concluded that individual-level determinants and teachers' organizational citizenship behaviour was positively and significantly correlated. Based on the beta weight, it is likely to be concluded that teachers' self-efficacy variable appears to be the best predictor of teachers' organizational citizenship behaviour.

According to the qualitative findings, the teachers with high level in big five personality can accept the critics of the oppositions, and understand others' feelings. They are patient. They are well prepared for things they do and help their abilities persevere even when they face with difficulties and when they are overloaded with work and problems. They are always active and studious for their work. They have team spirit. The teachers with low level of personality worry over difficulties. They oppose critics and problems with lack of initiative. They cooperate only with the colleagues of the same nature of personality and attitude.

The teachers with high level of organizational commitment assumes the responsibilities of the school as their own ones. They are really interested in their profession. They accept that their profession is nobler than others. They spent most of their time for school activities because they are willing to devote themselves to the school. They also have vision over the development of the school. The teachers who have low level of organizational commitment become interested in the profession only after working for a long time for their living. They consider the school activities as duties; consequently, they have no vision for the future of the school. Some teachers persist in the profession on account of their investment such as time and money for the attainment of education in the past. The other reason is that there are some possibilities of difficulties to come if they change their current profession.

The teachers with high level of self-efficacy are good at teaching as well as classroom management. They have confidence in what they do. They are willing to work with the students giving regular exercises to them and checking their answer paper. They enjoy learning the methodology of teaching from experienced teachers. They are always doing their best. They are capable of continuing something over a long period of time.

The teachers with high level of job satisfaction are happy and they are successful in their job because they are very interested in their teaching job. They are also satisfied with the management and fairness of the school principal, and the cooperation of the colleagues. They also find their profession noble and they believe that the profession can cultivate next generation. The teachers with low level of job satisfaction are neither satisfied nor dissatisfied with their job. Some teachers are dissatisfied with the management and leadership styles and antisocial behaviour of the school principal too. They want to have chances to present their ideas at the school meeting like the teachers in charge of grades and the subject leaders.

The teachers with high level of teachers' organizational citizenship behaviour toward the students used to take extra time for teaching. They were good in teaching. They tried to know their students' background such as their socioeconomic status, level of intelligence and learning styles. They cared for the well-being of the students. They kept complete notes and documents on every material for teaching. They helped the students who feel unhappy at schools and the ones with not enough school supply such as book, pencil, food, clothes in order to motivate them. They discussed with the parents concerning their children's education. They visited and helped their students when their students have occasion days at home. The teachers with low level of teachers' organizational citizenship behaviour toward the students were in lack of initiative and took extra time for teaching only when the school principal asked them. Some teachers cared for the unhappy students and the students who are often absent from school. Some were not aware of the students who felt unhappy at schools.

The teachers with high level of teachers' organizational citizenship behaviour toward the team are used to compromising. They were willing to take relieving and teaching for the absent colleagues. They consulted with each other to promote their quality in teaching skills. They supported each other with team spirit. They always cared for their colleagues who had some cases and they also helped the new teachers. The teachers with low level of teachers' organizational citizenship behaviour toward the team were weak in discussion among the colleagues to strengthen their capacity. They are accustomed to taking classes for relieving and to taking part in social occasions of colleagues.

The teachers with high level of teachers' organizational citizenship behaviour toward the school are normally active in school activities as their own affairs, cooperating with the school principal, the headmen of the village and the parents for the development of the school. They maintained the school property. They learned taking initiative for searching new information and applying for the progress of the school. They also involved in school health, school cleaning, school library and disciplinary actions. They arrived at school early. The teachers with low level of teachers' organizational citizenship behaviour performed school tasks and activities only when they were assigned by their school principal. They did little learning to improve themselves especially in teaching. They had the difficulties of inappropriate class size and relentless schedule. They arrived early at school when they were only on duty.

Conclusion

Findings indicated that the more the teacher received support and encouragement from principals and colleagues, the more they engage in teachers' organizational citizenship behaviour. According to the findings, it can be interpreted that school principals also need to provide teachers with encouragement and empowerment to effectively perform instructional activities, students' all-round development activities and other school activities which could lead to have more trust in school principals, believe more in their abilities, more committed to teachings, students, colleagues and school organization as a whole beyond the job description.

According to the findings, teachers' self-efficacy seemed to be the best predictor of teachers' organizational citizenship behaviour. Teachers need to upgrade their capacity through individual learning and collaborating with colleagues and teachers who have experiences theoretically and practically. Moreover, to improve teachers' self-efficacy, teachers should have high motivation and should set goals to take on school tasks, instructional activities, and students' development activities, that can challenge them but that goals are also realistic and attainable. School principals should support the teachers giving chances to raise their self-efficacy, to have a role in making important school decisions and present their ideas in the school mettings. School principal's praise on the teacher's effort is effective recognition of teacher's performance, resulting

school success. Even if things go wrong with the teachers, the school principal needs to give kind consideration and guidance on their wrong doings. Besides, school principals should realize the teachers individually as valuable human resources who have their own talents, empowering them to participate in leadership role according to their respective skills. In addition, teachers should imitate successful experienced teachers by observing their actions or by reading books on the biography and accomplishments of successful teachers. In addition, teachers should cooperate with colleagues who can motivate them to achieve their goals.

