

## **A STUDY ON TEACHER SELF-EFFICACY OF IN-SERVICE TEACHERS IN TAIKKYI DISTRICT**

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### **Abstract**

The main aim of this study was to investigate teacher self-efficacy of in-service teachers in Taikkyi District. This study was conducted by using the descriptive research design and survey method. Among the types of survey studies, a cross-sectional survey was used. Teachers' self-efficacy for teaching was examined by using a questionnaire survey method. The sample of the present study was 355 in-service teachers (107 Primary Assistant Teachers, 148 Junior Assistant Teachers and 100 Senior Assistant Teachers) in Taikkyi District. In this study, Teacher Self-Efficacy Scale (TSE) designed by Albert Bandura (1997) was used. The reliability coefficient of TSE was 0.90. Based on the descriptive analyses of teachers' self-efficacy, the teachers in this study were identified into three groups, 16.6% of teachers were considered high group, 69.3% of teachers were grouped into a moderate group; and the remaining teachers of 14.1% were identified as a low group. According to the results of this study, there were no significant differences in teacher self-efficacy of in-service teachers by gender, age, marital status, and teaching subjects, whereas there was a significant difference in teacher self-efficacy of in-service teachers by designation. Among these subscales, there were significant differences on instructional self-efficacy, efficacy to enlist parental involvement, and efficacy to create a positive school climate.

**Keywords:** Self-efficacy, Teacher self-efficacy, In-service Teacher

### **Introduction**

Teachers' careers are influenced by various factors, with one of the most significant variables being their self-efficacy. In the realm of social cognitive psychology, the concept of self-efficacy revolves around an individual's belief in their ability to perform a specific task and achieve the desired goals. Individuals with high self-efficacy are adept at effective planning and successfully completing tasks, drawing upon their confidence in their own capabilities. They have a strong belief in their capacities and apply them with confidence, even when faced with challenging tasks. On the other hand, individuals with low self-efficacy tend to avoid complex tasks, struggle to devise effective plans to achieve goals, and have limited belief in their own abilities to accomplish objectives. In the context of teaching, teachers with high self-efficacy have a clear understanding of their capacities and can plan their activities successfully, whereas teachers with low self-efficacy may struggle to fulfill their professional responsibilities.

One of the major challenges facing in-service teachers is encountering a significant obstacle in the form of incorporating student-centered approaches, methods, and techniques that promote the development of essential skills and empower students to take charge of their own learning. The effectiveness of these teaching practices relies heavily on teachers' self-perception and confidence in their ability to navigate the challenges associated with adopting learning-centered models.

Self-efficacy, a psychological phenomenon encompassing an individual's self-perception, holds significant influence over teachers' decision-making processes regarding task assignments and activities. Moreover, it shapes their dedication and persistence when confronted with challenges, and even impacts their emotional reactions to demanding situations. At its core, self-

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efficacy represents a cognitive construct that serves as a mediator between one's knowledge and subsequent actions.

Self-efficacy beliefs exert an influence on the quality of human functioning through various cognitive, motivational, affective, and decisional processes. Specifically, these beliefs play a role in shaping individuals' expectations of outcomes, attributions of successes and failures, and their ability to motivate themselves and persevere when faced with obstacles. Furthermore, self-efficacy beliefs have an impact on individuals' perceptions of their coping abilities, mechanisms for regulating emotions, and susceptibility to stress and depression. Finally, these beliefs can also influence the choices individuals make during critical life moments, potentially influencing the trajectory of their lives and shaping their future endeavors.

Teacher's self-efficacy, as a significant motivational construct, plays a pivotal role in shaping their thoughts, behaviors, and emotions within an educational context. It is important to note that teachers' efficacy beliefs are not uniform but rather dependent on the specific tasks, students, and circumstances encountered in the classroom. One specific area of teacher task-specific self-efficacy that has been extensively studied in the research literature is classroom practices. Findings from these studies indicate that teachers with high self-efficacy tend to create positive classroom learning environments characterized by well-planned and engaging lessons, as well as effective management strategies. Furthermore, teachers who possess a strong sense of self-efficacy in the school environment report that fostering closer relationships and interactions with students can enhance their overall behavioral functioning.

