The Relationships between Taiwanese Elementary English Teachers' Qualification, Teaching Experiences and Teacher's Efficacy Beliefs

Cheng, Hsing-Fu, PhD
Assistant Professor
Department of Applied English
Ming Chuan University
Taiwan

Huang, De-Huei
Graduate student
Department of Applied English
Ming Chuan University
Taiwan

Abstract

This study investigates teacher's efficacy beliefs between teachers with different qualification, teaching experiences and educational attainment. A questionnaire was distributed to 246 English teachers in public elementary schools in Taiwan. The data were analyzed by Independent Sample t-test using SPSS 12.0. The results indicate that for experienced teachers, mastery experiences were more important whereas for novice teachers vicarious learning from similar models seemed conducive to improving their self-efficacy due to relatively fewer teaching experiences. In addition, substitute English teachers believed they were more capable of engaging their students than their regular English teacher counterparts. The substitute English teachers' efficacy was more likely to be influenced by vicarious experiences and physiological and affective states. Finally, English major teachers perceived themselves to have higher self-efficacy in student engagement and instructional strategies than non-English major teachers. These results might have pragmatic implications for MOE or teacher educators in pre-service and in-service education.

Key words: EFL elementary school, English major, substitute teachers, teaching experiences, teachers' self-efficacy

1. Introduction

1.1 English teaching at Elementary level

In order to upgrade and nurture Taiwanese learners' English ability, incorporating English into the curriculum at primary school level has become a trend among EFL countries in Asia (Chern, 2006; Chou, 2008). The Nine-year Integrated Curriculum for Elementary and Junior High Schools was carried out by Taiwan's Ministry of Education (MOE) in 2001, which made English a required course for Grade 5 at elementary schools. Starting from 2005, English instruction was introduced to the third grade nationwide and some cities even initiate English education as early as Grade 1 (Chang, 2008; Chern, 2002).

A number of challenges have accompanied the implementation of English teaching at elementary schools including the design and selection of the appropriate materials and textbooks, the accommodation of learners of diverse English proficiency and the recruitment and training of qualified and certified English teachers. Indeed, because of a large amount of English teachers are in demand in a short period of time, it is difficult to ensure quality control. As a consequence, the recruited teachers are often found to have varying teaching qualifications and competence (Chen, 2006).

Although the policy may have temporarily solved the supply and demand imbalance of elementary English teachers, Chang's (2007) study pointed out that in 2006 only 51.7% of public elementary English teachers were qualified. Since low birth rates have become a phenomenon in Taiwan, it has discouraged many college graduates with an ELT background from pursuing a teaching career. As a result, there are an increasing number of substitute teachers and non-English major teachers who have not acquired teaching credentials at the teaching post. These teachers are constantly compelled to juggle with the heavy teaching load often accompanied with administrative duty. In addition, they are under enormous pressure to perform well in teaching lest they are denied the renewal of contract.

Su (2008) postulated that substitute teachers may form an identity crisis as their status is an ambivalent one in that on the one hand, they believe that they are more capable than some regular teachers; one the other hand, they are unable to reconcile themselves to fact that they are only there to 'fill in the gaps' whenever the regular teachers are unavailable, which implies that the nature of their job is replaceable and even disposable. Although substitute teachers without certification occupy almost half of the teaching force in elementary education, very few studies excerpt for some unpublished master dissertations (c.f. Chang, 2010; Cheng, 2011; Su, 2008; Yang, 2013) have focused on their teaching motivation and self-efficacy.

1.2 Teachers' self-efficacy

Bandura's social cognitive theory (1986, 1997) proposed a motivational construct― self-efficacy, that is, the extent to which an individual believes in one's own ability to accomplish tasks. The higher level one's self-efficacy is, the more possible they can realize their goals. Similarly, teacher efficacy has been defined as the extent to which the teacher believes he or she has sufficient capability to organize and execute courses of action to successfully accomplish specific instructional tasks, or, more simply, his or her ability to affect student performance (Berman, et al., 1977).

