

RELATIONSHIP BETWEEN MENTAL WELL-BEING, ADJUSTMENT STYLES AND ACADEMIC ACHIEVEMENT OF STUDENT-TEACHERS

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Abstract

The main purpose of the present study was to study the relationship between mental well-being, adjustment styles and academic achievement of student-teachers. Questionnaire survey method was applied and quantitative approach was executed in this study. A total of 474 student-teachers (147 males and 327 females) from Yangon University of Education and Sagaing University of Education participated in this study. The required sample was selected by using random sampling technique. As the research instruments, Warwick-Edinburgh Mental Well-being Scale (WEMWBS, 2005) and Adjustment Styles Inventory developed by Kumar (1998), Reddy (1990) and Srinivas (1999) were applied to measure the mental well-being state and various adjustment styles of student-teachers. Academic achievement was described in terms of scores obtained from an achievement test including three subjects (Educational Psychology, English and Biology) in 2016-2017 Academic Year developed by the researcher. In the analysis of data, descriptive statistics, independent sample t-test, one-way ANOVA, Pearson's correlation technique and stepwise multiple regression analysis were used in this study. According to the results of regression analyses, it can be concluded that both mental well-being and three subscales of adjustment styles inventory: appraisal-focused, problem-focused and emotional-focused were also significant predictive of academic achievement of student-teachers. To sum up, the student-teachers who are in good state of mental well-being and able to adjust difficulties in their life are active in academic activities and achieve well in their student life in universities of education.

Keywords: mental well-being, adjustment styles, appraisal-focused, emotional-focused, problem-focused, academic achievement

Introduction

Mental conditions of both teacher and students play an important role in performing effective teaching learning activities. If the teachers and students are in good state of mental well-being, they can carry out academic and school programs without any difficulties. Mental well-being gives us a unified identity, satisfaction, happiness, love, respect, positive attitude, inner peace and direction to individual life. People with good mental well-being can make good decisions, form positive relationship with others and feel connected and supported. Mental well-being is a variable that is related to academic performance of students. People who have a good state of mental well-being are active in academic performance and achieved well.

Adjustment can be defined as a process of altering one's behavior to reach a harmonious relationship with their environment. As people are different from each another, they use different styles of adjustment in their daily experiences, physical environment and interactions with others. The adjustment styles of the individual play a decisive role in his total development. Students face new challenges to adjust to the new environment, new teachers, new academic teachers and the need to try to be able to adapt with the new and diverse group of other students from different cultural backgrounds. The students have to use various types of adjustment styles to overcome learning problems, instructional difficulties and to make satisfactory progress in exploratory experiences.

Academic achievement is the educational process carried out by students, teacher or institution over a certain period. It is one of the most important indicators in educational

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assessment and educational system. Academic systems are similar across cultures, but not completely identical, which forces students to change once they enter into a new academic system. Ridley (2004) pointed out that the courses of academic disciplines in higher education can be confusing and mysterious for those who are new to university life. As the students who have completed their basic education enter the higher education system, they need to adjust their behaviors, thoughts and feeling to be adaptable with new environment, academic subjects and classmates.

Purpose of the Study

The main purpose of the study was to study the relationship between mental well-being, adjustment styles and academic achievement of the student-teachers in universities of education.

Specific Objectives

- To investigate the mental well-being of student-teachers in universities of education.
- To study the adjustment styles of the student-teachers in universities of education.
- To examine the academic achievement of student-teachers in universities of education.

Scope

The study was geographically restricted to Yangon Region and Sagaing Region.

Definition of the Key Terms

Mental Well-being: Mental Well-being is defined as a state of being comfortable, healthy or happy in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully and is able to make a contribution to his or her community. ([http:// www.who.int/features/factfiles/mental](http://www.who.int/features/factfiles/mental)).

Adjustment: Adjustment is the outcome of the individual's attempts to deal with the stress and meet his needs, also his efforts to maintain harmonious relationships with the environment (Coleman, J. C, 1983).