Teacher's self-efficacy serves as a crucial indicator of teachers' perceptions regarding their ability to effectively influence positive learning outcomes and behavioral changes. Extensive research has demonstrated that teacher self-efficacy significantly impacts both teaching behaviors and student motivation and achievement (Kitsantas & Zimmerman, 2009). However, the persistent challenge of accurately measuring teacher self-efficacy has been a recurring issue within the field. It is essential that when measuring teacher self-efficacy, the assessment reflects a specific context or domain of functioning, rather than a global assessment. A comprehensive measure of teacher self-efficacy should encompass the teacher's confidence in their overall teaching abilities, while a context-specific or domain-specific measure focuses on the teacher's confidence in accomplishing specific tasks or objectives. According to Brady and Woolfson (2008), teacher self-efficacy refers to a teacher's belief in their own ability to effectively support student learning. Their research indicates that teachers with high self-efficacy are more inclined to take personal responsibility for addressing the individual needs of their students within the classroom.

Teacher's self-efficacy of in-service teachers in Myanmar has not been widely acknowledged by researchers. In addition, teacher's self-efficacy was found as important determinant of school performance by previous researchers. Therefore, this study tried to investigate teacher's self-efficacy of in-service teachers in Taikkyi District.

### **Purposes of the Study**

The main purpose of the study was to investigate teacher's self-efficacy of in-service teachers in Taikkyi District, Yangon Region, Myanmar.

The specific objectives of the study were

- to examine the teacher's self-efficacy of in-service teachers by gender
- to explore the teacher's self-efficacy of in-service teachers by aged group
- to examine the teacher's self-efficacy of in-service teachers by designation
- to examine the teacher's self-efficacy of in-service teachers by the subjects what they taught

### **Definitions of Key Terms**

**Self-efficacy:** Self-efficacy refers to the individual's beliefs about his ability to organize and implement the action steps to reach the desired goal (Kitsantas & Zimmerman, 2009).

**Teacher self-efficacy:** A teacher's belief in his or her capabilities to bring about desired outcomes of student engagement and learning (Bandura, 1977).

**In-service Teacher:** The term in-service teacher designates a teacher that has certification or is already teaching in a classroom (Ojo, 2006).

## **Related Literature Review**

### **Self-efficacy**

Janssen (2015) proposed that self-efficacy is a person's beliefs about his or her abilities to organize and execute actions needed to complete tasks. Self-efficacy beliefs shape the outcomes people expect their efforts to produce. Those of high self-efficacy expect to realize favorable outcomes. Conversely, those with low self-efficacy expect their efforts to bring poor outcomes. People of low self-efficacy quickly give up trying (Bandura, 2001).

### **Self-efficacy Theory**

Bandura's (1977) social cognitive theory introduced the concept of self-efficacy as the primary motivational force behind an individual's action. Bandura defined self-efficacy as "the conviction that one can successfully execute the behavior required to produce outcomes". Self-efficacy is considered to lead the individual from knowledge to action. Bandura (1986) implied that increased efficacy beliefs is viewed as a more accurate description of teacher efficacy than the construct called increased persistence and high levels of performance.

### **Teacher Self-Efficacy**

Teacher self-efficacy as a belief is expected to guide teachers in their behaviors, decisions, and motivation concerning teaching. The power of self-efficacy is rooted in its ability to guide the decisions that teachers make during their role as teachers. According to Bandura's (1977) self-efficacy proposal, coping behavior will be initiated, how much effort will be expended and how long it will persist in the face of aversive experiences. One can see how self-efficacy aid teachers while their professional life. Specifically, teachers' level of efficacy for teaching affects their daily decisions related to teaching and their willingness to invoke specific strategies and techniques.

self-efficacy is related to many meaningful educational outcomes such as teachers' persistence, enthusiasm, commitment, and instructional behavior, as well as student performance (Tschannen-Moran & Hoy, 2001). Teachers with a strong sense of efficacy set more challenging

goals, and have demonstrated high levels of planning and organization (Allinder, 1994). Teachers with a high sense of self-efficacy devote more classroom time to academic learning aid students who have difficulty, and reward them for their achievements. Ashton (1984) concluded that teachers with a high sense of self-efficacy are less critical of students who make mistakes and work longer with students who are having difficulty mastering the material. In contrast, teachers who have a low sense of self-efficacy spend less time on academics. Teachers with a low sense of self-efficacy will easily give up on the students when the students do not learn quickly and will criticize the students for their failures. Tschannen-Moran and Hoy (2001) also stated that teachers who have a low sense of individual self-efficacy rely on extrinsic rewards and negative sanctions to motivate students.

