

A STUDY ON CAREER SELF-EFFICACY AND TEACHING BEHAVIOR OF SENIOR ASSISTANT TEACHERS IN PYIN OO LWIN TOWNSHIP

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Abstract

The main purpose of the study was to study on career self-efficacy and teaching behavior of senior assistant teachers in Pyin Oo Lwin Township. Descriptive research design and survey method were utilized to explore the teachers' career self-efficacy and their teaching behavior. In this study, 102 Grade 10 teachers from the selected schools and 510 Grade 10 students from these schools were selected as the sample. Two questionnaires were used in the study: Teachers' Career Self-Efficacy Questionnaire (TCSEQ), and Teacher Behavior Inventory (TBI). Results of the study revealed that there was a significant positive relationship between teachers' career self-efficacy and teaching behavior. The independent sample t-test showed that significant differences were not found in career self-efficacy and teaching behavior of senior assistant teachers by gender and teaching subject. Furthermore, to examine the differences in teachers' career self-efficacy and teaching behavior by school groups and teaching experience, ANOVA was conducted. These results showed that there were significant differences by school types and also revealed that teaching experience affected on career self-efficacy and teaching behavior of senior assistant teachers. The findings of this study provide opportunities for teachers and educators to engage in working environment and adequate information that can foster higher sense of efficacy.

Keywords: Career Self-efficacy, Teaching Behaviour, Teacher Self-efficacy, Self-efficacy, Senior Assistant Teacher

Introduction

Teaching is one of the most significant professions in the society all around the world. The role of the teacher in society is both adorable and valuable. Teaching Profession has a great influence on the society and no other professions can have an influence more profound than that of a teacher. It can also be described as an infrastructure where significant and proficient socializing of the students takes place. To be an efficient teacher for the students, it is necessary to be skillful. The performance in the classroom must be able to pursue the students into the teaching learning process. And, teachers must be confident in their abilities in teaching and guiding their students.

Thus, teacher self-efficacy has great influence on the positive teaching behavior and strong enthusiasm on quality teaching. Teachers with high self-efficacy are optimist with their teaching behavior, more emphasize to explore the students' creative and critical thinking skill, more likely to use the advanced teaching methods which improve the students' investigative skill. So, teacher self-efficacy has been shown to be a powerful construct related to positive teacher behaviour and student outcome.

Purposes of the Study

The main aim of the present study is

- ❖ To study on career self-efficacy and teaching behaviour of senior assistant teachers

The specific objectives are

- ❖ To explore career self-efficacy and teaching behavior of senior assistant teachers
- ❖ To investigate the role of certain biographic variables such as gender, school groups, subject and teaching experience in determining teachers' career self-efficacy and teaching behaviour.
- ❖ To explore the relationship between career self-efficacy and teaching behaviour of senior assistant teachers.

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Definitions of Key Terms

Self-Efficacy: an individual's level of confidence in and beliefs about his/her capabilities to successfully carry out courses of action, perform given behaviour, accomplish given tasks, and attain desired performance outcomes (Bandura, 1977, 1986).

Career Self-Efficacy: people's judgments of their abilities to perform career behaviours in relation to career development, choice, and adjustment (Anderson & Betz, 2001; Niles & Sowa, 1992).

Teacher Self-Efficacy: the belief that teachers have about their abilities and skills as educators (Bandura, 1997).

Senior Assistant Teacher: teachers who teach in Grade10 and Grade11 in high schools.

Review of Related Literature

Career Self-efficacy

Career self-efficacy can be defined as people's judgments of their abilities to perform career behaviors in relation to career development, choice, and adjustment (Anderson & Betz, 2001; Niles & Sowa, 1992). Career self-efficacy provides important information relevant to understanding the complex career development process (Niles & Sowa, 1992). Career self-efficacy beliefs can lead to avoidance of or motivation toward career behaviors (Betz & Taylor, 2001). Betz (1992) revealed that low career self-efficacy can cause people to procrastinate making career decisions and may lead to poor career improvement. In general, the higher the career self-efficacy, the greater the career goals and challenges will set for themselves, and the stronger the commitment will be to them (Bandura, 1993, 1997). Therefore, low career self-efficacy beliefs should be emphasized and improved, whereas high career self-efficacy should be supported and enhanced.