Academic Achievement: Academic achievement becomes the corner stone of the developmental path of education and really, it becomes a strong determinant of effective teaching (Adval, S. B, 1952).

Review of Related Literature

According to World Health Organization (2001), an individual who has good mental health is able to realize his or her own abilities, cope with stress of everyday living, work productively and contribute to the community where he lives. Good mental health protects and helps us to avoid risk-taking behaviors that contribute to poor mental health (Moodie & Jenkins, 2005; NeLMH, 2004). Well-being is a positive outcome that is meaningful for people and generally includes global judgments of life satisfaction and feelings ranging from depression to joy.

The well-being of university students is an important research endeavor. Experiencing high levels of well-being is considered to be a central criterion of positive mental health. In addition to this, well-being has been found not only to be an outcome of favorable life circumstances such as academic success and satisfying relationships but also a predictor and part cause of these outcomes (Lyubomirsky, 2005). Mental well-being is beneficial for adults to live a

healthy life, making it an important aspect of one's life in the college years (Molina, Garcia, Castillo & Queralt, 2011). Life dissatisfaction or even suicidal behaviours have also been documented in students who have a lack of support and poor well-being of one's self (Chao, 2012). The years that someone spends in colleges or universities are often one of the most stressful periods especially the beginning of the academic year and the transition from childhood to adulthood (Burriss, Brechting, Carlson & Salsman, 2009). Well-being and adjustment to college or university was associated with incoming student's individuation from parents (Yelle, Kenyon & Koerner, 2009).

Successful adjustment to school largely depends on past experiences at home and on children's skills and knowledge (Fregussion, 2000). Adjustment to schooling is the interaction of the child personal and their experiences that ultimately determines how a child adjusts to school. A well-adjusted child is one who does not get affected adversely by the interactions such as conflicts, emotions etc., and whose personality development goes through a healthy course of socialization (Sangeeta et al., 2012). College adjustment reflects on how much an individual achieves through it and its effect on his personal growth (Arkoff, 1968). The college students of low socio-economic status and low academic achievement have more adjustment problems than the students of high socio-economic status and high academic achievement (Sangeeta & Chirag, 2012). Students of private schools are better adjusted than students of government schools (Surekha, 2008). Children of low socio-economic families are at risk from a variety of adjustment problems (Fregussion & Woodward, 2000).

Effective teachers have a good command of their subject matter and have a better academic performance. Without conceptual competencies, a teacher can never create a strong basement of academic development in his students. Academic achievement becomes the corner stone of the developmental path of education and really, it becomes a strong determinant of effective teaching (Adval, S. B, 1952).

Methodology

Sampling

A total of 474 third year to fifth year student-teachers participated in this study. The selected sample of third year to fifth year student-teachers for this study is described in the following table.

Table 1. Numbers of Participated Student-Teachers and Selected Universities

University	Year	Students Numbers		Total
		Male	Female	
University of Education (Yangon)	Third Year	34	47	81
	Fourth Year	20	81	101
	Fifth Year	16	50	66
University of Education (Sagaing)	Third Year	36	47	83
	Fourth Year	17	50	67
	Fifth Year	24	52	76
Total		147	327	474

Research Method

In this study, descriptive survey design was used.

Research Instrumentation

Warwick-Edinburgh Mental Well-being Scale (WEMWBS, 2005) was used to measure the mental well-being state of student-teachers. Participants rated 14 items relating to their mental well-being conditions on a 5-point Likert scale.

Adjustment Styles Inventory developed by Kumar (1998), Reddy (1990) and Srinivas (1999) was used to measure student-teachers' various adjustment styles. Participants rated 40 items on a 5-point Likert scale.

Students' academic achievement was described in terms of scores obtained from an achievement test on three subjects viz. Educational Psychology, English and Biology developed by the researcher. Moreover, as demographic data, gender and year were also assessed. Data were collected through self-reported survey questionnaire.