Job satisfaction plays a major role in how much they can achieve success. Teachers' job satisfaction depends on the students' trust and respect to the teachers, the cooperation and encouragement of colleagues and principals. Therefore, it is necessary to have mutual trust and respect among school principals, teachers, students, parents, and community members. School principals must not only recognize the complex and various tasks of teachers' work but also support them to do their task and activities effectively. The other factors for job satisfaction are interest in the progress of the children, cooperation of colleagues, having privilege for further learning, having opportunity to promotion, and reasonable payment.

According to findings, the difficulties they are facing are having insufficient human resources and material resources in schools, and having relentless schedule, inappropriate class size, having no spare time for their learning. Accordingly, the basic requirements for the teachers are enough space for teaching, spare time for their own learning to progress their continuous professional development, and enough payment for reasonable living status.

According to the findings, professional qualification and trainings affect teachers' job attitude and organizational citizenship behaviour. So the educational authorities should design training program for specializing in subjects, and to know how to use teaching aids effectively, how to value professional ethics, educational theories and how to do with educational psychology. Moreover, the teachers who engage in teachers' organizational citizenship behaviour should be also recognized and awarded by school principals and educational authorities.

Recommendations

The following points are the suggestions for teachers, school principals, educational authorities, to promote teachers' organizational citizenship behaviour in schools.

Teachers

1. should understand how important their profession is. They should pay respect and internalize professional ethics.
2. should keep on learning for their professional development to improve their skills and abilities that can lead success to the goals of education.
3. should also motivate themselves to perform effectively in implementing the goals of education by reading books and watching inspirational movies highlighting on famous and expert teachers.
4. should understand teacher centered pedagogy and learner centered pedagogy widely and deeply to be able to utilize in teaching.
5. should have enough time to study effective teaching methods and to create applicable teaching aids.
6. should understand the students intelligence levels, learning styles, innate abilities, to gain trust and reliability of the students in order to create the lesson to be interesting.
7. should have mutual respect, collaborative and supportive attitudes in relationship with administrators, colleagues, parents, and students.

8. should have mutual trust and friendly relationship with their students and colleagues. Mutual trust among members of organization is the core of the school organization. In the same way, the support and collaboration of school principals and colleagues is also highly important.

9. in pre-service and in service teacher trainings, the teacher educators should discuss and educate the nature, and the importance of teachers' organizational citizenship behaviour in schools.

School Principals

1. should have vision on how to make their school develop and to create enjoyable learning environment for the teachers and students.

2. should encourage the teachers to read and discuss the professional ethics, teaching methodologies, classroom management, and educational psychology so that they can apply in their teaching effectively.

3. should pay respect and accept the advice of every teacher who is carrying out teaching strategies and school activities practically.

4. need to pay attention to the way teachers are dealing with their students, the way they are teaching, and the way they are cooperating with their colleagues. At the same time, the school principals need to give the feedback monitoring and supervising what they do.

5. should take care and supervise attentively the unity and solidarity of the teachers.

6. should pay attention to the teachers' problems and challenges that they encounter in their teaching giving them some advice and necessary assistance.

Educational authorities

1. should provide enough school facilities, and enough qualified teachers for effective teaching.

2. should implement the recommendations that are needed to be carried out in the educational sectors presented by educational researchers, arranging training programs and workshop needed for the capacity building of teachers.

3. should award and appreciate the teachers who take part in teachers' organizational citizenship behaviour in schools.

Need for Further Research

In order to represent individual-level determinants, group-level determinants and organizational-level determinants of teachers' organizational citizenship behaviour, the area of study should be extended to cover with all the teachers including pre-service teachers and teacher educators at different levels of institutions such as colleges of education and universities of education.