With regard to antecedent studies, past research has investigated the extent to which a wide array of demographic variables such as gender (Greenwood, Olejnick, & Parkay, 1990), teachers' educational attainment (Hoy & Woolfolk, 1993), and years of teaching experiences (Ghaith & Shaaban, 1999; Soodak & Podell, 1997) influence teachers' self-efficacy.

Efficacy expectations are also found to be a major determinant of pedagogical decisions including goal setting, effort expenditure and perseverance under adverse teaching conditions (Allinder, 1994; Bandura & Adams, 1977; Coladarchi, 1992; Gibson & Dembo, 1984; Pintrich & Schunk, 2002). In addition, teachers with a higher sense of self-efficacy are inclined to try a variety of innovative teaching methods and instructional strategies and therefore are reported to be more ready to meet the needs of their students (Cousins & Walker, 2000; Ghaith & Yaghi, 1997; Soodak & Podell,1994; Wertheim & Leyser, 2002; Woolfolk Hoy & Davis, 2006). Finally, teachers' efficacy has also been shown to be positively related to students' accomplishments (Ashton & Webb, 1986; Skaalvik & Skaalvik, 2007).

1.2 Teachers' sources of efficacy

Bandura proposed that people's conceptions of self-efficacy are influenced by four sources of influences: mastery experience, vicarious experience, verbal persuasion, and physical and affective states (Bandura, 1997). Bandura (1977, 1994, 1997) pointed out that mastery experiences were the most important determinant of self-efficacy because they provided the most genuine validation for people who have completed tasks successfully (Bandura, 1995). Vicarious experiences were identified as the second potent determinant of self-efficacy by Bandura (1977, 1997). When observers see that the behaviors of other people result in positive outcomes, they'll be motivated to devote themselves to similar tasks. Verbal persuasion is another source of peoples' self-efficacy. If people are persuaded verbally into possessing sufficient competence to master a given task, they might take pains to complete it and be more prepared to embrace the potential challenges. Finally, physiological states such as fatigue and pleasure will also affect people's expectations of their performance in a given task.

Although abundant studies have been carried out examining teachers' self-efficacy, the sources of teachers' self-efficacy beliefs remained underexplored. Tschannen-Moran and Hoy's (2007) study found that although for both novice and experienced teachers, teachers' perception of their past experiences were moderately linked to teachers' self-efficacy; nonetheless, experienced teachers were more inclined to draw on their past successful experiences.

On the other hand, for novice teachers who do not have many prior successful teaching experiences to draw upon, other sources of self-efficacy appear to be more prominent in their own self-evaluations of efficacy such as vicarious experience, verbal persuasion, and physiological and emotional arousal.

1.3 Teacher's efficacy and the years of teaching experiences

Many researchers found a positive relationship between years of teaching and teachers' self-efficacy, that is, the longer the teachers teach, the higher self-efficacy they may have (Soodak & Podell, 1996; Woolfolk & Hoy, 1990).

Tschannen-Moran and Woolfolk Hoy's (2007) study also showed that novice teachers' overall teaching self-efficacy was significantly lower than that of experienced teachers. In Taiwan, Wang (1992) found elementary teachers who had served over 26 years at school had significantly higher teacher self-efficacy than teachers who had served only 5 years and 6 to 15 years. However, some research (Cavers, 1988; Emrick, 1999; Liao, 2005) revealed no significant differences between the seniority of a teacher and teachers' self-efficacy; that is, they asserted teachers' self-efficacy was not influenced by teaching years. As findings along this line of exploration are inconclusive, one of the aims of this study is to explore the relationships between years of teaching experiences and teacher's self-efficacy.

Among the three efficacy domains, classroom management has arguably been a potential source of frustration for novice teachers (Freiberg, 2002 Giallo & Little, 2003). Freiberg (2002) reported that novice teachers have most difficulty in planning lesson and managing time. However, Önkol (2002) found both inexperienced and experienced teachers regard classroom management as challenging.