According to Bandura (1991), teacher candidates with high self-efficacy can approach challenging tasks and recover quickly from disappointment and setbacks. In contrast, low self-efficacy results in avoiding challenging situations and believing that difficult tasks are beyond one's capabilities. Brouwer and Tomic (2001) concurred with Bandura in the view that teachers who believe that they are competent to teach their students have strong self-efficacy beliefs in teaching. In Brouwer and Tomic study, teachers who doubted their ability in this respect were considered to have weak self-efficacy beliefs in teaching. Teachers who enter their field without adequate training can experience challenges throughout their career (Simonsen et al., 2013). According to Simons et al. (2013), administrators should have multi-tiered support. The multi-tiered support should consist of (a) training all teachers in classroom management practices, (b) identifying teachers who require additional training in classroom management, (c) supporting the designated teachers, and (d) continuing to monitor teachers' classroom management to adjust supports (Simonsen et al., 2013).

## **Method**

### **Sampling**

In order to obtain the data on test development, a sample of teachers from Taikkyi districts, Yangon Region was selected by random sampling technique. Firstly, twenty-three schools were selected from Taikkyi district, Yangon Region. Therefore, in-service teachers from 23 schools participated in this study. The selected schools included all types of schools: high schools, middle schools and primary schools. Finally, altogether 355 teachers (31 male teachers and 324 female teachers) were randomly selected from 9 high schools, 3 middle schools and 11 primary schools. According to job designation, 107 primary assistant teachers, 148 junior assistant teachers and 100 senior assistant teachers participated in this study.

### **Research Method**

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

### **Research Instrumentation**

To examine teacher's self-efficacy, the Teacher Self-Efficacy Scale designed by Albert Bandura (1997) was used in this study. This scale included 30 items and in-service teachers' responses were assessed by a five-point Likert scale.

### **Data Analysis and Research Findings**

#### **Mean and Standard Deviation of Teachers’ Self-Efficacy**

Descriptive analyses revealed that the mean and standard deviation of teachers’ self-efficacy for the whole sample were 104.08 and 13.106. The practical mean score of 104.08 was greater than the theoretical mean score of 90. Therefore, in this study, teachers’ self-efficacy was satisfactory.

#### **Three Different Groups of Teachers’ Self-Efficacy**

Based on descriptive analyses of teachers’ self-efficacy, teachers in this study were identified into three groups: 16.6% of teachers with scores one standard deviation above the sample mean were considered high group, 69.3% of teachers with scores between (+1) and (-1) standard deviation from the sample mean were grouped into moderate group; and the remaining teachers of 14.1% who scored one standard deviation lower than the sample mean were identified as a low group.

#### **Descriptive Statistics for Components of Teacher Self-efficacy of In-service Teachers**

In order to reveal the minimum score, maximum score, mean and standard deviation of components of teacher self-efficacy of in-service teachers was conducted. Descriptive analysis revealed the differences in means and standard deviations for components of general self-efficacy of in-service teachers (see Table 1).

**Table 1 Descriptive Statistics for Components of Teacher Self-efficacy of In-service Teachers**

| <b>Variables</b>                             | <b>N</b> | <b>Minimum</b> | <b>Maximum</b> | <b>Mean</b> | <b>Mean %</b> | <b>SD</b> |
|--|----------|----------------|----------------|-------------|---------------|-----------|
| Efficacy to Influence Decision making        | 355      | 3              | 14             | 9.36        | 62.38%        | 13.5      |
| Efficacy to Influence School Resources       | 355      | 1              | 5              | 3.19        | 63.77%        | 16.66     |
| Instructional Self-Efficacy                  | 355      | 19             | 43             | 32.81       | 72.91%        | 9.122     |
| Disciplinary Self-Efficacy                   | 355      | 7              | 15             | 11.86       | 79.04%        | 10.353    |
| Efficacy to Enlist Parental Involvement      | 355      | 5              | 15             | 10.15       | 67.66%        | 12.422    |
| Efficacy to Enlist Community Involvement     | 355      | 4              | 19             | 11.26       | 56.28%        | 13.392    |
| Efficacy to Create a Positive School Climate | 355      | 17             | 39             | 28.65       | 71.63%        | 9.674     |