Acknowledgement

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A STUDY OF TEACHER'S STRESS MANAGEMENT STRATEGIES

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Abstract

This study aims to study the teachers' stress management strategies in Basic Education High Schools, Hlaing Thar Yar Township, Yangon Region. The participants were 222 teachers in 8 Basic Education High Schools in Hlaing Thar Yar Township, Yangon Region during the 2019-2020 academic year. Quantitative and qualitative methods were used. Questionnaire were developed and based on Fimian's Teacher Stress Inventory (TSI), Robbins' Potential Sources of Stress and Ugwuja, U's Different Stress Management Strategies. To collect data for teachers' stress management strategies, questionnaire and open-ended and interview questions were applied in this study. Questionnaire consists of four parts: part A (teachers' demographic information), part B (stress items by teachers' personal distress), part C (items for sources of teachers' stress) and part D (items for teachers' stress management strategies). The internal consistency of Teachers' Stress Management Strategies was 0.94. Descriptive statistics, Independent Samples t Test, One-way ANOVA were used for data analysis. According to quantitative findings, teachers sometimes occur the feeling of little time to relax by their personal distress. Teachers agree environmental, organizational and personal factors as sources of their stress. Among them, organizational factors can cause mostly the teachers' stress. Teachers agree that they use Job related, Personal Characteristics and Interpersonal Stress Management Strategies when they feel stress. Among them, teachers mostly preferred Interpersonal Stress Management Strategies to relieve from stress. There were no significant differences in preferring stress management strategies among schools, between gender and position. There were significant differences in Job Related stress management strategies between qualification, in Personal Characteristics Stress Management Strategies between total service years and in Personal Characteristics and Interpersonal Stress Management Strategies between teachers' marital status.

Keywords: teacher, stress management strategies

Introduction

In every occupation, stress exists in human being who work in any occupation. Teaching is commonly recognized as one of the most stressful occupations in our nation. Teacher stress results in such consequences as early retirement, long and excessive absences, new teachers leaving during training and an increase in teachers leaving the profession within their first five years (Smith & Bourke, 2000). Rees (2001) indicated that occupational stress is the inability to cope with the pressures in a job because of a poor fit between someone's abilities and one work requirements and conditions. Stress is a mental and physical condition which affects an individual's productivity, effectiveness personal health and work quality (Holmtund-Rytkonen & Stranvik, 2005). Occupational stress related problems among teachers, which have led to declining interest in their jobs, less commitment and growing impatience among the teachers (Pflanz & Ogle, 2006). Litt and Turk (1985) stated that the sources of stress could be occupational, domestic and economic. Stress can eventually affect both physical and emotional well-being if not managed effectively. Weiten (1989) stated that Stress management is a skill that is used to deal with situations that are stressful and may eventually lead to burn out. Oboegbulem (1995) stated that stress management strategies are coping actions, behaviors or attitudes which an individual exhibits when faced with certain psychological and social demands that tax the individual's adaptive resources. Common strategies used to alleviate stress include exercise, social resources, avoidance, reading, hobbies, movement and meditation (Gulwadi, 2006). To be lifted the education status of the country, the teachers'

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quality and physical and mental well-being are very important. So, the teachers' stress management strategies that are used to be healthy and produce their workload well should be studied. This study aims for the Senior Assistant Teacher, Junior Assistant Teacher and Primary Assistant Teacher in Hlaing Thar Yar Township to study their stress management strategies.

Main Aim

The main aim of this study was to study the teachers' stress management strategies in Basic Education High Schools of Hlaing Thar Yar Township, Yangon Region.

Specific Aims

1. To study the stress items mostly occur in teachers' personal distress
2. To study the sources of teachers' stress
3. To study the teachers' stress management strategies
4. To study the teachers' preference on stress management strategies according to their personal factors

Research Questions

1. Which stress items mostly occur in teachers' personal distress?
2. Which sources of stress can cause mostly the teachers' stress?
3. Which strategies do the teachers use to manage their stress?
4. Which stress management strategies do the teachers prefer to use according to their personal factors?

Limitations of the Study

This study was conducted to study the teachers' stress management strategies using simple random sampling method. The questionnaire were administered to Senior Assistant Teacher, Junior Assistant Teacher and Primary Assistant Teacher from Hlaing Thar Yar Township, Yangon Region.

Theoretical Framework

In this study, sources of stress are based on Robbins (2007**)** and stress management strategies are based on Ugwuja (2009) and there are six dimensions. Sources of stress includes three dimensions such as environmental factors, organizational factors and personal factors.

(a) Environmental factors

The environmental factors that can cause stress are: job exposed to high levels of air pollution, job environment is often too hot. Job environment is very dust, job environment is often noisy, glare of powerful head lights during nights, nervousness due to high speed vehicles, moving all around, no protection from weather.

(b) Organizational factors

The poor organizational factors cause stress among people such as pressures to avoid errors or complete tasks within a limited time, work overload, a demanding and insensitive leader and unpleasant followers and so on.

(c) Personal factors

Personal economic problems, family issues and inherent personality characteristics constitutes the employee's personal life. National surveys show that people hold family and personal relationships such as marital difficulties, break down relationships and discipline troubles with children as the result of stress. These relationship problems decline work performance.

Stress management strategies include three strategies. These are (1) job related stress management strategies, (2) personal characteristics stress management strategies and (3) Interpersonal stress management strategies.