Pilot study was done with a sample of 60 student-teachers from third year, fourth year and final year from Yangon University of Education in the second week of December 2016 to test whether the wording of items, statements and instructions had their clarity in Myanmar version and were appropriate and relevant. After conducting the pilot study, the internal consistency (Cronbach α) of mental well-being questionnaire is 0.813 and adjustment styles inventory is 0.787. The participants from Yangon University of Education and Sagaing University of Education were distributed the self-reported survey questionnaire and achievement test in January, 2017.

Data Analysis and Findings

1. Mental Well-being Level of Student-teachers from Selected Universities

Descriptive analyses revealed that the mean and standard deviation of mental well-being of all participants were 74.12 and 8.55 respectively. Based on the descriptive analysis of mental well-being questionnaire, student-teachers in this study could be identified into three groups: 13% of students were in the high, 74% were in the moderate and 13% were in the low group. The finding showed that the mental well-being conditions of student-teachers was satisfactory.

2. Student-teachers' Adjustment Styles from Selected Universities

To investigate all the students' adjustment styles, descriptive statistics was carried out and the results showed that the mean scores for student-teachers' problem-focused adjustment style was the highest in all adjustment styles. It was clearly seen that the sample students reported having relatively high use of problem focused adjustment styles. They also used fairly high level of emotional focused adjustment styles, but low levels of appraisal focused adjustment styles.

3. Comparison of Mental Well-being and Adjustment Styles by Gender

Descriptive analyses showed that mean scores of mental well-being and adjustment styles for boys are greater than those of girls. The result of t test stated that there was no gender difference in mental well-being of student-teachers. Moreover, the results of t-test stated that there was gender difference in the adjustment styles of student-teachers. This meant that male student-teachers can easily adjust and solve the problems they are facing.

Table 2. Comparison of Mental Well-being and Adjustment Styles by Gender

Variable	<i>t</i>	<i>df</i>	<i>p</i>	Mean	Mean Difference
Mental Well-being	1.653	472	0.099	75.18 (M)	1.40
				73.78 (F)	
Adjustment Styles	4.195***	472	0.000	58.31 (M)	3.59
				54.71 (F)	

***The mean difference is significant at 0.001 level.

4. Comparison of each subscale of Adjustment Styles by Gender

Descriptive analyses on each subscale of adjustment styles revealed that regarding adjustment styles, except appraisal focused, boys reported to have greater level of the remaining adjustment styles: viz. problem focused and emotional focused. The results of t test confirmed that significant difference by gender exists in problem focused adjustment style and emotional focused adjustment style at 0.001 level. In general, males could control their mental state when they face difficulties in their life and also be able to overcome, control, solve and easily adjust to particular problems. This fact might be the reason why boys reported greater level of mental well-being and adjustment styles than girls.

Table 3. Comparison of each subscale of Adjustment Styles by Gender

Subscales of Adjustment Styles	<i>t</i>	<i>df</i>	<i>p</i>	Mean	Mean difference
Appraisal focused	1.459	472	0.145	48.30 (M)	2.103
				46.20 (F)	
Problem focused	4.200***	472	0.000	67.12 (M)	4.349
				62.77 (F)	
Emotional focused	3.448***	472	0.001	54.52 (M)	3.386
				51.54 (F)	

***The mean difference is significant at 0.001 level.

5. Comparison of Mental Well-being and Adjustment Styles by Universities

In addition, it was necessary to observe whether student-teachers have significant differences in mental well-being and adjustment styles with respect to university, descriptive statistics was computed. Then, independent sample t-test was computed to investigate whether there were any significant differences in mental well-being and adjustment styles by universities. The results of t test stated that there was no significant difference between Yangon University of Education and Sagaing University of Education for both mental well-being and adjustment styles of student-teachers.

6. Comparison of Mental Well-being and Adjustment Styles by Grade

In addition, it was necessary to observe whether student-teachers have significant differences in mental well-being and adjustment styles with respect to grade, descriptive statistics was computed. Then, ANOVA was computed to investigate whether there were any significant differences in mental well-being and adjustment styles of student-teachers by grade or not.