Teachers' Career Self-efficacy and Teaching Behaviour

Teacher self-efficacy has been found to be consistently related to positive teaching behavior and strong pupil achievement, pupils learn more from teachers who have high self-efficacy, and highly self-efficacious teachers are eager to promote the students' creative and critical thinking, more likely to use active methods, group learning activities and fun learning activities for students. In addition, teachers with high self-efficacy exhibit greater enthusiasm for teaching, have greater commitment for teaching, and are more likely to remain in the teaching profession (Tschannen-Moran & Hoy, 2001, cited in Gavora, 2010). Moreover, career self-efficacy is considered important to successful job performance, and can greatly influence on work behaviors (Bandura, 1977, 1986; Niles & Sowa, 1992). Career self-efficacy has also been found to be one of the best predictors of many beginning career behaviors (Niles & Sowa, 1992). It has been found that career self-efficacy beliefs do indeed have a strong influence on career exploration, career performances and employment outcomes.

Method

Sampling

From each of the randomly selected schools in Pyin Oo Lwin Township, all senior assistant teachers in Grade-10 and 5 students for each teacher were selected randomly as the ratio of 1:5. Thus, the total sample for the study constituted 102 teachers and 510 Grade 10 students.

Research Method

In this study, descriptive survey design and quantitative approach were used.

Research Instrumentation

The career self-efficacy beliefs of senior assistant teachers were measured using TCSEQ modified by Bandura’s Instrument Teacher Self-Efficacy Scales. Bandura’s Instrument consists of 30 items with seven categories. To be relevance with Myanmar school culture, this measure consists of 23 items and 5 categories; efficacy to influence decision making, efficacy to influence school resources, instructional self-efficacy, disciplinary self- efficacy and efficacy to create positive school climate. The items assessed along a 5 point continuum as “1= Nothing”, “2= Very Little”, “3= Some Influence”, “4= Quite A Bit”, “5= A Great Deal”.

Teaching Behaviour Inventory was developed by Harry G Murray, 1983. It consists of 60 items originally. And, it was adapted in accordance with Myanmar school culture. This measure consists of 58 items relevant to Grade-10 students with eight categories; clarity, enthusiasm, interaction, organization, pacing, disclosure, speech and rapport. Each of 58 items needs an optional response as “1= almost never”, “2= rarely”, “3= sometimes”, “4= often”, and “5= almost always”. This questionnaire has eight reverse questions.

Then, these two instruments were adapted to Myanmar Version. And, expert review was conducted for face validity and content validity by three experts. After that, pilot testing was conducted with 10 senior assistant teachers and their 50 students as the ratio of 1:5. After piloting, item analysis was used to test the reliability of these two instruments. For the Teacher’s Career Self-Efficacy Questionnaire (TCSEQ), the reliability coefficient was 0.866 and for Teaching Behaviours Inventory (TBI), it was 0.890.

Data Analysis and Research Findings

Senior Assistant Teachers’ Career Self-efficacy

At first, means and standard deviations for Teacher Career Self-Efficacy Questionnaire were 93.54 and 11.21 (see Table 1).

Table 1. Basic Descriptive Statistics for Teachers’ Career Self-Efficacy

Variables	No. of Items	Minimum	Maximum	Mean	Mean Percentage	SD
Decision Making	2	3	10	8.25	82.50%	1.35
School Resources	1	1	5	3.85	77.00%	0.97
Instructional Self- efficacy	9	24	45	36.26	80.57%	4.82
Disciplinary Self- efficacy	3	6	15	13.16	87.73%	1.89
Efficacy for positive School Climate	8	12	40	32.02	80.05%	5.36
Teacher’s Career Self-Efficacy	23	63	115	93.54	81.34%	11.21

Table 1 showed that the mean and standard deviation for the whole sample were 93.54 and 11.21. By the mean percentage of the components of teachers’ career self-efficacy scale, disciplinary self-efficacy was the highest and efficacy for school resources was the lowest. It could be interpreted that teacher participants had the higher self-efficacy concerning discipline and they had the high believes that they can control their students well but they had low efficacy

in getting school resources. The mean percentages of career self- efficacy components could be seen obviously in Figure 1.

