The Factors Effecting the Self-efficacy of Secondary School Teachers

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Abstract

The main purpose of this study was to investigate the factors effecting the self-efficacy of secondary school teachers. A total of 530 teachers from eight Basic Education High Schools in Yangon Region and Six Basic Education High Schools in Tanintharyi Region participated in this study. Questionnaire survey method was used in this study. Teacher Self-Efficacy Scale (TSES) was used as the research instrument. TSES consists of 30 items with seven subscales. Regarding the teachers' self-efficacy, it was found that there were no significant differences in overall self-efficacy by age, teaching experience, marital status, designation and region. However, a significant difference was found in efficacy to enlist parental involvement subscale by age. Moreover, there were significant differences on efficacy to influence decision making and efficacy to enlist parental involvement subscales by teaching experience.

Key words: self-efficacy.

Introduction

Education is essential to national growth and development. It helps individuals to become self-reliant, skillful and good citizens. The future of any nation depends largely on the quality of its education system. An education system is usually considered to be the fundamental principle of a developing country. Effective teachers are essential for the accomplishment of an educational system. A high demanding educational system has made the teaching profession extremely challenging, as high performance is expected from teachers (Gkolia, 2014).

Teachers' self-efficacy is considered to be one of the most important factors effecting teachers' satisfaction to teaching profession. Teachers' efficacy includes important implications in education. A teacher's efficacy is the capability of bringing about the desired outcomes for student engagement and learning of both motivated and unmotivated ones (Bandura, 1997).

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Self-efficacy can make instructional strategies more meaningful by engaging all students in learning activities. Teachers who have high levels of self-efficacy are more open to new ideas, exhibit greater levels of planning and organization, tend to experiment new teaching strategies with their students and have clear goals with higher level of aspiration. Teachers with greater self-efficacy have greater desires for teaching and are more likely to continue in teaching position as they would write less number of discipline referrals due to having successful classroom management (Eberle, 2011).

Teacher self-efficacy is a vital factor and a worthy variable in educational research (Woolfolk& Hoy, 1990). Teacher efficacy is defined as a teacher's judgment of his/her own capability to bring about desired outcomes from students' engagement and learning even among those students who may be difficult or unmotivated. A strong sense of efficacy enhances human accomplishment and personal well-being in many ways (Gkolia, 2014).

According to Oyewumi, Ibitoye and Sanni (2012), people with high assurance in their capabilities approach difficult tasks as a challenge to be mastered rather than as threats to be avoided. Such an efficacious outlook fosters intrinsic interest and deep commitment. They heighten and sustain their efforts in the face of failure. They quickly recover from failure and setbacks. They attribute failures to insufficient effort or deficient knowledge and skills which are acquirable. They approach threatening structures with assurance that overcome them. Such efficacious outlook produces personal accomplishment, reduces stress and lower vulnerability to depression (Bandura, 2001).

A strong sense of teacher's self-efficacy promotes a firm commitment to the profession and collaborative relationships with colleagues and parents, contributing fruitfully to the promotion of a rich and stimulating learning environment. However, a teacher with low self-efficacy avoids difficult tasks which he views as personal threats. Such teacher usually has low aspirations and weak commitment to the goals they have set for themselves in their chosen profession (Caprara, Barbaranelli, Borgogni, Petitta et al., 2003).

Teachers' self-efficacy has a crucial role in affecting and sustaining to their commitment to school and their job satisfaction. It is likely that job satisfaction accompanies teachers' self-efficacy and contributes to sustain their efforts towards pursuing children's optimal scholastic attainment. Therefore, educational leaders, policy makers and other key stakeholders in the education sector need to have a clear understanding of the factors

effecting the self-efficacy of teachers if school performance and effectiveness are to be improved.

Purpose of the Study

The purpose of this research is to investigate the factors effecting the self-efficacy of secondary school teachers from selected schools in Yangon Region and Tanintharyi Region.

Research Questions

1. Is there any difference in self-efficacy of secondary school teachers by age?
2. Is there any difference in self-efficacy of secondary school teachers by teaching experience?
3. Is there any difference in self-efficacy of secondary school teachers by designation?
4. Is there any difference in self-efficacy of secondary school teachers by marital status?
5. Is there any difference in self-efficacy of secondary school teachers by region?

Definition of Key Terms

Self-efficacy

Self-efficacy refers to belief in one's capabilities to organize and execute the sources of action required to manage prospective situations(Bandura, 1997).

Teacher self-efficacy is defined as a teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning (Tschannen-Moran &Woolfolk-Hoy, 2001).