Table 4. Comparison of Mental Well-being and Adjustment Styles by Grade

Variable	Grade	N	Mean	SD	F	p
Mental Well-being	3 rd year	164	76.12	8.70	8.887**	.000
	4 th year	168	72.24	8.87		
	5 th year	142	74.35	7.46		
Adjustment Styles	3 rd year	164	55.99	8.56	9.837***	.000
	4 th year	168	53.75	7.19		
	5 th year	142	58.10	10.11		

The results showed that mental well-being condition of third year student-teachers was highest among the other grades. However, the adjustment styles of fifth year students were the higher than the others. This meant that fifth-year student-teachers can be able to adjust well as they are familiar with the learning environment for a long time.

Again, post-hoc comparison was computed using Tukey HSD test to find out the differences which particular class level had greatest differences in mental well-being.

Table 5. Results of Tukey HSD Multiple Comparisons for Mental Well-being of Student teachers by Grade

Variable	I (Grade)	J (Grade)	(I-J) Mean Difference	p
Mental Well-being	Third year	Fourth year	3.887***	0.000
		Fifth year	1.778	0.157

***The mean difference is significant at 0.001 level.

It was observed that mental well-being of third year student-teachers was significantly different from that of fourth year student-teachers. There was no significant difference between mental well-being of third year and fifth year student-teachers. Thus, it could be interpreted that mental well-being of student-teachers was different by Grade.

There was a significant difference in student-teachers' adjustment styles by Grade at 0.001 level. So, to find out which subscales have significant difference, ANOVA was carried out again for each subscale of adjustment styles.

Table 6. Comparison of Each Subscale of Adjustment Styles by Grade

Subscales of Adjustment Styles		Mean Square	F	p
Appraisal Focused	Between Group	1741.224	8.509***	.000
	Within Group	204.630		
Problem Focused	Between Group	1101.026	10.164***	.000
	Within Group	108.325		
Emotional Focused	Between Group	507.582	5.162**	.006
	Within Group	98.335		

Note: **The mean difference is significant at 0.01 level.

***The mean difference is significant at 0.001 level.

To find out which particular class level had greater difference, Tukey HSD post hoc test was conducted. Likewise, there were also significant differences depending upon appraisal-focused, problem-focused and emotional-focused subscales of third year, fourth year and fifth year.

Table 7. Results of Tukey HSD Multiple Comparisons for Adjustment Styles of Student-teachers by Grade

Variable	I (Class Level)	J (Class Level)	(I-J) Mean Difference	p
Appraisal Focused	Fifth year	Third year	4.996**	0.007
		Fourth year	6.498***	0.000
Problem Focused	Fourth year	Third year	- 4.042**	0.001
		Fifth year	- 4.914***	0.000
Emotional Focused	Fifth year	Fourth year	3.598**	0.004

Note: ***The mean difference is significant at 0.001 level.

**The mean difference is significant at 0.01 level.

7. Relationship between Student-teachers’ Mental Well-being, Adjustment Styles and Academic Achievement

To examine the relationship between mental well-being, adjustment styles and academic achievement of student-teachers, it was calculated correlations.

Table 8. Correlation Among Mental Well-being, Adjustment Styles Factors and Academic Achievement

Variables	MW (total)	AS (total)	AF	PF	EF	Academic Achievement
MW (total)	1	.387**	.59	.547**	.233**	.391*
AS (total)		1	.488**	.801**	.926**	.342*
Subscales						
AF			1	.181**	.393**	.433*
PF				1	.555**	.291*
EF					1	-.160*

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

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

MW = Mental Well-being, AS = Adjustment Styles, AF = Appraisal-focused, PF = Problem-focused, EF = Emotional-focused

The results showed that mental well-being and overall adjustment styles were significantly inter-correlated. In addition, the results of bivariate correlations showed that mental well-being factors and adjustment styles factors were significantly correlated with academic achievement. Particularly, overall mental well-being and academic achievement were significantly correlated, (r = 0.391, p < 0.05), and also adjustment styles and academic achievement were significantly correlated (r = 0.342, p < 0.05). Therefore, it can be assumed that

student-teachers who adjust their difficulties by emotions usually get negative results in academic achievement.