(1) Job Related Stress Management Strategies

Okpe (1997) stated that job stress can emanate as a result of role overload which exists when there is too much workload requiring long hours of work among individual, when work is not clearly specified what the job requires of the individual, for example when there is no scope and objectives. Work stress has significant health consequences that range from the relatively begin to the more serious, like heart disease. Stress at work is so common, finding a low-stress job may be difficult or impossible for people. A more realistic choice would be to simply adopt job related stress management strategies to reduce stress at work.

(2) Personal Characteristics Stress Management Strategies

The personal characteristics strategies sometimes reduce the stress in individual. Davis (1995) stated that personal characteristics stress management strategies such as low expectation, sense of patience, openness, agreeableness and conscientiousness can be used to reduce and manage stress. Some individuals in their place of work want to be perfectionists, do not interpret situations rationally, can use these strategies to manage stress. Personality characteristics stress management strategies can be used to reduce the negative feelings resulting from stressful events (Lazarus, 1991).

(3) Interpersonal Stress Management Strategies

Stress arises as a result of relationship with leader and colleagues. It could be on social, personal, interactive or on the ground of issuing directives in the campus. Davis, Meilahn and Kiss (1995) mentioned extreme conflict with other subordinates, having an abrasive leader who wants to see the follower fail which is part of the interpersonal relationships. Social support implies the kind of aid and backing that individuals receive from interaction with other person (Bishop, 1994). Interpersonal stress management strategies can be used to reduce stress in interpersonal relationships because the deterioration of interpersonal relationships at work can also result in psychological and physiological dysfunctions (Liu & Spector, 2005).

Definition of Key Terms

- **Stress: Stress** is a psychological and physiological response to events that upset our personal balance. It is a process in which environmental events or forces threaten the well being of an individual in the society (Singh, 2011).

- **Sources of Stress: Sources of stress** are any situation which provokes a feeling of loss of sense of security, loss of self-confidence and a feeling of sense of failure in occupation (Ivancevich & Matteson, 1980).

- **Teacher Stress: Teacher stress** is defined in terms of unpleasant negative emotions such as anger, frustration, anxiety, depression and nervousness that teacher experience due to some facets of their job (Kyriacou, 2001).

- **Stress Management: Stress management is** used to deal with situations that are stressful and may eventually lead to burn out (Weiten, 1989).
- **Stress Management Strategies: Stress management strategies** are coping actions, behaviors or attitudes which an individual exhibits when faced with certain psychological and social demands (Oboegbulem, 1995).

Methodology

Quantitative Methodology

Sample

This research was conducted with descriptive research type. Data were collected through questionnaire. 222 teachers from 8 Basic Education High Schools in Hlaing Thar Yar Township, Yangon Region were taken as sample by using simple random sampling method.

Instrumentation

The questionnaire consists of four parts: part A, B, C and D. In part A, it included 10 items related with teachers' demographic information. In part B, it included 20 items related with the stress items by teachers' personal distress developed by Fimian (1988). Each item was rated on a four-point Likert Scale ranging from 1=never, 2=seldom, 3=sometimes to 4=always. In part C, it included 30 items related with sources of teachers' stress based on Robbins (2007). It consists of three dimensions for sources of stress: Each item was rated on a four-point Likert Scale ranging from 1=strongly disagree, 2=disagree, 3=agree to 4=strongly agree. In part D, it included 45 items related with teachers' stress management strategies based on Ugwuja (2009). It consists of three dimensions for stress management strategies: Each item was rated on a four-point Likert Scale ranging from 1=never, 2=rarely, 3=sometimes to 4=always. Open-ended and Interview questions were developed and were used to collect information concerning teachers' stress management strategies.

Instrument Validity

In order to obtain the content validity of the questionnaire, instrument was reviewed by 9 experts who have sound knowledge and experience from the Department of Educational Theory, Yangon University of Education. To measure the reliability of the questionnaire, a pilot test was conducted with forty-five teachers in No. (2), Basic Education High School, South Okkalapa Township, Yangon Region.

Instrument Reliability

The internal consistency (Cronbach's alpha) of teachers' stress management strategies was 0.94. Therefore, the questionnaire was reliable to use for this study.

Procedure

First and foremost, related literature was explored. Next, the instrument was constructed in order to collect the required data. The pilot study was undertaken with (45) teachers in No. (2) Basic Education High School, South Okkalapa Township to refine the developed questionnaire. After that, questionnaires were distributed to the schools on 28th, 29th, October, 2019. Distributed questionnaires were recollected on 4th 5th, November, 2019. The respondent rate was 100 %. Interview was conducted from 24th to 31st December, 2019.

Data Analysis

Descriptive analysis, Independent Samples *t* Test, One-way ANOVA and Post Hoc Tukey HSD were used to analyze the data.