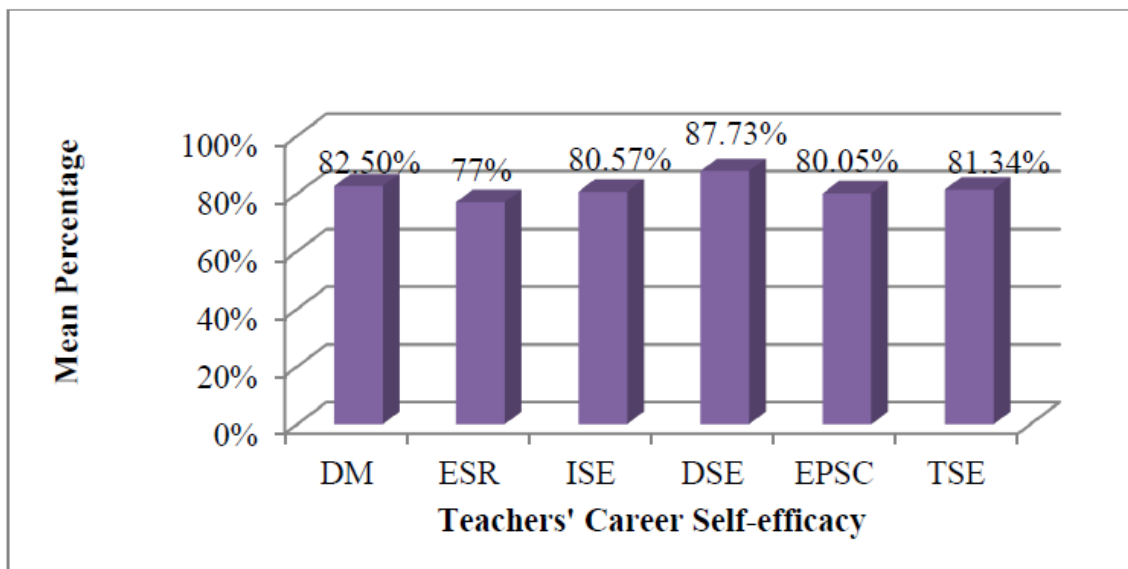


Figure 1. Mean Percentage of Teachers' Career Self-Efficacy by Components

DM= Decision Making, ESR= Efficacy for School Resources, ISE= Instructional Self-Efficacy, DSE= Disciplinary Self-Efficacy, EPSC = Efficacy for Positive School Climate

Furthermore, the teachers were grouped in order to figure out their career self-efficacy as low, middle and high. Teachers with scale of the (+1) standard deviation above the sample mean were identified as high group and teachers with scale below the (-1) standard deviation lower than the sample mean were identified as the low group. And, teachers with scale between (+1) and (-1) standard deviation and equal to the sample mean were identified as the middle group. It could be seen clearly in Table 2.

Table 2. Grouping for Teachers' Career Self-Efficacy

Variables	High group	Middle group	Low group	Total
Career Self-Efficacy	13 (12.7%)	75 (73.5%)	14 (13.8%)	102

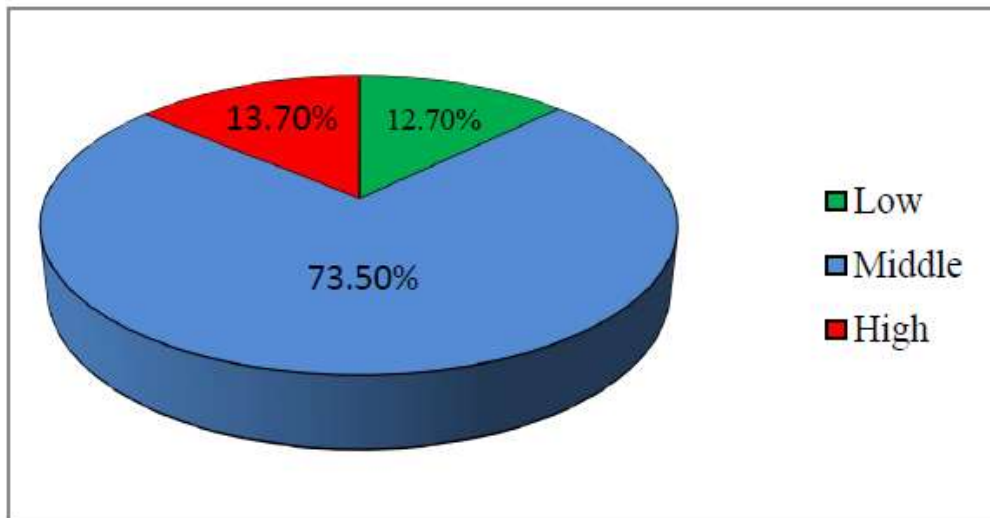


Figure 2. Grouping for Career self-efficacy of SAT Teachers with Percentage

By Table 2 and Figure 2, out of 102 teachers, 13 teachers (12.7%) were identified as efficacy scale high groups, 75 teachers (73.5%) as middle group and 14 teachers (13.8%) as low groups. It revealed that the career self-efficacy of senior assistant teachers in Pyin Oo Lwin Township was commonly not very high and very low, and so it was in the moderate level.