Senior Teacher (ST)

Senior teacher is a teacher who is currently teaching grade ten and grade eleven students in Basic Education High School.

Junior Teacher (JT)

Junior teacher is a teacher who is currently teaching students from grade six to grade nine in Basic Education Middle School as well as in Basic Education High School.

Review of Related Literature

Teacher's efficacy is a type of self-efficacy. Self-efficacy impacts behavior by influencing goals, outcome expectations, affective states, perceptions of obstacles or threats and opportunities (Bandura, 1997). When individuals believe that they will be successful on a given task or assignments, it

appears that they internalize ambitious goals, work harder to realize them, persist when they faced with obstacles and develop coping skills and strategies to regulate their emotions. It is anticipated that these actions should yield greater success in accomplishing the given task or assignment.
Tschannen-Moran and Woolfolk-Hoy (2001) defined teacher self-efficacy as "the estimation of their abilities to bring desired results in potential involvement with their students or results that are related to students' learning, even with students which are difficult to motivate" (Henson, 2001). Dellinger, Bobbett, Olivier &Ellett (2008) described teacher efficacy as a teacher's individual beliefs in his/her capabilities to perform specific teaching task or a specified level of quality in a specific situation. Tashannen-Moran argued that teacher's self-efficacy motivates school teachers adhere to various setbacks that arise. Bandura (1977) stated that people with low self-efficacy are insufficient as teachers, even if they are aware of what they are supposed to do.
Teacher's efficacy influences human functioning and performance (Bandura, 1997). Teachers' high self-efficacy is related with their high confidence in their ability to confront different new issues that arise as well as their ability to deal with the consequences that may be created in the classroom (Staple, Hulland& Higgins, 1999). Teachers with high self - efficacy are more open to new ideas, more willing to adopt innovations, are less likely to experience burnout, support pupils' autonomy to a greater extent and are more attentive to low ability students (Henson, 2001; Ross & Bruce, 2008). 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 (Tashannen-Moran & Hoy, 1998).

Teacher's self-efficacy was found in a relationship with year in teaching, grade level, teaching area of specialization. Among these variables, year in teaching was found to have an impact on developing positive teaching efficacy. However, some researchers concluded that teacher self-efficacy decreased by increasing year in teaching experience. There were other studies showing differences in teacher efficacy among the teachers who have varying levels of teaching experiences. For example, year in teaching was positively correlated to teacher self-efficacy in the study of Tschannen-Moran and Woolfolk Hoy (2007).

Method

The main purpose of this study is to investigate the factors effecting the self-efficacy of secondary school teachers.

Sample of the Study

A total of 530 teachers were selected by random sampling technique from eight Basic Education High Schools in Yangon Region and six Basic Education High Schools in Tanintharyi Region.

Instrumentation

The teacher self-efficacy scale (TSES) questionnaire is based on the work of (Bandura, 1997). The instrument consists of two main parts. The first part consists of demographic or personal factors which included such aspects as: age, designation, teaching experience, district and region.

The second part of the instrument consists of 30 items and each item was rated on a five-point Likert-Scale (i.e. 1=Nothing, 2=Very Little, 3=Some Influence, 4=Quite a Bit, and 5=A Great Deal). The 30 items are organized into seven categories such as Efficacy to Influence Decision Making, Efficacy to Influence School Resources, Instructional Self-Efficacy, Disciplinary Self-Efficacy, Efficacy to Enlist Community Involvement and Efficacy to Create a Positive School Climate.

Data Collection Procedure

The demographic characteristics of the participants were also collected. It would give sufficient data to describe the sample. Firstly, Teacher Self-Efficacy Scale (TSES) Questionnaire was adapted to Myanmar Language. Then, expert review was conducted for face validity and content validity by 14 experts in the field of education, educational psychology and test and measurement from Yangon University of Education.

Prior to the actual data collection, the pilot study was done in the first week of December in 2017 with the sample of 20 secondary school teachers from No.(2) Basic Education High School, Tarmwe to check whether the wording of the statements was appropriate and relevant to the teachers or not. Then, the final version of Teacher Self-Efficacy Scale(TSES) Questionnaire consists of 30 items. The internal consistency (Cronbach α) of the whole inventory for TSES was 0.938. Thus, computation of Cronbach alpha showed that the mentioned two instruments had high reliability to measure self-efficacy of teachers. For real data collection, the teachers were administered in the first week of January in 2017.The quantitative data were analyzed by descriptive analysis technique, using independent sample t-test and one way ANOVA (Analysis of Variance).