### Comparison of Teacher Self-Efficacy of In-service Teachers by Gender

Descriptive statistics was conducted to compare teacher self-efficacy of in-service teachers by gender (see Table 2)

**Table 2 Comparison of Mean and Standard Deviations, and Results of Independent Samples *t* Test for Teacher Self-Efficacy of In-service Teacher by Gender**

| Variable              | Gender | N   | Mean   | SD     | <i>t</i> | <i>df</i> | <i>p</i> | MD    |
|-----------------------|--------|-----|--------|--------|----------|-----------|----------|-------|
| Teacher Self-Efficacy | Male   | 31  | 105.10 | 15.967 | 0.450    | 353       | 0.653    | 1.109 |
|                       | Female | 324 | 103.99 | 12.825 |          |           |          |       |

Table 2 showed that although male teachers had scored a little more on teacher self-efficacy than female teachers but there was no significant difference in teacher self-efficacy of in-service teachers by gender. This result was consistent with the findings that there was no significant difference in teacher self-efficacy by gender (Hay Mar Oo, 2017). This may be because nowadays both males and females are more confident and more aware about their capacities because they face equally to overcome the difficulties with their self-beliefs. On the other hand, the number of male teachers is less than female teachers in Myanmar.

### Comparison of Teacher Self-Efficacy of In-service Teachers by Age

The means and standard deviations of teacher's self-efficacy according to their age are presented in Table 3.

**Table 3 Comparison of Mean and Standard Deviations for Teacher Self-Efficacy of In-service Teacher by Age**

| Variable              | Age   | N   | Mean   | SD     |
|-----------------------|-------|-----|--------|--------|
| Teacher Self-Efficacy | 18-30 | 89  | 102.39 | 14.899 |
|                       | 31-40 | 109 | 104.00 | 13.155 |
|                       | 41-50 | 78  | 104.88 | 12.130 |
|                       | 51-60 | 79  | 103.99 | 11.783 |
|                       | Total | 355 | 104.08 | 13.106 |

The mean value of teachers' self-efficacy of in-service teachers who were between the age of (41-50) perceived slightly higher than that of other aged group teachers (see Table 3). According to the result, it can be said that the age group 41-50 had more positive self-efficacy and confidence than the other age group.

Then, one-way analysis of variance (ANOVA) was conducted to find out the differences of self-efficacy of in-service teachers by age.

**Table 4 ANOVA Results for In-Service Teachers’ Self-Efficacy by Age**

| Self-Efficacy  | Sum of Squares | df  | Mean Square | F     | p     |
|----------------|----------------|-----|-------------|-------|-------|
| Between Groups | 425.179        | 3   | 141.726     | 0.824 | 0.481 |
| Within Groups  | 60384.286      | 352 | 172.035     |       |       |
| Total          | 60809.465      | 355 |             |       |       |

ANOVA result showed that there were no significant differences between in-service teachers’ self-efficacy by age. It may be said that people may place less importance on their job as they get older and other aspects of their bodies (e.g., health and the valuable things their body can do) become more important. Thus, self-efficacy about their job could not be different according to the ages. This result was consistent with the findings that there was no significant difference in teacher self-efficacy by age (Hay Mar Oo, 2017).

**Comparison of Teacher Self-Efficacy of In-service Teachers by Designation**

The means and standard deviations of teachers’ self-efficacy according to their designation (primary assistant teachers, junior assistant teachers and senior assistant teacher) are presented in Table 5. The mean value of teachers’ self-efficacy of senior assistant teachers perceived slightly higher than that of primary and junior assistant teachers (see Table 5).

**Table 5 Comparison of Mean and Standard Deviations for Teacher Self-Efficacy of In-service Teachers by Designation**

| Variables     | Designation                | N          | Mean          | SD            |
|---------------|----------------------------|------------|---------------|---------------|
| Self-Efficacy | Primary Assistant Teachers | 107        | 107.02        | 13.063        |
|               | Junior Assistant Teachers  | 148        | 104.34        | 12.383        |
|               | Senior Assistant Teachers  | 100        | 100.56        | 13.486        |
|               | <b>Total</b>               | <b>355</b> | <b>104.08</b> | <b>13.106</b> |

To get more detailed information on the of teachers’ self-efficacy by designation, one way analysis of variance (ANOVA) was conducted. ANOVA results showed that there were statistically significant differences of teachers’ self-efficacy among primary, junior and senior assistant teachers (see Table 6).