Senior Assistant Teachers’ Teaching Behaviour

Mean and standard deviation of senior assistant teachers’ teaching behaviour were explored by the descriptive statistics by the dimensions (see Table 3).

Table 3. Descriptive Statistics for Teaching Behaviour

Dimension	Number of Items	Minimum	Maximum	Mean	Mean Percentage	SD
Clarity	11	24	53	45.04	84.89%	4.20
Enthusiasm	10	24	47	36.41	77.47%	4.09
Interaction	9	18	41	31.53	76.90%	3.92
Organization	7	16	34	28.02	82.41%	3.71
Pacing	5	13	25	21.06	84.24%	2.41
Disclosure	6	13	29	23.45	80.86%	2.80
Speech	5	14	90	19.74	21.93%	7.22
Rapport	5	12	23	17.81	77.43%	2.61
Teaching Behaviour	58	140	266	222.40	83.46%	19.94

According to the mean percentages of the components of teaching behavior inventory scale, clarity was the highest mean percentage. It could be interpreted that the participant teachers can use methods to explain or clarify the concepts and principals of the subject matter but their speech is unclear in the classroom teaching. The mean percentages of teaching behavior dimensions were shown clearly in Figure 3.

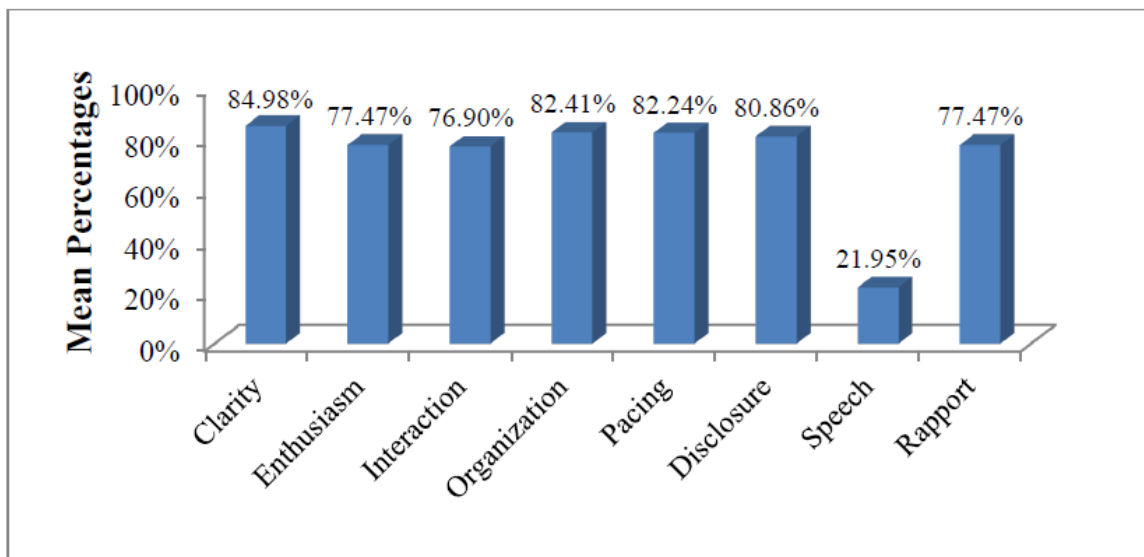


Figure 3. Mean Percentage of Teaching Behaviour Scale

Descriptive Statistics of Teachers’ Career Self-Efficacy and Teaching Behaviour by Gender

The result of *t*- test which indicated the differences of career self-efficacy and teaching behaviour of teachers by gender was shown in Table 4.

Table 4. Results of *t*-test of Career Self-Efficacy and Teaching Behaviour of Teachers by Gender

Variables	Gender	N	Mean	Mean Percentage	<i>t</i>	<i>df</i>	<i>p</i>
Career Self-Efficacy	Male	14	95.86	88.76%	0.836	100	0.408
	Female	88	93.17	81.02%			
Teaching Behaviour	Male	14	225.56	90.95%	0.636	100	0.526
	Female	88	221.90	.42%			

Table 4 showed that career self-efficacy of males was slightly higher than that of females. However, no significant differences ($t = 0.836, p > 0.05$) were identified by gender. It could be interpreted that beliefs of their capabilities in teaching tasks did not differ between male and female teachers. It can also be found that there were no significant differences between male and female teachers for teaching behaviour ($t = 0.636, p > 0.05$).