1.4 Teacher's efficacy and qualification

As mentioned earlier, Teachers' command of English is crucial particularly in the Taiwanese context where elementary school English teachers are often recruited from various different channels in a relatively short period of time. Some homeroom teachers take a 20-hour crash course in teaching English and become English teachers since. In the past decade, a number of studies on elementary school English teachers' teaching beliefs and teaching effectiveness in Taiwan found that English teachers with English majors tended to have better teaching efficacy compared to their non-English major counterparts (Chiang , 2013; Hung, 2011) . GÜven & Çakir (2012) investigated 266 Turkish English teachers in public primary schools and the results showed that English major teachers perceived themselves as having higher self-efficacy than other majors. In particular, Chang's (2010) study showed a high percentage of non-English major elementary English teachers believed they had poor abilities in English speaking, listening, writing and reading. In addition, they also reported inadequate English teaching skills and insufficient English pedagogical knowledge.

In addition, according to Li, Lin and Haggard (2010), eligible and permanent teachers may feel more at ease and competent at work because they have tenure status and stable contracts. On the contrary, substitute teachers are constantly preparing for the teacher recruitment exams held annually, which means they often are forced to assume a dual identity: one as a substitute teacher; the other as a student. This strain dilemma makes it difficult, if not impossible, for them to make consistent efforts to teach with enthusiasm and dedication (Tsai, 2008).

However, there are also some research findings suggesting that substitute teachers could also demonstrate effective teaching (Chen & Cheng, 2013; Cheng, 2011; Liang, 2010; Patterson, 2006; Yang, 2013). Chen and Cheng's (2013) case study of the supervisory process of EFL teachers revealed that teaching certificate does not guarantee effective teaching skills and substitute teacher without qualification sometimes display competent teaching. On a similar note, in his study of 592 elementary substitute teachers in Taipei and New Taipei City, Cheng (2011) displayed most elementary substitute teachers not only had strong creative teaching abilities, but also high intrinsic motivation. In addition, the teaching effectiveness of elementary substitute teachers was in keeping with the teaching quality indicators put forward by MOE (Yang, 2013). Liang's (2010) study of elementary substitute teachers pointed out that to prove their abilities and importance, substitute teachers tended to make more efforts in running their own class, getting their students involved, concerning disadvantaged students and improving students' academic performances. However, since the population of their study was small, the researchers suggested more mixed-method studies carried out in the future.

Similarly, Patterson (2006) examined both regular and substitute teachers' opinions of substitute teachers' ability. The study showed that there was a discrepancy between their views.

While the regular teachers were assured that the substitutes follow the lesson plan, they were more reticent when it comes to the substitute teachers' competence in terms of introducing the teaching content or managing the classroom. In contrast, the substitute teachers believed that they had sufficient teaching capacity and were able to maintain discipline.

As can be seen, there is contradictory finding regarding the self-efficacy, perceived effectiveness and motivation among elementary English teachers with varying qualifications in Taiwan.

The purpose of this study is to examine the extent to which teacher qualification and teaching experiences influence teachers' self-efficacy and their sources of self-efficacy. The research questions are:

1. Are there differences between teachers' self-efficacy and sources of self-efficacy between novice and experienced teachers?
2. Are there differences between teachers' self-efficacy and sources of self-efficacy between regular teachers and substitute teachers?
3. Are there differences between teachers' self-efficacy and sources of self-efficacy between English major teachers and non-English major teachers?

2 Method

2.1 Participants

Through convenience sampling, a total amount of 246 elementary English teachers (25 male and 221 female) from 30 elementary schools across 18 different districts in northern Taiwan were recruited. Among them, 148 were Regular English teachers and 98 were substitute English teachers. In terms of their qualification, 149 of them were English major, and 97 were non-English major. Their years of teaching experiences range from less than 1 year to more than 30 years. In particular, 124 of them have teaching experiences less than 5 years, and thus were considered novice teachers and 118 of them have more than 5 years of teaching experiences, and were considered experienced teachers in our study.

2.2 Instrumentation

A modified version of The Sources of Teaching Self-Efficacy Scale developed by Morris (2010) was employed consisting of a total of 16 items focusing on four measures: mastery experiences (4 items; α=0.67); vicarious experiences: (4 items; α=0.69); verbal persuasion: (4 items; α=0.85); and physiological and affective states: (4 items; α=0.66). It was presented in six point Likert scale format from "extremely disagree" to "extremely agree". According to Henson's (2001) guidelines, although only the reliability of verbal persuasion was high, there were significant correlations among the sources and between the sources and teaching self-efficacy. In addition, rare instruments were examined to measure the four sources of self-efficacy efficiently (Morris, 2010). Therefore, the present study adopted the scale to measure the four sources of teacher self-efficacy.