Data Analysis and Results

By applying the instrument of Teacher Self-Efficacy Scale (TSES), the teachers' self-efficacy was examined to 530 teachers from the selected schools in Yangon Region and Tanintharyi Region. Moreover, the other factors effecting the teachers' self-efficacy such as age, teaching experience, marital status, designation and region were also explored.

Mean Comparison of Teachers' Self-Efficacy by Age

The differences in mean score of self-efficacy by age were shown in table 1. The mean score of the (41-50) years age group was slightly higher than other age groups. in order to investigate the significant differences in the teacher self-efficacy between different age groups, the further detail analyses were taken by using one way analysis of variance.

Table 1. ANOVA Results of Teachers' Self-Efficacy by Age

Self-efficacy	20-30 years	31-40 years	41-50 years	51-60 years	*F*	
Efficacy to Influence Decision Making (DM)	5.70	5.79	6.16	6.09	2.198	0.087
Efficacy to Influence School Resources (SR)	3.30	3.29	3.26	3.37	0.799	0.495
Instructional Self-efficacy (IS)	30.43	30.47	31.20	30.96	1.074	0.360
Disciplinary Self-efficacy (DS)	11.40	11.39	11.33	11.27	0.209	0.890
Efficacy to Enlist Parental Involvement (PI)	9.81	10.05	**10.44**	10.43	3.420*****	**0.017**
Efficacy to Enlist Community Involvement (CI)	11.47	12.01	12.34	12.05	1.865	0.134
Efficacy to Create a Positive School Climate (PSC)	27.00	27.48	28.27	28.29	2.492	0.059

Total	99.11	100.49	102.99	102.46	2.060	0.105

*The mean difference is significant at the 0.05 level.

Although a slight variation of the mean score was found in all factors as well as overall scale, a significant difference was found to be only on efficacy to enlist parental involvement subscale. The results showed that the (41-50) years age group teachers may have more self-efficacy than other age groups concerning efficacy to enlist parental involvement.

Mean Comparison of Teachers' Self-Efficacy by Teaching Experience

According to table 2, the differences in the mean score of self-efficacy by teaching experience were shown. The mean score obtained by the group of (31-40) years teaching experience was slightly higher than other groups.

To make the confirmation of the significant difference of teachers' self-efficacy by teaching experience, ANOVA was calculated. As the results, there was no significant difference on overall self-efficacy. Among the subscales, there were significant differences on efficacy to influence decision making as well as efficacy to enlist parental involvement.

Table 2. ANOVA Results of Teachers' Self-Efficacy by Teaching Experience

Self-efficacy	**1-10 years**	**11-20 years**	**21-30 years**	**31-40 years**	***F***	***p***
Efficacy to Influence Decision Making (DM)	5.68	5.85	**6.28**	6.02	3.831*****	**0.010**
Efficacy to Influence School Resources (SR)	3.30	3.28	3.29	3.39	0.707	0.548
Instructional Self-efficacy (IS)	30.40	30.76	31.08	30.99	0.716	0.543
Disciplinary Self-efficacy (DS)	11.42	11,37	11.27	11.30	0.248	0.863
Efficacy to Enlist Parental Involvement (PI)	9.99	10.22	10.29	10.56	2.458	0.062

Efficacy to Enlist Community Involvement (CI)	11.63	12.19	12.06	12.27	1.653	0.176
Efficacy to Create a Positive School Climate (PSC)	27.17	27.83	28.03	**28.64**	2.637*****	**0.049**
Total	99.61	101.50	102.29	103.17	1.731	0.160

*The mean difference is significant at the 0.05 level.

Table 3. Post-Hoc Analysis of Teachers' Self-Efficacy by Teaching Experience

Subscales	**(I)Teaching experience**	**(J)Teaching experience**	**Mean Difference(I-J)**	***p***
Efficacy to Influence Decision Making	21-30	1-10	**0.595***	**0.012**
		11-20	0.431	0.171
		31-40	0.264	0.177
Efficacy to Enlist Parental Involvement	31-40	1-10	**0.575***	**0.040**
		11-20	0.341	0.296
		21-30	0.279	0.433
Efficacy to Create a Positive School Climate	31-40	1-10	**1.463***	**0.030**
		11-20	0.803	0.329
		21-30	0.609	0.531

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

To obtain more detail information, Post-hoc test was executed by Tukey HSD method. Concerning the efficacy to influence decision making factor, the mean score of the (21-30) years teaching experience group was significantly higher than that of (1-10) years teaching experience group. Moreover, the mean score of (31-40) years teaching experience group was significantly higher than that of (1-10) years teaching experience group in efficacy to enlist parental involvement and efficacy to create a positive school climate factors. It may be assumed that the longer the teaching experience, the higher the self-efficacy.