Descriptive Statistics of Teachers’ Career Self-Efficacy and Teaching Behaviour by Teaching Subject

The independent sample *t*-test was used to find out the significant differences between art teachers and science teachers on career self-efficacy and teaching behaviour.

Table 5. Results of *t*-test of Career Self-Efficacy and Teaching Behaviour by Subject

Variables	Subject	N	Mean	Mean Percentage	<i>t</i>	<i>df</i>	<i>P</i>
Teacher’s Career Self-Efficacy	Art	39	92.03	80.02%	-1.073	100	0.286
	Science	63	94.48	85.89%			
Teaching Behaviour	Art	39	218.46	86.69%	-1.528	100	0.117
	Science	63	224.84	84.53%			

Table 5 showed the mean percentage of science teachers was slightly more than that of art teachers in career self-efficacy but the mean percentage of art teachers was slightly more than that of science teachers in teaching behaviour. Then, based on the *t*-test, there was no significant difference between career self-efficacy of art teachers and science teachers ($t = - 1.073, p > 0.05$). And also, it can be found that there was no significant difference between teaching behaviours of art and science teachers ($t = -1.582, p > 0.05$). Thus, it can be interpreted that the career self-efficacy and teaching behaviour of art and science teachers were not different.

Descriptive Statistics of Career Self-Efficacy and Teaching Behaviour of Teachers by School Groups

To investigate the differences of teachers’ career self-efficacy and their teaching behaviour among the school groups (downtown, suburb and private), descriptive statistics was carried out (see Table 6).

Table 6 Mean and Standard Deviation of Teachers’ Career Self-Efficacy and Teaching Behaviour by School Groups

Variables	School Groups	N	Mean	Mean percentage	Std. Deviation
Teachers’ Career Self-Efficacy	Downtown	72	91.24	83.71%	11.13
	Suburb	13	99.31	90.28%	10.62
	Private	17	98.88	85.98%	8.83
	Total	102	93.54	81.34%	11.21
Teaching Behaviour	Downtown	72	220.17	82.77%	21.48
	Suburb	13	237.09	94.46%	11.65
	Private	17	220.61	90.77%	12.56
	Total	102	222.40	83.61%	19.94

According to Table 6, the mean percentage of suburb school for the teachers’ career self-efficacy was the highest among the three groups of school See (Figure 4).

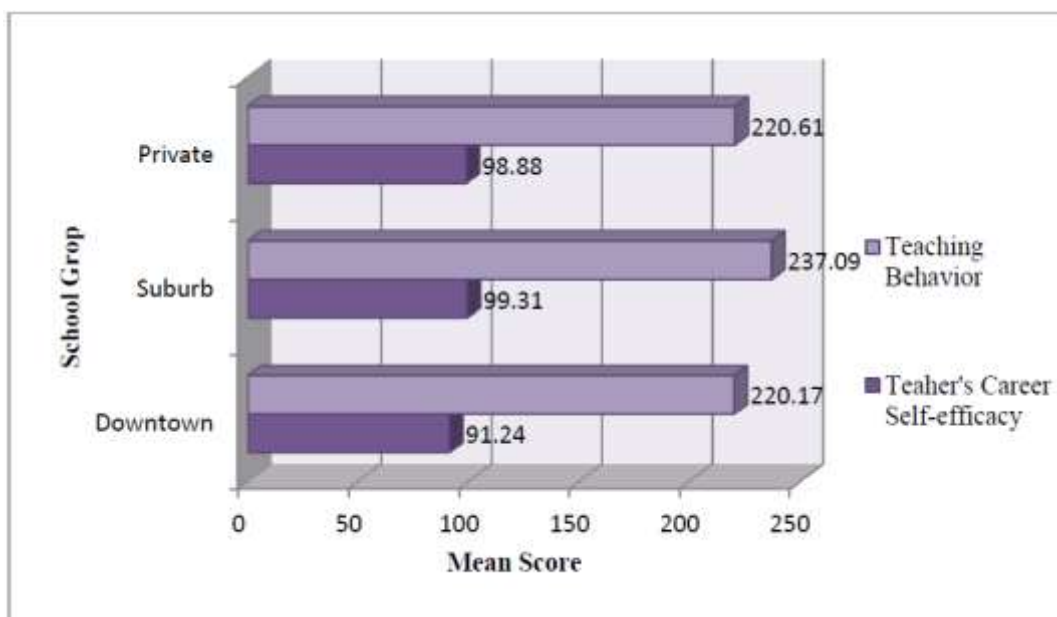


Figure 4. Mean Score of Teachers’ Career Self-Efficacy and Teaching Behaviour by School Groups