With regard to the measurement of teachers' self-efficacy, Ohio State Teacher efficacy Scale (OSTES) developed by Tschannen-Moran and Woolfolk Hoy (2001) was adapted because it is able to "assesses a broad range of capabilities that teachers consider important to good teaching, without being so specific as to render it useless for comparisons of teachers across contexts, levels, and subjects" (Woolfolk Hoy & Spero, 2005, p.354). OSTES consists of 24 items assessing three main dimensions of teacher efficacy: efficacy for management, engagement, and instructional strategies. OSTES is believed to be a both valid and reliable construct with a satisfactory Cronbach's alpha .94 and has since been a popular measure adopted by researchers working in this field (e.g. Chacón, 2005; Eslami & Fatashi, 2008; Tschannen-Moran and Hoy, 2007).

2.3 Procedures

Data were collected mainly via administering questionnaires by mail or in person. The researchers tried to contact directors of academic affairs in elementary schools in Taipei City or New Taipei City by phone. After understanding the study purpose, some of the directors were willing to participate in the study. On average, it took each respondent around 20 minutes to fill in the questionnaire. The total amount of questionnaires administered was 303 out of which 256 questionnaires were returned, rending a desirable response rate: 84%. However, ten questionnaires were eliminated since they were answered incompletely and therefore, the total effective sample size was 246.

2.4 Statistical procedure

The participants' answers to the items included in the questionnaire were fed into the SPSS for analysis. Descriptive analysis of the data was measured to explore the teacher's sources of efficacy and self-efficacy. Independent sample t-tests were used to examine the differences in sources of efficacy and self-efficacy between three different sets of English teachers: Regular teachers and substitute teachers, novice and experienced teachers, and English majors and Non-English majors.

3. Results

3.1 Teachers' Sources of Self-Efficacy and Efficacy between Novice Teachers and Experienced teachers

Table 1 shows sources of self-efficacy between novice teachers and experienced teachers. Regarding vicarious experiences, the mean score of novice English teachers (M = 4.46, SD = 70) was lower than that of experienced English teachers (M = 4.64, SD = .65).

The independent sample t-test showed that elementary experienced English teachers had a significantly higher degree of mastery experiences than novice English teachers (t = -1.983, p < .05). Similarly, the independent sample t-test indicated the vicarious experiences were significantly affected by teacher's years of teaching experiences (t = 2.579, p < .05). The finding suggested that elementary novice English teachers' efficacy was more likely to be influenced by vicarious experiences.

Table 1 Independent Sample T-Test of Sources of Efficacy between Novice Teachers and Experienced Teachers *(N=246)*

Variable	Teaching Seniority	N	Mean	SD	t-value	p(2-tailed)
Mastery Experiences	Novice teacher	124	4.46	.70	-1.983*	.048
	Experienced teacher	118	4.64	.65		
Vicarious Experiences	Novice teacher	124	4.76	.58	2.579*	.011
	Experienced teacher	118	4.56	.63		
Verbal Persuasions	Novice teacher	124	4.35	.68	-1.071	.285
	Experienced teacher	118	4.45	.69		
Physiological & Affective States	Novice teacher	124	4.40	.67	1.185	.237
	Experienced teacher	118	4.29	.81		

*P<.05

In verbal persuasion variable, the independent sample t-test found no significant difference between the mean score of novice English teachers (M= 4.56, SD = .68) and experienced teacher (M = 4.35, SD = .69) (t = -1.071, p = .285). In physiological & affective states variable, no significant difference existed between the mean score of novice English teachers (M= 4.40, SD = .67) and experienced teacher (M = 4.29, SD = .81) (t = -1.071, p = .285). In other words, the sources of verbal persuasions and physiological & affective states were equally important sources of efficacy for novice and experienced English teachers.