Qualitative Methodology

Answering open-ended questions and interviewing were used to collect more information about the teachers' stress management strategies.

Sample

Two hundred and twenty two teachers were responded in answering open-ended questions. Eight teachers from Hlaing Thar Yar Township were participated in conducting interviews.

Instrumentation

Four open-ended questions and three interview questions were included in qualitative study. Among open-ended questions, number one item regarded with stress items teachers mostly occur in terms of personal distress, number two item regarded with sources of teachers' stress and number three and four items regarded with teachers' stress management strategies. In Interview questions, item number one concerned with stress items teachers mostly occur in terms of personal distress, item number two concerned with sources of teachers' stress and item number three concerned with teachers' stress management strategies.

Procedure

Interview was conducted by using partially structured interview from 24th to 31st December.

Findings

Quantitative Findings

Findings for research question (1) are presented in Table 1.

Table 1 Mean and Standard Deviations of Stress Items by Teachers' Personal Distress

(N=222)

No.	Stress Items	Mean (SD)
1	I surrender feeling overwhelmed.	2.30 (0.91)
2	I feel that I have little time to relax.	2.64 (0.88)
3	I feel low self-esteem and lonely.	1.44 (0.76)
4	Personal priorities are being shortchanged.	1.76 (0.87)
5	Avoiding others.	1.36 (0.65)
6	I feel anxious frequently.	2.25 (0.85)
7	I want to laugh or cry at the same time.	1.38 (0.71)
8	Do more than one thing at a time.	2.09 (0.89)
9	Physical exhaustion.	2.41 (0.81)
10	I become impatient.	2.27 (0.86)
11	Think about unrelated matters.	1.65 (0.85)
12	Rush in my speech.	2.29 (0.96)
13	Apathy to work.	1.80 (0.88)
14	Becoming fatigued in short time at work.	2.12 (0.93)
15	Need more status and respect.	1.84 (0.98)
16	Procrastinating.	1.59 (0.82)
17	Sleeping more than usual.	1.88 (0.96)
18	Being pessimistic or seeing negative side.	1.35 (0.70)
19	Overreacting to unexpected problem.	1.89 (0.90)
20	Personal opinions are not sufficiently aired.	1.49 (0.75)

Note: The higher the mean, the more undergo the stress items.
Scoring Direction
For the stress items mostly occur in teachers' personal distress
1.00 to 1.75 = Never   1.76 to 2.50 = Seldom
2.51 to 3.25 = Sometimes   3.26 to 4.00 = Always

According to table 1, "I feel that I have little time to relax" item has a mean of 2.64 (higher than other stress items). It can be said that the teachers more occur this stress item than other stress items.

Findings for research question 2 are revealed in Table 2.

Table 2 Means and Standard Deviations of Teachers' Perceptions on Sources of Teachers' Stress

(N=222)

No.	Sources of Stress	Mean	SD	Remark
I	Environmental Factors	2.56	0.65	Agree
II	Organizational Factors	2.78	0.58	Agree
III	Personal Factors	2.53	0.57	Agree
	Overall Sources of Teachers' Stress	2.62	0.52	Agree

Scoring Direction
For the level of teachers' perceptions on sources of teachers' stress
1.00 to 1.75 = Strongly Disagree 1.76 to 2.50 = Disagree
2.51 to 3.25 = Agree   3.26 to 4.00 = Strongly Agree

According to table 2, the mean value of *Organizational Factors* was 2.78 and it is higher than other dimension. It can be said that the organizational factor can cause mostly the teachers' stress.

Findings for research question 3 are revealed in Table 3.

Table 3 Mean and Standard Deviations of Teachers' Perceptions on their Stress Management Strategies   (N=222)

No.	Teachers' Stress Management Strategies	Mean	SD	Remark
I	Job Related Stress Management Strategies	3.12	0.37	Agree
II	Personal Characteristics Stress Management Strategies	3.30	0.40	Strongly Agree
III	Interpersonal Stress Management Strategies	3.47	0.41	Strongly Agree
	Overall Stress Management Strategies	3.30	0.33	Strongly Agree

Scoring Direction
For the Level of Teachers' Perceptions on their Stress Management Strategies
1.00 to 1.75 = Strongly Disagree   1.76 to 2.50 = Disagree
2.51 to 3.25 = Agree   3.26 to 4.00 = Strongly Agree

According to table 3, the total mean value of teachers' stress management strategies was 3.30. It can be said that all stress management strategies had "Strongly agree" level.

Findings for research question 4 are revealed in Table 4, 5, 6, 7 and 8.