8. Regression Analysis for Predictive Power of Adjustment Styles on Mental Well-being

To make more detailed investigation, further detail analyses and computations were undertaken by using regression analyses. The standard multiple regression analysis was conducted to predict the predictive power of adjustment styles on mental well-being of student-teachers.

Table 9. Regression Analysis for Predictive Power of Adjustment Styles on Mental Well-being

Variables	B	β	<i>t</i>	<i>R</i>	<i>R</i> ²	Adjusted <i>R</i> ²	<i>F</i>
Mental Well-being	47.722		21.728	0.553	0.306	0.302	69.069
Predicator Variables							
Appraisal-focused	-0.007	-0.012	-2.88				
Problem-focused	0.486	0.602***	13.021				
Emotional-focused	-0.083	-0.097*	-1.953				

Note: $R^2 = 0.306$, $F(3, 470) = 69.069$, *** $p < .001$, * $p < .05$

The results of standard multiple regression analysis pointed out $R^2 = 0.306$, $F(3, 470) = 69.069$ and $p < 0.001$. The adjusted R^2 value was 0.302 which means 30% of the variance in mental well-being can be explained. It was found that problem-focused adjustment styles were significant positive predictors and emotional focused adjustment styles were significant negative predictors of mental well-being of student-teachers. Figure 1 was drawn based on the findings of the multiple regression analysis which described how adjustment styles significantly affecting mental well-being.

The model can be explained by the following equation:

$$\text{Mental Well-being} = 47.722 + 0.486\text{PF} - 0.083\text{EF}$$

Where, PF = Problem-focused

EF = Emotional-focused

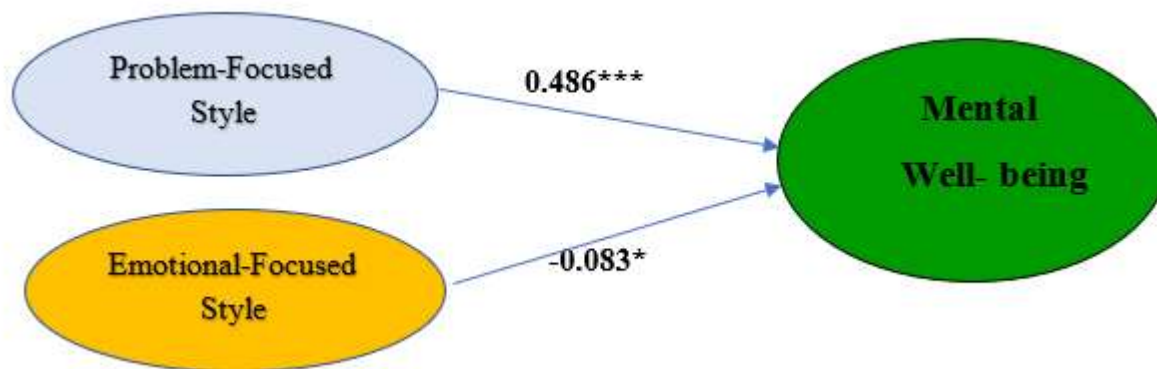


Figure 1. Predictive Powers of Adjustment Styles on Mental Well-being

9. Impact of Mental Well-being on Academic Achievement of Student-teachers

Multiple regression was conducted to predict the best predictor of student-teachers' academic achievement.