Mean Comparison of Teachers' Self-Efficacy by Marital Status

The mean and standard deviation of self-efficacy for both single and married were reported in table 4. The results revealed that the mean score of the married teachers was greater than that of the single teachers on self-efficacy.

In order to confirm the difference in teachers' self-efficacy by marital status, independent sample *t*-test was applied. The results showed that there was no significant difference on the whole test of self-efficacy as well as on the subscales by marital status. It can reasonably be said that teachers' self-efficacy does not depend on marital status. This finding is consistent with the findings of Wafula (2010), Njoka (2007) and Nginah (2012) who found that the influence of marital status on teachers' self-efficacy was not significant.

Table 4. Results of Independent Sample t-test for Teachers' Self-Efficacy by Marital Status

Variable	Marital Status	Mean	SD	*t*	*p*
Efficacy to Influence Decision Making (DM)	Single	6.07	1.508	1.060	0.396
	Married	5.93	1.529		
Efficacy to Influence School Resources (SR)	Single	3.33	0.632	0.722	0.251
	Married	3.29	0.719		
Instructional Self-efficacy (IS)	Single	30.75	3.707	-0.667	0.260
	Married	30.98	3.957		
Disciplinary Self-efficacy (DS)	Single	11.32	1.570	-0.182	0.965
	Married	11.34	1.516		
Efficacy to Enlist Parental Involvement (PI)	Single	10.26	1.549	-0.296	0.751
	Married	10.30	1.619		
Efficacy to Enlist Community Involvement (CI)	Single	12.06	2.306	-0.148	0.948
	Married	12.09	2.199		
Efficacy to Create a Positive School Climate (PSC)	Single	27.85	3.847	-0.812	0.911
	Married	28.12	3.873		
Self-efficacy	Single	101.63	11.705	-0.394	0.898
	Married	102.04	12.060		

Mean Comparison of Teachers' Self-Efficacy by Designation

In table 5, the mean and standard deviations of self-efficacy of both junior teachers and senior teachers were shown. The results revealed that the mean score of junior teachers was greater than that of senior teachers.

To assess the difference of teachers' self-efficacy by designation, independent sample *t*-test was computed. According to the results, there was no significant difference on overall self-efficacy by designation. It can reasonably be said that teachers' self-efficacy does not depend on designation. Among the seven subscales, the significant difference was found to be only on efficacy to enlist community involvement subscale.

Table 5. Results of Independent Sample *t*-test for Teachers' Self-Efficacy by Designation

Variable	Designation	Mean	SD	*t*	*p*
Efficacy to Influence Decision Making (DM)	J.T	6.06	1.465	1.002	0.164
	S.T	5.93	1.576		
Efficacy to Influence School Resources (SR)	J.T	3.33	0.659	0.544	0.962
	ST	3.29	0.690		
Instructional Self-efficacy (IS)	J.T	31.06	3.638	1.332	0.182
	S.T	30.62	4.017		
Disciplinary Self-efficacy (DS)	J.T	11.40	1.532	1.152	0.660
	S.T	11.25	1.556		
Efficacy to Enlist Parental Involvement (PI)	J.T	10.39	1.496	1.666	0.694
	S.T	10.16	1.666		
Efficacy to Enlist Community Involvement (CI)	J.T	12.17	2.104	**1.093***	**0.040**
	S.T	11.96	2.415		
Efficacy to Create a Positive School Climate (PSC)	J.T	28.33	3.871	2.288	0.756
	S.T	27.56	3.810		
Self-efficacy	J.T	102.74	11.369	1.913	0.174
	S.T	100.77	12.337		

Note: J.T = Junior Teachers, S.T = Senior Teachers

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

Mean Comparison of Teachers' Self-Efficacy by Region

The mean and standard deviations of self-efficacy by region were shown in table 6. It can be interpreted that the mean score of Region (2) was higher than that of Region (1).

In order to confirm the difference of teachers' self-efficacy by region, independent sample *t*-test was applied. According to the results, there was no significant difference on overall test of self-efficacy by region. It can reasonably be said that teachers' self-efficacy does not depend on region. Among the seven subscales, there was significant difference on efficacy to enlist community involvement.