Table 4 Means and Standard Deviations of Teachers' Preference on Stress Management Strategies Grouped by Gender   (N=222)

No.	Stress Management Strategies (SMS)	Gender	N	Teachers' Preference on Stress Management Strategies	
				Mean	SD
1	Job Related SMS	Male	43	3.03	0.27
		Female	179	3.12	0.39
2	Personal Characteristics SMS	Male	43	3.14	0.29
		Female	179	3.33	0.40
3	Interpersonal SMS	Male	43	3.40	0.39
		Female	179	3.50	0.41
	Overall	Male	43	3.19	0.25
		Female	179	3.32	0.34

According to table 4, the mean values of female teachers' preference on stress management strategies were higher than the mean values of male teachers' preference on stress management strategies.

Table 5　Means and Standard Deviations of Teachers' Preference on Stress Management Strategies Grouped by Qualification　　　　　　(N=222)

No.	Stress Management Strategies (SMS)	Qualification	N	Teachers' Preference on Stress Management Strategies	
				Mean	SD
1	Job Related SMS	BA/BSc, MA/MSc	169	3.10	0.40
		BEd, MEd	53	3.12	0.27
2	Personal Characteristics SMS	BA/BSc, MA/MSc	169	3.29	0.41
		BEd, MEd	53	3.32	0.34
3	Interpersonal SMS	BA/BSc, MA/MSc	169	3.47	0.42
		BEd, MEd	53	3.49	0.38
	Overall	BA/BSc, MA/MSc	169	3.29	0.34
		BEd, MEd	53	3.31	0.27

In table 5, concerning with the teachers' preference on stress management strategies, the overall mean value of BEd, MEd holders (M=3.31) was higher than the overall mean value of BA/BSc, MA/MSc holders (M=3.29). Both BEd, MEd holders and BA/BSc, MA/MSc holders were mostly perceived in the Interpersonal Stress Management Strategies.

Table 6　Mean and Standard Deviations of Teachers' Preference on Stress Management Strategies Grouped by Total Service Years　　　　　　(N=222)

No.	Stress Management Strategies (SMS)	Total Service Years	N	Teachers' Preference on Stress Management Strategies	
				Mean	SD
1	Job Related SMS	1-3 years	14	3.25	0.30
		4-6 years	35	3.00	0.43
		7-18 years	102	3.11	0.30
		19-30 years	42	3.16	0.39
		31-40 years	29	3.08	0.47
2	Personal Characteristics SMS	1-3 years	14	3.39	0.34
		4-6 years	35	3.12	0.44
		7-18 years	102	3.27	0.35
		19-30 years	42	3.45	0.34
		31-40 years	29	3.32	0.47
3	Interpersonal SMS	1-3 years	14	3.59	0.34
		4-6 years	35	3.43	0.45
		7-18 years	102	3.46	0.36
		19-30 years	42	3.58	0.37
		31-40 years	29	3.36	0.55
	Overall	1-3 years	14	3.41	0.24
		4-6 years	35	3.18	0.37
		7-18 years	102	3.28	0.27
		19-30 years	42	3.40	0.32
		31-40 years	29	3.25	0.44

In table 6, concerning with the teachers' preference on stress management strategies, the overall mean value of total service 1-3 years (M=3.41) was the highest mean value and the overall mean value of total service 4-6 years (M=3.18) was the lowest mean value. And then, the mean value of total service 19-30 years (M=3.59) was the highest mean value so the teachers prefer in interpersonal stress management strategies.

Table 7   Mean and Standard Deviations of Teachers' Preference on Stress Management Strategies Grouped by Position   (N=222)

No.	Stress Management Strategies (SMS)	Position	N	Teachers' Preference on Stress Management Strategies	
				Mean	SD
1	Job Related SMS	Primary	58	3.09	0.41
		Junior	111	3.10	0.39
		Senior	53	3.13	0.26
2	Personal Characteristics SMS	Primary	58	3.30	0.38
		Junior	111	3.28	0.42
		Senior	53	3.31	0.34
3	Interpersonal SMS	Primary	58	3.55	0.38
		Junior	111	3.43	0.43
		Senior	53	3.48	0.39
	Overall	Primary	58	3.31	0.32
		Junior	111	3.27	0.36
		Senior	53	3.30	0.27

In table 7, concerning with the teachers' preference on stress management strategies, Primary teachers had the higher mean value (M=3.31) than Junior and Senior teachers.

Table 8   Means and Standard Deviations of Teachers' Preference on Stress Management Strategies Grouped by Marital Status   (N=222)

No.	Stress Management Strategies (SMS)	Marital Status	N	Teachers' Preference on Stress Management Strategies	
				Mean	SD
1	Job Related SMS	Single	129	3.09	0.35
		Married	93	3.12	0.39
2	Personal Characteristic SMS	Single	129	3.29	0.38
		Married	93	3.30	0.45
3	Interpersonal SMS	Single	129	3.50	0.35
		Married	93	3.43	0.48
	Overall	Single	129	3.30	0.28
		Married	93	3.29	0.38

In table 8, concerning with the teachers' preference on stress management strategies, the overall mean value of single teachers was higher than the overall mean value of married teachers. Both single and married teachers were mostly perceived in the Interpersonal Stress Management Strategies.