Table 10. Multiple Regression Analysis Summary for Mental Well-being and Academic Achievement

Variables	B	β	<i>t</i>	<i>R</i>	<i>R</i> ²	<i>Adj R</i> ²	<i>F</i>
Constant	64.058		19.685***	0.291	0.084	0.082	21.846*
Mental Well-being	.431	.228*	3.911*				

$R^2 = 0.082$, $F(1, 472) = 17.846$, * $p < .05$, *** $p < .001$

$$\text{Academic Achievement} = 64.508 + 0.431\text{MW}$$

where, MW = Mental Well-being

From these results, we can interpret that the students who are in good state of mental well-being may lead to high achievement in their academic subjects. The adjusted R-square was 0.082. This indicated that approximately 8.2% of the variance in academic achievement was explained by this model.

10. Impact of Adjustment Styles on Academic Achievement of Student-teachers

To test the predictive contributions of the set of adjustment styles factors to academic achievement, the multiple regression analysis was conducted.

Table 11. Multiple Regression Analysis Summary for Adjustment Styles and Academic Achievement

Variables	B	β	<i>t</i>	<i>R</i>	<i>R</i> ²	<i>Adj R</i> ²	<i>F</i>
Constant	60.015		24.031***	.279	.078	.074	17.983*
Predictor Variables							
Appraisal focused	.452	.183*	2.597*				
Problem focused	.268	.336*	6.041*				
Emotional focused	-.283	-.314*	-5.743*				

$R^2 = 0.074$, $F(3, 470) = 21.983$, *** $p < 0.001$, * $p < 0.05$

The results showed that emotional-focused adjustment style was a significant predictor of academic achievement ($\beta = -0.314$, $p < 0.05$), in negative position, and followed by problem-focused adjustment style ($\beta = 0.336$, $p < 0.05$) and appraisal-focused adjustment style ($\beta = 0.183$, $p < 0.05$) (see Table 10). This means that student-teachers who often apply emotional-focused adjustment style in solving their academic difficulties and daily life problems may not be able to perform well in their academic subjects and get low level of academic achievement. These student-teachers may emphasize only their mental condition and may not care about good grade or marks in their academic subjects. The adjusted R-square was 0.074. This means that approximately 7.4% of the variance in academic achievement was explained by the model. The visual presentation of how adjustment styles factors significantly contributing academic achievement of student-teachers in the current study can be seen in figure 2.

$$\text{Academic Achievement} = 60.015 + 0.452\text{AF} + 0.268\text{PF} - 0.283\text{EF}$$