Tschannen-Moran and Woolfolk Hoy's (2007) study asserted that teachers' mastery experiences on their teaching increased along with their teaching experiences. In addition, they further suggested that vicarious learning by way of observation appeared to be a more salient source of novice teachers' self-efficacy because of their little teaching experiences. Our finding is compatible with theirs in that more experienced teachers tended to have more mastery experiences through years of teaching experiences and actual teaching accomplishments.

Since novice teachers may have few mastery experiences to draw on, other sources of efficacy, such as vicarious experiences, verbal persuasions and physiological and affective states seemed to be more prominent influences.

Another possible explanation of this result was that teachers who just start their teaching career may have unrealistic high hopes about how they are going to inspire and transform their students. Their dreams of bringing positive influences on their learners often dash when encountering disturbing teaching setback beyond their imagination (Weinstein, 1988). Such negative experiences may exert detrimental effects on how they view their teaching, which may account for their relatively low mastery experiences.

Table 2 Independent Sample T-Test of Teacher's Self-Efficacy between Novice Teachers and Experienced Teachers *(N=246)*

Variable	Teaching Seniority	N	Mean	SD	t-value	p(2-tailed)
Student Engagement	Novice teacher	124	4.46	.70	0.041	.967
	Experienced teacher	118	4.64	.65		
Classroom Management	Novice teacher	124	4.76	.58	-0.497	.620
	Experienced teacher	118	4.56	.63		
Instructional Strategies	Novice teacher	124	4.35	.68	-1.114	.267
	Experienced teacher	118	4.45	.69		

Table 2 shows the result of independent sample T-Test of teacher's self-efficacy between novice teachers and experienced teachers. With regard to teacher's self-efficacy, the mean score of novice teacher is higher than experienced teachers in all aspects of teacher's self-efficacy, namely, student engagement, classroom management and instructional strategies. However, the independent sample t-test found no significant difference between the mean score of novice English teachers and experienced teacher in all three sub-domains. The finding is in disagreement with the results reported by Tschannen-Moran and Woolfolk Hoy (2007) in that experienced teachers rated themselves significantly higher on instructional strategies and classroom management.

3.2 Teachers' Sources of Self-Efficacy and Self-efficacy between Regular Teachers and Substitute Teachers

The results of descriptive and independent sample t-test analysis for four sources of self-efficacy for elementary regular and substitute English teachers are displayed in Table 3. Among the four sources, vicarious experiences had the highest mean scores both for regular and substitute English teachers, followed by mastery experiences.

Table 3 Independent Sample T-Test of Sources of Efficacy between Regular Teachers and Substitute Teachers *(N=246)*

Variable	Teaching Position	N	Mean	SD	t-value	p(2-tailed)
Mastery Experiences	Regular teacher	148	4.53	.61	-.499	.618
	Substitute teacher	98	4.58	.78		
Vicarious Experiences	Regular teacher	148	4.54	.59	-4.325*	.000
	Substitute teacher	98	4.87	.60		
Verbal Persuasions	Regular teacher	148	4.37	.62	-.956	.340
	Substitute teacher	98	4.45	.76		
Physiological & Affective States	Regular teacher	148	4.20	.71	-4.104*	.000
	Substitute teacher	98	4.53	.75		

*P<.05

However, the independent sample t-test indicated that the difference was not significant (t = -.476, p = .634). Thus, for both regular and substitute English teachers, mastery experiences were important sources of their efficacy. In verbal persuasion variable, the mean score of regular English teachers (M= 4.37, SD = .62) was also lower than substitute English teachers (M = 4.45, SD = .76). The independent sample t-test found no significant difference between regular and substitute English teachers (t = -.956, p = .340). In other words, the sources of verbal persuasions were equally important sources of efficacy for both regular and substitute English teachers.

Regarding vicarious experiences, the mean score of regular English teachers (M = 4.54, SD = .59) was lower than that of substitute English teachers (M = 4.87, SD = .60). The independent sample t-test showed that elementary substitute English teachers had a significantly higher degree of vicarious experiences than elementary regular English teachers (t = -4.325, p < .01). Similarly, the independent sample t-test indicated the physiological and affective states were significantly affected by different teaching positions (t = -4.104, p < .01). The finding suggested that elementary substitute English teachers' efficacy was more likely to be influenced by vicarious experiences such as good teaching models and physiological and affective states.