**Table 6 ANOVA Results for In-Service Teachers’ Self-Efficacy by Designation**

| Self-Efficacy  | Sum of Squares | df         | Mean Square | F      | p     |
|----------------|----------------|------------|-------------|--------|-------|
| Between Groups | 1.854          | 3          | 0.927       | 3.051* | 0.049 |
| Within Groups  | 106.918        | 352        | 0.304       |        |       |
| <b>Total</b>   | <b>108.772</b> | <b>355</b> |             |        |       |

**Note.** \* The mean difference is significant at 0.05 level

After having found that ANOVA result was significant, then Tukey’s HSD was conducted to find out which significant groups’ means (compared with each other) were different.

**Table 7 Tukey HSD Results for In-service Teachers' Self-Efficacy by Designation**

| Variable      | (1) Designation | (2) Designation | Mean Difference | <i>p</i> |
|---------------|-----------------|-----------------|-----------------|----------|
| Self-Efficacy | PAT             | JAT             | -0.131          | 0.149    |
|               |                 | SAT             | -0.181*         | 0.049    |

\* $p < 0.05$ 

**Note:** PAT = Primary Assistant Teachers, JAT= Junior Assistant Teachers, SAT= Senior Assistant Teachers

According to results, there was significant difference of in-service teachers' self-efficacy between primary assistant teachers and senior assistant teachers. But there was no significant difference in junior assistant teachers.

### Mean Comparison for Teachers' Self-Efficacy of In-Service Teachers by Designation

Moreover, to find out the differences in each factor of in-service teachers' self-efficacy by designation, one-way analysis of variance (ANOVA) was conducted. It can be clearly seen in Table 8.

**Table 8 ANOVA Results for Each Factor of In-service Teachers' Self-Efficacy by Designation**

| Variables                               |                | Sum of Squares | <i>df</i> | Mean Square | <i>F</i> | <i>p</i> |
|---|----------------|----------------|-----------|-------------|----------|----------|
| Efficacy to Influence Decision making   | Between Groups | 1.860          | 3         | 1.2899      | 0.226    | 0.798    |
|   | Within Groups  | 1449.706       | 352       | 4.118       |          |          |
|   | Total          | 1451.566       | 355       |             |          |          |
| Efficacy to Influence School Resources  | Between Groups | 3.085          | 3         | 1.542       | 2.899    | 0.056    |
|   | Within Groups  | 187.270        | 352       | 0.532       |          |          |
|   | Total          | 190.355        | 355       |             |          |          |
| Instructional Self-Efficacy             | Between Groups | 3.9.525        | 3         | 159.763     | 9.962*** | 0.000    |
|   | Within Groups  | 5644.830       | 352       | 16.036      |          |          |
|   | Total          | 5964.355       | 355       |             |          |          |
| Disciplinary Self-Efficacy              | Between Groups | 9.801          | 3         | 4.900       | 2.044    | 0.131    |
|   | Within Groups  | 843.872        | 352       | 2.397       |          |          |
|   | Total          | 853.673        | 355       |             |          |          |
| Efficacy to Enlist Parental Involvement | Between Groups | 62.833         | 3         | 31.417      | 9.482*** | 0.000    |
|   | Within Groups  | 1166.254       | 352       | 3.313       |          |          |
|   | Total          | 1229.087       | 355       |             |          |          |

| Variables                                    |                | Sum of Squares | df  | Mean Square | F         | p     |
|--|----------------|----------------|-----|-------------|-----------|-------|
| Efficacy to Enlist Community Involvement     | Between Groups | 4.849          | 3   | 2.425       | 0.337     | 0.714 |
|  | Within Groups  | 2534.824       | 352 | 7.201       |           |       |
|  | Total          | 2539.673       | 355 |             |           |       |
| Efficacy to Create a Positive School Climate | Between Groups | 321.156        | 3   | 160.578     | 11.352*** | 0.000 |
|  | Within Groups  | 4979.227       | 352 | 14.146      |           |       |
|  | Total          | 5300.383       | 355 |             |           |       |

\*\*\*  $p < 0.001$

According to the ANOVA result, there were significant differences in each factor of the in-service teachers' self-efficacy according to designation.