To make sure these differences, one-way analysis of variance (ANOVA) was conducted and the result revealed that there were significant differences in teachers' career self-efficacy between school groups ($F(2, 99) = 5.643, p < 0.01$). Concerned with teaching behaviour, there were also significant differences between school groups. ($F(2, 99) = 4.314, p < 0.05$). So, there were significant differences both in career self-efficacy and teaching behaviour of teachers according to school groups at 0.05 level (see Table 7).

Table 7. ANOVA Results of Teachers' Career Self-Efficacy and Teaching Behaviour by School Groups

Variables	Sum of Square		df	Mean Square	F	p
Teachers' Career Self-Efficacy	Between Groups	1299.823	2	649.912	5.643	.005*
	Within Groups	11401.520	99	115.167		
	Total	12701.343	101			
Teaching	Between Groups	3217.928	2	1608.964	4.314	.016*
	Within Groups	36923.071	99	372.960		
	Total	40141	101			

Note: * The mean difference is significant at the 0.05 level.

Then, Post Hoc test was computed by Tukey (HSD) method to be specific about the significance between teachers' career self-efficacy by school groups.

Table 8. Tukey (HSD) Results of Teachers' Career Self-Efficacy and Teaching Behaviour by School Groups

Variables	School (I)	School (J)	Mean Differences(I-J)	p
Teachers' Career Self-Efficacy	Downtown	Suburb	-8.072*	.038
		Private	-7.646*	.026
	Suburb	Downtown	8.072*	.038
		Private	0.425	.994
	Private	Downtown	7.646*	.026
		Suburb	-0.425	.994
Teaching Behaviour	Downtown	Suburb	-16.920*	.012
		Private	-0.440	.996
	Suburb	Downtown	16.920*	.012
		Private	16.481	.058
	Private	Downtown	0.440	.996
		Suburb	-16.481	.058

Based on the results in Table 8, the career self-efficacy of teachers from private and suburb schools were more than that of teachers from schools of downtown area. The career self-efficacy of the teachers was significantly different according to school groups ($p < 0.05$). It could be interpreted that teachers from suburb schools had higher efficacy than private and downtown schools and also the teachers from private school had the higher career self-efficacy than the teachers from schools in downtown area.

Furthermore, teaching behaviour of teachers from suburb school was significantly different from that of teachers from downtown schools ($p < 0.05$), and it revealed that teachers

from school in suburb area had better teaching behaviour than those from schools in downtown area.

Descriptive Statistics of Teachers’ Career Self-Efficacy and Teaching Behaviour by Teaching Experience

In order to find out whether teaching experience may affect the teachers’ career self-efficacy or not, the following Descriptive Table will show

Table 9. Mean and Standard Deviation of Teachers’ Career Self-Efficacy and Teaching Behaviour by Teaching Experience

Variables	Years of Experience	N	Mean	Std. Deviation
Career Self-Efficacy	0-10	20	83.05	14.784
	11-20	37	90.08	7.053
	21-30	21	96.52	4.781
	Above 30	24	105.00	3.781
	Total	102	93.54	11.214
Teaching Behaviour	0-10	20	216.71	20.718
	11-20	37	217.77	20.285
	21-30	21	225.64	18.711
	Above 30	24	231.45	16.869
	Total	102	222.46	19.936

According to Table 9, there were differences in career self-efficacy of teachers in terms of teaching experience. Among the groups, Teachers with above 30 years teaching experience had the highest career self-efficacy. Similar with career self-efficacy, the mean score of the teachers with the highest teaching experience had the highest mean score in teaching behaviour. Figure 5 clearly supported these findings.