Table 6. Results of Independent Sample *t*-test for Teachers' Self-Efficacy by Region

Variables	Region	Mean	SD	*t*	*p*
Efficacy to Influence Decision Making (DM)	Region (1)	5.84	1.598	-2.683	0.082
	Region (2)	6.19	1.403		
Efficacy to Influence School Resources (SR)	Region (1)	3.34	0.662	0.883	0.706
	Region (2)	3.28	0.685		
Instructional Self-efficacy (IS)	Region (1)	30.49	3.887	-2.328	0.548
	Region (2)	31.26	3.715		
Disciplinary Self-efficacy (DS)	Region (1)	11.34	1.525	0.173	0.493
	Region (2)	11.32	1.568		
Efficacy to Enlist Parental Involvement (PI)	Region (1)	10.34	1.636	0.867	0.589
	Region (2)	10.22	1.517		
Efficacy to Enlist Community Involvement	Region (1)	11.67	2.429	**4.472****	**0.003**

(CI)	Region (2)	12.52	1.952		
Efficacy to Create a Positive School Climate (PSC)	Region (1)	27.98	4.005	0.043	0.312
	Region (2)	27.96	3.632		
Self-efficacy	Region (1)	100.99	12.215	-1.715	0.426
	Region (2)	102.76	11.404		

**The mean difference is significant at the 0.01 level.

Conclusion, Discussion and Recommendations

Conclusion

The main purpose of this study was to investigate the factors effecting the self-efficacy of secondary school teachers. A total of 530 teachers from eight high schools in Yangon Region and six high schools in Tanintharyi Region participated. Questionnaire Survey Method was used in this study. The major findings of this study and discussions are also presented.

In this study, the results revealed that there was no significant difference on overall self-efficacy as well as seven subscales by age. Looking across the different teaching experience groups, there was no significant difference on overall self-efficacy. However, there were significant differences on efficacy to influence decision making and efficacy to create a positive school climate subscales.

Again, post-hoc results showed that concerning the efficacy to influence decision making subscale, the (21-30) years teaching experience group teachers' self-efficacy was significantly different from the self-efficacy of (1-10) years teaching experience group teachers. Concerning the efficacy to enlist parental involvement and the efficacy to create a positive school climate subscales, the self-efficacy of (31-40) years teaching experience group teachers was significantly different from that of (1-10) years teaching experience group teachers.

Regarding the marital status, there was no significant difference on overall self-efficacy as well as seven subscales. It may be assumed that teachers' self-efficacy does not depend on marital status. Moreover, there was no significant difference on overall self-efficacy and seven subscales by designation. Thus, teachers' self-efficacy does not depend on designation. Regarding the region, significant difference was not found on overall self-

efficacy as well as seven subscales. It may be said that teachers' self-efficacy does not depend on region.

Discussion and Recommendations

Education should enable every person to develop his or her full potential as an individual human being and as a member of a society. The education of children is the main purpose of schools and the teacher is the most important single resource for shaping a nation's future. Thus, school must pay more attention to improving teachers' self-efficacy and job satisfaction. Teachers who are satisfied with their jobs usually have a high degree of professional capabilities and they could manage, organize and perform specific tasks and behavior.

Teachers' self-efficacy include important implications in education because teachers with greater self-efficacy have greater desires for teaching and are more likely to continue staying in teaching position. Tschannen-Moran et al. (1998) suggested that past experience, communication with principals, students, peers and parents can mediate the development of teachers' self-efficacy. If teachers who have high level of self-efficacy encounter difficult tasks, they could perform their tasks successfully.

If teachers who have low level of self-efficacy encounter difficult tasks, they could not overcome such difficulties. However, teachers with a strong sense of self-efficacy are more open to new ideas and innovations, show commitment to certain teaching and improve student achievement. Thus, teachers need to have high self-efficacy. The policy-makers should consider to design and apply appropriate policies to create different professional development programs. They should provide teachers with suitable programs to increase their confidence in the teaching process.

Limitations of the Study

There are some limitations in this study. The research area is restricted to Yangon Region and Tanintharyi Region. In this study, the sample teachers were selected only from above these mentioned regions. Because of the limited time frame, teachers from other regions and states were excluded. In addition, the difference between rural and urban areas was not investigated in this study. Moreover, this study was carried out by using quantitative research design due to the economy of time.

Suggestions for Future Research

In this study, the research tried to investigate into the self-efficacy and job satisfaction of the secondary school teachers. The sample of the teachers was chosen only from Yangon Region and Tanintharyi Region. If possible, future research should be carried out by selecting teachers from other

regions and states so that sample might be representative. In addition, future research should investigate the difference between rural and urban areas. Moreover, future research should be conducted by using qualitative approach in order to get more detailed information about teachers' feeling, and opinion on self-efficacy and job satisfaction.

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