As shown in Table 8, the ANOVA result revealed that there were significant differences in the mean scores for self-efficacy of in-service teachers by designations. To obtain more detailed information on self-efficacy in which designation had differences, the Post hoc Test was carried out by Tukey HSD method (see Table 9).

**Table 9 Tukey HSD Results for In-service Teachers' Self-Efficacy by Designation**

| Variable                                     | (1) Designation | (2) Designation | Mean Difference | p     |
|--|-----------------|-----------------|-----------------|-------|
| Instructional Self-Efficacy                  | PAT             | JAT             | 1.457*          | 0.012 |
|  |                 | SAT             | 2.462***        | 0.000 |
| Efficacy to Enlist Parental Involvement      | SAT             | PAT             | -1.069***       | 0.000 |
|  |                 | JAT             | -0.760**        | 0.004 |
| Efficacy to Create a Positive School Climate | SAT             | PAT             | -2.371***       | 0.000 |
|  |                 | JAT             | -1.820***       | 0.001 |

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Note:** PAT = Primary Assistant Teachers, JAT= Junior Assistant Teachers, SAT= Senior Assistant Teachers

According to the results, there were significant differences for each factor of the in- service teachers' self-efficacy among designations.

Table 9 shows the differences in mean scores of self-efficacy by designations. Among the subscales, there were significant differences in instructional self-efficacy, efficacy to enlist parental involvement, and efficacy to create a positive school climate. To deal with challenging and difficult students, is one of the major problems that most of the teachers have faced. To connect finding a solution to that problem and the instructional self-efficacy of the teachers, designation can influence those students to admonish. According to the results shown in Table 9, the primary

assistant teacher can have a good influence on them more than the junior assistant teacher and senior assistant teacher for some reasons. First, PAT in some school can build trust to grow closer to the most challenging students. Not only young students but also teenaged students trust and believe in their primary teachers as they build a read and strong student-teacher relationship, since they have built the very first primary schooldays of their young age. Then, weak students need appreciation and praise. It can build the mutual respect and mutual-understanding between the teacher and weak students. So, those primary teachers can have a real influence over them. Secondly, it is undeniable that there are some students who are lack in school lessons and activities. For those students, it is also the primary teachers who can draw the attention of the students through a variety of teaching styles, school activities and extra-curricular activities. Unlike the teachers of adult learners, the primary teachers use various kinds of visual aids, show videos, use picture symbols and flash cards and sometimes physically demonstrate themselves. By doing so, they can establish close relationships between students and teachers. As an effective outcome, the students listen and obey the teachers' words. Then, even the weak students become to engage in classroom activities. By looking at this point, primary assistant teachers can influence better than junior assistant teachers and senior assistant teachers.

Another essential fact in a good teaching- environment is parental involvement. Therefore, the efficacy to enlisting parental involvement must be considered as a vital role. The teachers must be able to make the parents actively involved in every school activity. In basic education schools, the designation of teachers can plan to improve parental engagement at schools. In accordance with this survey, primary assistant teachers can perform the best by doing 'an Open House Tour the first schooldays of an academic year.' On that day, the teachers let the parents come into the school and see the environment that their children will be in. Moreover, they do ice-breaking activities together with the parents. And the parental meetings are also held every month in primary level. For these points, primary assistant teachers perform more parental participation at schools.

This result was contrary to the findings of Zajacova, Scott, Lynch, & Espenshade, (2005). They found that there was no significant difference in teacher self-efficacy by designation. In their study, participants gave the responses about their work situation. They said that their workloads are allocated similarly between the different designation groups, so that they serve their duties similarly. Therefore, previous researchers concluded that the designation does not influence the teachers' self-efficacy.

### **Comparison of Teacher Self-Efficacy of In-service Teachers by Teaching Subject**

The means and standard deviations of teachers' self-efficacy according to their teaching subjects (science, arts) from all selected schools are presented in Table 10. The mean value of teachers' self-efficacy of teachers who teach science subjects perceived slightly higher than that of teachers who teach art subjects (see Table 10).