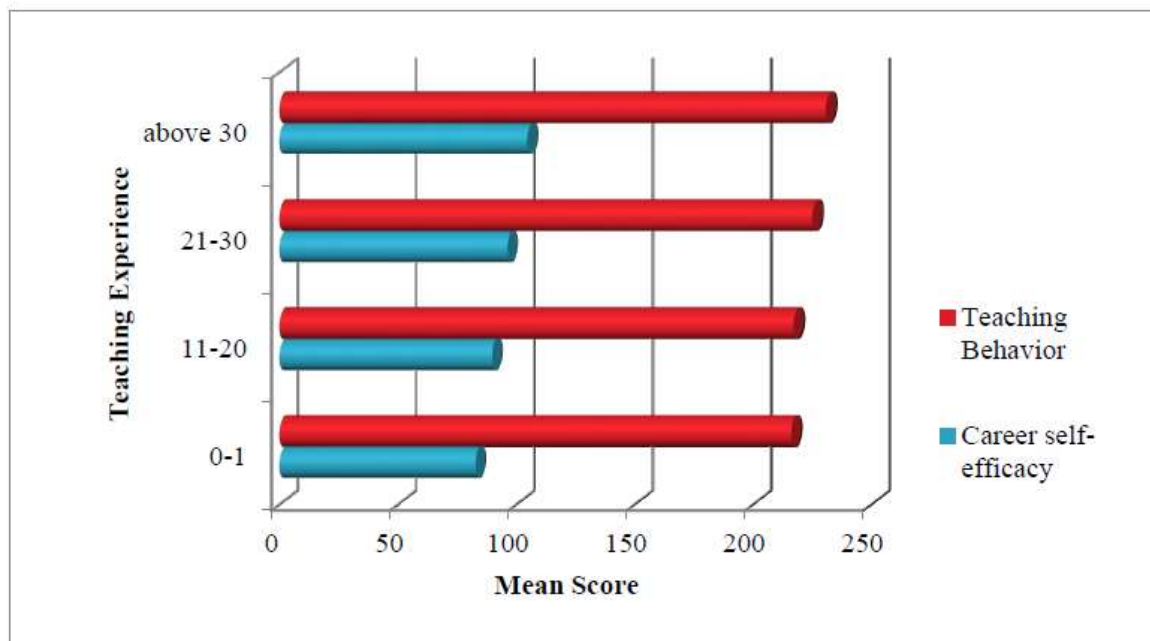


Figure 5. Mean Score of Career Self-Efficacy and Teaching Behavior by Teaching Experience

Besides, ANOVA was also calculated to explore the significant differences in career self-efficacy and teaching behaviour of teachers by teaching experience (see Table 10).

Table 10. ANOVA Results of Career Self-Efficacy and Teaching Behaviour of Teachers by Teaching Experience

Variables	Sum of Squares		df	Mean Squares	F	p
Teachers' Career	Between Groups	5982.398	3	1994.133	29.086	.000*
	Within Groups	6718.945	98	68.561		
	Total	12701.343	101			
Teaching Behaviour	Between Groups	3625.519	3	1208.506	3.243	.025*
	Within Groups	36515.480	98	372.607		
	Total	40141.000	101			

Note: * The mean difference is significant at the 0.05 level.

According to teaching experience, Table 10 pointed out that there were significant differences among groups of teaching experience in teachers' career self-efficacy ($F(3, 98) = 29.086, p < 0.001$) and in teaching behaviour ($F(3, 98) = 3.243, p < 0.05$) at 0.05 level. Beyond these results, Tukey (HSD) was conducted to explore specifically.

Table 11 Tukey (HSD) Results of Career Self-Efficacy and Teaching Behaviour of Teachers by Teaching Experience

Variables	Teaching Experience (I)	Teaching Experience (J)	Mean Differences (I-J)	p
Teachers' Career Self-Efficacy	0-10	11-20	-7.031*	.015
		21-30	-13.474*	.000
		Above 30	-21.950*	.000
	11-20	0-10	7.031*	.015
		21-30	-6.443*	.027
		Above 30	-14.919*	.000
	21-30	0-10	13.474*	.000
		11-20	6.443*	.027
		Above 30	-8.476*	.005
	Above 30	0-10	21.950*	.000
		11-20	14.919*	.000
		21-30	8.476*	.005
Teaching Behaviour	0-10	11-20	-1.063	.997
		21-30	-8.928	.453
		Above 30	-14.740	.063
	11-20	0-10	1.063	.997
		21-30	-7.865	.447
		Above 30	-13.677*	.040
	21-30	0-10	8.928	.453
		11-20	7.865	.447
		Above 30	-5.812	.745

Variables	Teaching Experience (I)	Teaching Experience (J)	Mean Differences (I-J)	p
	Above 30	0-10	14.740	.063
		11-20	13.677*	.040
		21-30	5.812	.745

Note: * The mean difference is significant at the 0.05 level.