Past studies have found that pre-service teachers' self-efficacy beliefs were shaped by vicarious experience and verbal persuasions (Szabo, Bailey &Ward , 2005). Researchers also indicated through vicarious experiences - by observing successful teaching models of others, teachers could acquire authentic teaching experiences to improve their teaching confidence in a similar circumstance (Tschannen-Moran et al., 1998; Tschannen-Moran & Woolfolk Hoy, 2007).

Interestingly, substitute teachers had more positive emotions toward teaching as their score of physiological and affective states rated considerably higher than regular teachers. The finding is contrast with Liang's (2010) study who found in order to reaffirm their self-worth and profession in teaching, substitute teachers strived to comply with the school regulations and took on all the duties thrust upon them; as a result, they often ended up experiencing a feeling of frustration and depression.

Table 4 Independent Sample T-Test of Teachers' Self-Efficacy between Regular Teachers and Substitute Teachers *(N=246)*

Variable	Teaching Position	N	Mean	SD	t-value	p(2-tailed)
Student Engagement	Regular teacher	148	4.16	.60	-2.550*	.011
	Substitute teacher	98	4.37	.69		
Classroom Management	Regular teacher	148	4.48	.64	-1.063	.289
	Substitute teacher	98	4.57	.66		
Instructional Strategies	Regular teacher	148	4.61	.52	-.649	.517
	Substitute teacher	98	4.66	.62		

*P<.05

Table 4 shows the result of Independent Sample T-Test of Teachers' self-efficacy between regular teachers and substitute teachers, disclosing a significant difference in student engagement between teachers with different teaching positions (t = -2.550, p < .05). However, there was no significant difference in classroom management (t = -1.063, p = .289) and instructional strategies (t = -.649, p = .517) between substitute English teachers and regular English teachers.

The results indicated elementary substitute English teachers believed they were capable of engaging their students than their regular English teacher counterparts. Compared to regular English teachers, substitute English teachers believed they valued their students more, and were better in increasing students' learning motivation, creativity, and in their abilities to solve learning problems.

The finding is in line with Su's (2008) study in which in-depth interviews of seven elementary substitute teachers suggested that in order to demonstrate their competence and professionalism, elementary substitute teachers made extra efforts in organizing their class and motivating their students.

Similarly, in a study on the culture of substitute teachers in the elementary schools, Liang (2010) observed and interviewed six elementary substitute teachers and also found that in order to show their importance and abilities, substitute teachers not only were involved in school administration actively, but also devoted themselves to improving students' academic achievement and concerned about disadvantaged students. One of the participant teachers (substitute English teacher) even expressed the worry of losing her job if her students got bad scores on their tests.

3.3 Teachers' Sources of Self-Efficacy and Efficacy between English Major and Non-English Major Teachers

The results of descriptive and independent sample t-test analysis of four sources of self-efficacy for English major and non-English major are shown in Table 5. The results showed no matter elementary English teachers graduated from English or non-English department, both of them got high mean scores in four sources of efficacy. Although English major teachers got higher mean scores than non-English major teachers, the t-test exhibited no significant differences.

Table 5 Independent Sample T-Test of Sources of Efficacy between English Major and Non-English Major Teachers *(N=246)*

Variable	Major	N	Mean	SD	t-value	p(2-tailed)
Mastery Experiences	English major	149	4.57	.72	.445	.657
	Non-English major	97	4.53	.63		
Vicarious Experiences	English major	149	4.69	.67	.660	.510
	Non-English major	97	4.64	.53		
Verbal Persuasions	English major	149	4.46	.70	1.745	.082
	Non-English major	97	4.31	.65		
Physiological & Affective States	English major	149	4.38	.78	.630	.529
	Non-English major	97	4.31	.69		

With regard to teacher's self-efficacy between English major and non-English major, as shown in Table 6, there were significant differences between English majors and non-English majors in student engagement (t = 2.185, p < .05) and instructional strategies (t = 2.389, p < .05). However, no significant difference existed between English majors teachers and non-English majors in classroom management (t = 1.302, p = .194), Thus, teachers who were English majors perceived themselves to have better self-efficacy in student engagement and instructional strategies than non-English major teachers.