Qualitative Findings

Findings of Open-ended Questions

In the qualitative study, open-ended questions were used to complement data obtained from quantitative.

Teachers' Responses

The selected 222 teachers from selected township have responded the four open-ended questions. The responses of the open-ended questions are-

Question 1 – Do you think that you are sensitive or not? Why?

Responses:

- They think that they are not sensitive. (n=128, 57.66 %): because teachers in teaching profession must possess strong mind. (n=89, 40.09 %): because they are not serious to every situation. (n=46, 20.72). They think that they are sensitive. (n=94, 42.34 %): because of compassion for others, fear of being criticized, too serious, easily irritability. (n=79, 35.59 %): because they are a good-hearted person and low self-esteem. (n=60, 27.03).

Question 2 – Describe the sources that can cause stress to you?

They responded that the most sources of their stress are: too much students, inadequate salary, prefer paperwork than teaching. (n=153, 68.92 %), Pupils' general lack of respect for teachers (n=121, 54.50 %), Working under deadlines pressure (n=119, 53.60 %), Too much workload, mutual understanding (n=105, 47.30 %), Poor relations with colleagues (n=101, 45.50 %), Handling overcrowded classes and teaching many subjects (n=99, 44.59 %), Economic situation and personal problem (n=79, 35.59).

Question 3 – How often do you respond when you are under stress at work because of difficulties?

The most teachers' responses are: Listening to music (n=201, 90.54 %), Meditation (n=198, 89.19 %), Travelling (n=192, 86.49 %), Having snacks (n=164, 73.87 %), I believe that every difficulties will be finished in one day (n=112, 50.45 %), Go to the pagoda (n=98, 44.14 %), Singing (n=95, 42.79 %), Relaxing (n=93, 41.89 %), Physical exercise (n=89, 40.10 %), Reading (n=82, 36.94 %).

Question 4 – Describe the strategies that should be used to manage stress?

The most teachers' responses are: Listening to music (n=201, 90.54 %), Meditation (n=198, 89.19 %), Having snacks (n=164, 73.87 %), Should take a trip (n=155, 69.82 %), Go outside with my friend (n=149, 67.12 %), Watching movies (n=148, 66.67 %), Learn to relax between activities (n=146, 65.77 %), Stress are mere challenges (n=144, 64.86 %), Physical exercise (n=142, 63.96 %), Try to adjust with my colleagues (n=140, 63.06 %), Try to get encouragement from parents, relatives and friends (n=137, 61.71 %).

Findings of Interview Questions

In the qualitative study, interview questions were used to complement the data obtained from quantitative.

Teachers Interviews

The eight teachers from each selected school who were selected by simple random sampling method were interviewed with 3 interview questions. They answer these questions as follows:

Question 1: What do you think about your mindset?

The most teachers' answers are: they have no strong mind because they usually worry something that have not been happened yet. (n=5), they have heart diseases and they are not patient to everything. (n=4) and they have strong mind because they used to cope every problem only with their ability. (n=3), they don't think the problem as a stress and they think the problem as a challenge and try to face these problem. (n=3), they think that every problem will be finished one day (n=2).

Question 2: Which matters can cause stress to you when you are at work?

The most teachers' answers are: Too much unneeded paperwork. (n=8), Too much workload and they have to work some matters and taking some responsibilities that are not concerned with us. (n=6), Unsystematic educational management. (n=6), Lack of job security. (n=6), Problem with the leader and colleagues. (n=5).

Question 3: If you feel you are under stress, what will you do to relieve from stress?

The teachers' answers are: they always spend enough sleeping time. (n=8), they listen to music and watch comedy movie. (n=8), they go outside with their relatives and friends. (n=7), Meditation. (n=6), they discuss their problems with their colleagues. (n=6), they interpret the problem from positive point of view. (n=6), they maintain cordial relationships with their colleagues and always stay with tolerance. (n=5).

Conclusion, Discussion and Recommendations

Conclusion and Discussion

Results showed that "I feel that I have little time to relax" item has a mean of 2.64 (higher than other stress items). The teachers more undergo this stress item than other stress items. "Being pessimistic or seeing negative side" item has a mean of 1.35 (lower than other stress items). Therefore it could be interpreted that the teachers more undergo "I feel that I have little time to relax" item in Hlaing Thar Yar Township. It could be interpreted that if people are under stress, they have no time to relax and they always excited and worried to some matters that have not happened. If teachers are under stress, they have difficulty in relaxing and quieting mind (Levine & Ursin, 1991).