Table 11 indicated that teaching experience may influence to some extent in the career self-efficacy and their teaching behavior. There were significant differences among the all groups of teaching experience in career self-efficacy. For teaching behaviour, it could be found that there were significant differences between teachers with 11-20 years teaching experience and teachers with above 30 years teaching experience. Thus, results revealed that teachers with more experience had higher self-efficacy and better teaching behaviour.

The Relationship between Teachers’ Career Self-Efficacy and Teaching Behaviour

In order to explore the relationship between career self-efficacy and teaching behaviour of senior assistant teachers in Pyin Oo Lwin Township, the Pearson Product-Moment Correlation Coefficient was calculated. The result was shown in Table 12.

Table 12. Relationship between Teachers’ Career Self-Efficacy and Teaching Behaviour

Variables	Teachers’ Career Self-Efficacy	Teaching Behavior
Teachers’ Career Self-Efficacy	1	.210*
Teaching Behaviour	.210*	1

Note: * Correlation is significant at the .05 level (2-tailed).

By the result of Table 12, there was a statistically significant correlation in career self-efficacy and teaching behaviour ($r = .210, p < .05$). Therefore, there was a positive relationship between teachers’ career self-efficacy and their teaching behaviour. This meant that teachers with high levels of self-efficacy performed their teaching tasks efficiently had good teaching behaviour.

Conclusion

In this study, there were significant differences in career self-efficacy and teaching behavior of senior assistant teachers by school groups. Teachers in school group in suburb area have higher self-efficacy and better teaching behavior. There were no significant differences in career self-efficacy and teaching behavior of senior assistant teacher by gender and by teaching subject. This result was consistent with the findings of Magno and Sembreno (2007), but in contrast with the study of Klassen (2010) who reported that female teachers have better manners and more enthusiasm in the classroom. Moreover, there were significant differences in career self-efficacy and teaching behavior by teaching experiences. It can be interpreted that teacher’s self-efficacy is different according to their teaching experience. But teaching behavior is not concerned with the teaching experience. There was only a significant difference between 11-20 years of teaching experience and above 30-year experience. It can be interpreted that teachers become confidence with their teaching skills throughout their experience. This finding was consistent with the study of Klasin (2007) and Gavora (2012).

Correlation analyses showed that teachers' career self-efficacy and teaching behaviour were significantly correlated ($r = .210, p < 0.05$). This meant that the strength of correlation is correlated to some extent. Thus, it could be interpreted that career self-efficacy effects on teaching behaviour. The higher the self-efficacy of the teachers had, the better their teaching behavior is. This result was consistent with the finding of Bandura (1989) and Ashraf (2012).

Thus, teacher's career self-efficacy has a great influence on the teaching performance in the classroom. As a model of the students, teachers must be creative, enthusiasm, confident, mastery and positive-minded. Teacher with high self-efficacy have greater interest for teaching, greater commitment to the profession and more active in the classroom. So, high career self-efficacy teachers can surely provide fantastic education for their students.

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References

- Anderson, S. L., & Betz, N. E. (2001). Sources of social self-efficacy expectations: their measurement and relation to career development. *Journal of Vocational Behavior, 58*, 98-117.
- Ashraf, N. (2012). The relationship between Teachers' self-efficacy and Their Perceived Job performance. *Journal of Contemporary Research in Business, Vol. 3. No. 10*, 204-222.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist, 44*(9), 1175-1184. Bandura, A. (2013). *Teacher Self-Efficacy Scale*. Retrieved January 23, 2013 <http://www.coe.ohio-state.edu/ahoy>.
- Gravora, P. (2010). Slovak Pre-service Teacher Self-efficacy: Theoretical and Research Considerations. *The New Educational Review, 21*(2), 17-30.
- Klassen, M. R., & Chiu, M. M. (2010). Effects on Teachers' self-efficacy and Job Satisfaction: Teacher Gender, Years of Experience, and Job Stress. *Journal of Educational Psychology, Vol. 102. No. 3*, 741-756.
- Mango, C. & Sembrano, J. (2007). The Role of Teacher Efficacy and Characteristic on Teaching Effectiveness, Performance, and Use of Learner-Centered Practices. *The Asia Pacific-Education Researcher, Vol. 16. No 1*
- Niles, S. G., & Sowa, C. J. (1992). Mapping the homological network of career self -efficacy. *Career Development Quarterly, 41*, 13-22.
- Taylor, K. M., & Betz, N. E. (1983). Applications of self-efficacy theory to the understanding and treatment of career indecision. *Journal of Vocational Behavior, Vol. 22. No. 1*, 63-81.
- Tschannen-Moran, M., & Woolfolk Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.