Table 6 Independent Sample T-Test of Teachers' Self-Efficacy between English Major and Non-English Major Teachers *(N=246)*

Variable	Teaching position	N	Mean	SD	t-value	p(2-tailed)
Student Engagement	English Major	149	4.31	.67	2.185*	.030
	Non-English Major	97	4.13	.59		
Classroom Management	English Major	149	4.56	.67	1.302	.194
	Non-English Major	97	4.45	.60		
Instructional Strategies	English Major	149	4.70	.57	2.389*	.018
	Non-English Major	97	4.53	.53		

*P<.05

The finding is consistent with Hung's (2011) who found elementary English teachers graduating from English departments had better teaching effectiveness than those teachers who only passed government training courses and acquired qualifications but were not English majors. In addition, Li's (2008) empirical study of investigating teachers' beliefs and teaching willingness also found that elementary English teachers who were English related majors had higher teachers' beliefs than other majors.

Ross et al. (1999) indicated self-efficacy was lower if people were asked to teach outside of their content area. Chang (2009) revealed non-English major teachers were initially disturbed by preparing lessons, while English major teachers were disturbed by how to assess students. The results indicated non-English major teachers had lower confidence and proficiency in English than English major teachers. It can be assumed that elementary English teachers with English majors had higher proficiency in English and therefore, their efficacy in instructional strategies use was better than those of non-English majors.

In addition, Lin (2012) found that EFL English teachers whose English was their second major showed lower proficiency in English speaking and writing abilities, and as a result, their instructional strategies use and classroom management abilities were lower than those of English majors. However, in this study, although the mean score of classroom management for non-English major teachers was lower than English majors, there was no significant difference. It can be inferred that English major teachers may have better command of English language and teaching methods; however, they are not necessarily superior in classroom management, which usually requires further training in teacher preparation program and in-service training.

Conclusion

The current study investigated the relationships between Taiwanese Elementary English teachers' qualification, teaching experiences and their teacher's efficacy beliefs. In terms of years of teaching, for experienced teachers who have more teaching experiences under their belt, mastery experiences were more critical whereas for novice teachers, vicarious learning from similar models seemed contributive to improving novice teachers' self-efficacy because of their limited teaching experiences.

Perhaps the most striking finding is that substitute English teachers got higher efficacy in student engagement than regular English teachers which suggests they believed that they are enthusiastic about maintaining class discipline and helping students value learning. This may seem counter-intuitive at the first glance due to the tremendous stress substitute teachers experience. Further studies are warranted to uncover the underlying reasons that make substitute resilient and persistent in their endeavor.

Another interesting finding is that English major teachers perceived themselves to have higher self-efficacy in student engagement and instructional strategies than non-English major teachers. The antecedent studies (Chang , 2010; Hung, 2011; Chiang , 2013) found that teaching effectiveness of English major teachers was better than non-English major teachers. It may be that English major teachers have received pedagogical and TESOL related training in their curriculum and are thus more confident of guiding and motivating students. Also, it may be reasonable to assume that English teachers' proficiency plays a mediating role in their self-efficacy. Further research needs to take into account of teacher's proficiency level to ascertain this hypothesis.

These results have pragmatic implications for MOE or teacher educators in pre-service and in-service education. For instance, for substitute teachers, the government and MOE should hold regular in-service training workshops offering peer teaching and modeling opportunities so that substitute teachers can tap into vicarious experiences to strengthen their self-efficacy. In addition, due to the fact that substitute teachers are more susceptible to physiological and affective states, support from the organization and teacher colleagues becomes all the more important to promote their psychological well-being.