According to the findings through open ended questions, 128 number of teachers in Hlaing Thar Yar Township were answered that they are not sensitive. According to the findings through open-ended questions, 94 number of teachers in Hlaing Thar Yar Township answered that they are sensitive.

Continuously, in this study, the teachers' perception on sources of teachers' stress was determined by mean values of teachers' responses to the questionnaire. The higher mean values, the level of teachers' perception on sources of teachers' stress was high. Results showed that teachers agree all dimension of sources of stress. Teachers perceived that organizational factors dimension had highest mean values (Mean=2.78). Therefore, it could be interpreted that the teachers' stress can cause mostly due to organizational factors. Poor pupil behavior, time pressure and work overload, poor working conditions are sources of teachers' stress (Kyriacou, 1987).

According to the results, the teachers use Job Related Stress Management Strategies, Personal Characteristics Stress Management Strategies and Interpersonal Stress Management Strategies to manage their stress. Results showed that the overall mean value of teachers' stress management strategies was 3.30 and teachers strongly agree these strategies. It could be interpreted that teachers in Hlaing Thar Yar Township strongly agree the teachers' stress management strategies from the questionnaire. Results showed that Interpersonal Stress Management Strategies dimension had the highest mean value than Job Related Stress Management Strategies and Personal Characteristics Stress Management Strategies. It could be interpreted that teachers in Hlaing Thar Yar Township preferred Interpersonal Stress Management Strategies to use to manage their stress than other stress management strategies. Lack of social support from colleagues and poor interpersonal relationship can cause stress, especially among employees with a high social need (Robbins, 2007). Social support such as encouragement have a lasting and positive impact on individual's life (Caplan, 1974).The stress due to environmental factors from sources of teachers' stress dimensions could be mostly managed by Personal Characteristics Stress Management Strategies. If people are under stress due to environmental situation, they must try to come up with a strategy about what to do and have to learn something from the experience (Okafor, 1998).Stress due to organizational factors can be mostly managed by Job Related Stress Management Strategies. The organization pressure could be relieved by planning the activities to complete the task, discussing to avoid ambiguity and effectively utilized time management (Arroba & James, 1990). Finally, stress comes from personal factor would be mostly managed by Interpersonal Stress Management Strategies. Social support system is a system of peoples' personal stress reduction (Bishop, 1994).

According to the results based on gender of teachers, the mean values of female teachers were higher than male teachers. Both male teachers and female teachers prefer on Interpersonal Stress Management Strategies to manage their stress. Female are not known with the creation of humor in relationship. More than two men can stay in a room for long but there will be no quarrel since they can easily overlook some certain things of which women cannot do (Ugwuja, 2009).

According to the results based on teachers' qualification, there were significant different between qualification on stress management strategies. According to the results, the perception of BEd, MEd degree holders was higher. Therefore, it could be interpreted that BEd, MEd degree holders got the sound knowledge about educational field and according to responses of open-ended and interview questions.

According to the results based on teachers' total service years, there were significant differences in overall stress management strategies. The overall mean value of 1-3 years were higher than the other total service years. Teachers in career entry stage need strong interpersonal skills in order to work collaboratively with each other, administrators, students and parents (Payne and Furnham, 1987).

According to the results based on teachers' position, there were no significant different between position of teachers. However, primary teachers had higher mean value than junior and senior teachers. Primary teachers role is to develop and foster the appropriate skills and social abilities to enable the optimum development of children according to age, ability and aptitude. So, they also must have strong interpersonal skills to implement their role to develop their children social skills (Marnik, 1997).

According to the results based on teachers' marital status, the mean value of single teachers was higher than the mean value of married teachers. It could be interpreted that single teachers more prefer on Interpersonal Stress Management Strategies. Married teachers received from their spouses, which enabled them to cope with stress on their jobs and Single teachers is constantly subjected to societal pressure (Popoola, 2003).

Recommendations

Based on the analysis of the surveys, testing instruments open-ended and interview questions on teachers' stress management strategies, teachers must accept that they should have sound mind and sound body because teaching profession has so many challenges and stress to cope. Teachers must know the sources of their stress clearly and should try to neglect some unexpected situation and students' misbehavior to relieve from stress. Teachers need to prepare some paperwork and need to manage their time to reduce some work-related stress. Teachers should try to get advice or help from parents, relatives and friends. Teachers should need to avoid unnecessary argument and should adopt the habits of positive reinterpretation and habits of not to make hasty decisions.

Need for Further Study

This study tried to investigate the teachers' stress management strategies in Hlaing Thar Yar Township, Yangon Region. Further research should be made in other Township, States and Regions. A similar study should be conducted in the area of the present study using school principals. A similar study should also be conducted to compare school principals and teachers. Further study should be conducted to investigate the type of teachers' stress.

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