Where, AF = Appraisal-focused

PF = Problem-focused

EF = Emotional-focused

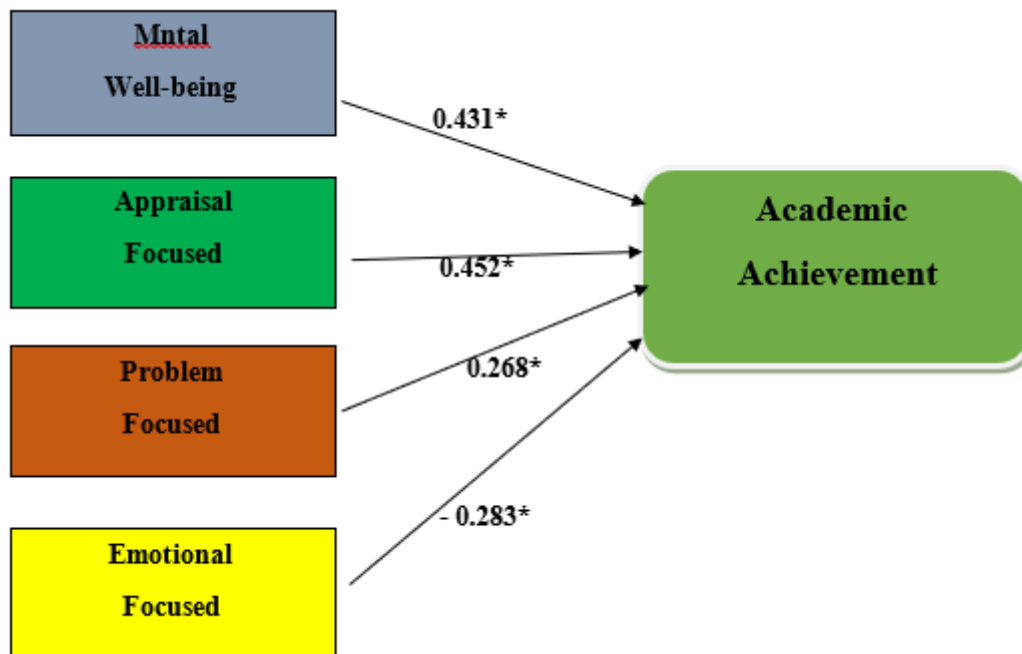


Figure 2. Predictive Power of Mental Well-being and Adjustment Styles on Academic Achievement

Conclusion

In this study, the results showed that the student-teachers from the selected universities were fairly in high level of mental well-being. There was no significant difference in mental well-being by gender. Among the three subscales of adjustment styles, significant gender differences were found in problem-focused and emotional focused adjustment styles. Male Student teachers can be more able to overcome, control, solve and easily adjust to the particular problems in their student life. There were no significant differences in both mental well-being and each subscale of adjustment styles between Yangon University of Education and Sagaing University of Education.

The result of ANOVA explored that there were significant differences in both mental well-being and adjustment styles among third year, fourth year and fifth year student-teachers. These finding showed that the mental well-being conditions of third year student-teachers are higher than fourth year and fifth year student-teachers. Moreover, it was found that there were also significant grade differences in each subscale of adjustment styles. According to the results, the fifth-year student-teachers can be able to adjust well as they are familiar with the learning environment for a long time.

The results of Pearson-product-moment correlations indicated that there were significant positive relationships between mental well-being and overall adjustment styles and academic achievement. To be exact, two subscales of adjustment styles (appraisal-focused and problem-

focused) have significant positive correlation with academic achievement of student-teachers but emotional-focused has significant negative correlation with academic achievement. More specifically, mental well-being was significant predictive of academic achievement and three subscales of adjustment styles inventory: appraisal-focused, problem-focused and emotional-focused were also predictive of academic achievement of student-teachers.

Thus, the results of this study provide the fact that the student-teachers who are in good state of mental well-being and able to adjust difficulties in their life are active in academic activities, achieve well in their student life in universities of education and can be able perform effective teaching-learning activities and communicate with their administrators, colleagues, parents and pupils in future professional field.

Suggestions of the study

The sample used in this study is only from third year, fourth year and fifth year student-teachers. To make more representative, all student-teachers from universities of education should be participated. As a result, the mental well-being plays an important role in predicting adjustment styles of student-teachers. Therefore, qualitative research such as interview with participants who were in low level of mental well-being should be conducted in order to investigate the causes of these mental health difficulties. Educators need to ask the students about their problems such as learning difficulties, home sickness and social difficulties etc., in order to improve their mental well-being and discuss how to overcome these problems to adjust in current learning environment year by year. Findings from such research may provide valuable guidance for those who are engaged in developing and operating programs to promote mental well-being of student-teachers.

Acknowledgement

I would like to acknowledge Dr. Kay Thwe Hlaing (Rector, Yangon University of Education) for her administrative support, inspiration, valuable comments perfect guidance, great support and providing facilities during this study. I would like to offer respectful appreciation to Dr. Pyone Pyone Aung (Pro-rector, Yangon University of Education), Dr. May Myat Thu (Pro-rector, Yangon University of Education), Dr. Khin Khin Oo (Pro-rector, Yangon University of Education) and Dr. Nyo Nyo Lwin (Pro-rector, Yangon University of Education) for their administrative supports, official permission and encouragement. I would like to offer my sincere and hearty gratitude to Dr. Khin Hnin Nwe (Professor and Head, Department of Educational Psychology, Yangon University of Education) for her kindness and excellent administrative support and encouragement for my study. I wish to express my sincere gratitude to Dr. Daw SanWin (Professor, Department of Educational Psychology, Yangon University of Education) for her teaching and valuable advices throughout the study.

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