**Table 10 Comparison of Mean and Standard Deviations for Teacher Self-Efficacy of In-service Teacher by Teaching Subjects**

| Variables     | Teaching Subjects | N   | Mean   | SD     |
|---------------|-------------------|-----|--------|--------|
| Self-Efficacy | Science           | 156 | 104.29 | 13.696 |
|               | Arts              | 199 | 103.92 | 12.657 |
|               | Total             | 355 | 104.08 | 13.106 |

Then, Independent samples *t* test was conducted to find out the differences of self-efficacy of in-service teachers by teaching subjects.

**Table 11 Results of Independent Samples *t* Test for In-Service Teachers' Self-Efficacy by Teaching Subject**

| Component             | Teaching Subjects | N   | <i>t</i> | <i>df</i> | <i>p</i> | <i>MD</i> |
|-----------------------|-------------------|-----|----------|-----------|----------|-----------|
| Teacher Self-Efficacy | Science           | 156 | 0.267    | 353       | 0.789    | -2.385    |
|                       | Arts              | 199 |          |           |          |           |

Independent samples *t* test result showed that there was no significant difference between in-service teachers' self-efficacy by teaching subjects. This result was consistent with the findings of Hay Mar Oo (2017). She found that, there was no significant difference in teacher self-efficacy by teaching subjects.

**Discussion and Recommendations**

A strong sense of self-efficacy enhances personal accomplishment in many ways. Students in the school and workers in the workplace with high perception of self-efficacy approach difficult tasks as a challenge to be mastered rather than as a threat to be avoided. Self- efficacy is distinctively related to motivational constructs such as locus of control, self-concept and outcome expectation for the reasons of their specificity and close link to performance tasks. It has implications in predicting motivation and learning to a better performance on students as to activities, goals, efforts, and persistence.

**Limitation**

In this study, the sample of participants was chosen from Taikkyi District. So, further research should be carried out by selecting participants from in-service teachers of other districts. Moreover, further research of teacher self-efficacy should be carried out with the sample, not only for in-service teachers but also for student teachers and university teachers. To confirm and validate the findings of this study, it is suggested that longitudinal studies should be undertaken. Future researchers also need to examine the other demographic characteristics of in-service teachers in detail and should carry out by selecting in-service teachers from different regions and states so that the sample might be representative.

## **Conclusion**

The primary objective of this study was to examine the self-efficacy of in-service teachers in teaching and determine any significant variations in self-efficacy based on factors such as gender, age, teaching subjects, and designation. The study included 355 teachers from 23 schools in the Taikkyi District. The findings of this study serve as an asset for teachers throughout their professional journey, exerting influence on their decision-making processes and their willingness to utilize specific strategies and techniques in the realm of teaching. Moreover, these findings have substantial implications for the future generation of Myanmar as they provide insight into the significance of in-service teachers' self-efficacy. Teachers' self-efficacy is an important component of teacher competencies. Teachers with good self-efficacy can improve the quality of their teaching and ultimately enhance student learning achievement. The increasing teachers' self-efficacy has improved the positive attitudes of other teachers, such as an attitude of learning interest, engagement, and curiosity. With these attitudes, teachers can understand students' learning needs, acknowledge their shortcomings, and appreciate their opinions. The attitude of the teacher who is more caring, patient, and democratic is what makes the student learning environment to be more conducive to foster the freedom of opinion that leads to the freedom of thought. Teachers with higher levels of overall efficacy have students with higher perceived learning levels than teachers with lower self-efficacy levels. The increasing teachers' self-efficacy can also be identified directly through teachers' interest in learning, engagement, and high curiosity. Teachers' curiosity needs to be cultivated continuously so it becomes a habit and attitude. If the teacher's curiosity has become his/her attitude, then the teacher's self-efficacy will grow by itself. This shows that the teachers' self-efficacy raises an attitude of interest to keep learning, active engagement, and curiosity. If the attitudes of interest in learning, active engagement, and curiosity has developed in teachers, they will impact the students' curiosity in learning. However, despite the relevance that teachers' self-efficacy may have in teaching, they alone do not guarantee the effectiveness of teaching. They must have the knowledge and skills to help students to achieve the desired learning outcomes. The fact of considering oneself capable of teaching does not guarantee by itself the quality of teaching; knowledge, training, and teaching skills that are essential in any case to promote student learning.

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