It is noteworthy that due to the fact that the participating teachers teach in Taipei and New Taipei City, the result may not be applicable to other areas in Taiwan, particularly teachers in remote areas. Future study in this vein is warranted to explore the efficacy among teachers of different backgrounds. Second, the research method employed in this study was the quantitative approach. It is suggested mix-method research incorporating both quantitative and qualitative data collection methods to be employed so as to investigate elementary teachers' self-efficacy in more detail. For instance, from a substitute teacher's viewpoints, what really explains their devotion to teaching even under an adverse, hostile and unjust working condition? For non-English major teachers, what can be done to effectively boost their self-efficacy? Interpretive research focusing on narratives through focus group interviews, case study, ethnographic studies are needed to answer these valid questions.

References

Allinder, R.M. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants. Teacher Education and Special Education, 17, 86-95. http://dx.doi.org/10.1177/088840649401700203.

Ashton, P.T., & Webb, R.B. (1986). *Making a difference: Teachers' sense of efficacy and student achievement.* New York: Longman.

Bandura, A. (1977). *Social learning theory.* Englewood Cliffs, New Jersey: Prentice-Hall.

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1994). Self- efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of Human Behavior, 4,* 71-81. New York: Academic Press.

Bandura, A. (Ed.). (1995). *Self-efficacy in changing societies.* New York: Cambridge University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive Therapy and Research, 1*(4), 287-310. doi.10.1007/BF01663995

Berman, P., McLaughlin, M., Bass, G., Pauly, E., & Zellman, G. (1977). *Federal programs supporting educational change: Vol. VII. Factors affecting implementation and continuation.* Santa Monica, CA: RAND.

Cavers, L. (1988). Teacher efficacy: Its relationship to school 1evel organizational conditions and teacher demographic characteristics. *Dissertation Abstracts International, 49*, 35-63.

Chacón, C. (2005). Teachers' perceived efficacy among English as a foreign language teachers in middle schools in Venezuela. *Teaching and Teacher Education,21*(3), 257-272. doi:10.1016/j.tate.2005.01.00

Chang, C. F. (2010). *An Investigation on Teaching Difficulties Encountered by Uncertified Elementary School English Teachers in Yunlin County* (Unpublished master thesis). *Department of Applied Foreign Languages of National Yunlin University of Science and Technology.*

Chang, F.Y. (2009). *A Study on College EFL Teachers' Self-Efficacy: Its Causal Relationship with Antecedents and Teaching Behaviors* (Unpublished master thesis). Graduate Institute of English National Taiwan Normal University.

Chang, Y. C. (2008). Parents' Attitudes toward the English Education Policy in Taiwan, *Asia Pacific Education Review, 9* (4), 423-435. . http://dx.doi.org/10.1007/BF03025660

Chang, W.C. (2007). "A brief sketch of Taiwan's English education at primary level", *Primary Innovations Regional Seminar: A collection of papers*, 67-73. British Council.

Chen, C. W.-y. (2006). Revisiting proficiency: An important requirement for elementary school English teachers in Taiwan. *Journal of National Hualien University of Education*, *23*, 287-304.

Chen, C. W.-y. & Cheng, Y.-s. (2013). The supervisory process of EFL teachers: A case study. *The Electronic Journal for English as a Second Language (TESL-EJ), 17*(1), 1-21.

Cheng, S. L (2011). *A Study of the Relationship between Substitute Teachers' Intrinsic and Extrinsic Motivations and Creative Teaching in Elementary School* (Unpublished master thesis).Education Department of National Taipei University of Education.

Chern, C. L. (2002). English language teaching in Taiwan today. *Asia-Pacific Journal of Education*, 22(2), 97-105. doi:10.1080/0218879020220209

Chern, C. L. (2006). An Overview of Reading Research in Taiwan. *English Teaching and Learning, Special Issue*, 1-19.

Chiang, Y. (2013). *A Study of teaching beliefs and teaching effectiveness of elementary school English teachers in Taoyuan County* (Unpublished master thesis). Department of Children English Education of National Taipei University of Education.

Chou, C. (2008). Exploring elementary English teachers' practical knowledge: A case study of EFL teachers in Taiwan. *Asia Pacific Education Review, 9(*4), 529-541. 10.1007/BF03025668

Coladarci, T. (1992). Teachers' sense of efficacy and commitment to teaching. *Journal of Experimental Education, 60*, 323-337. http://dx.doi.org/10.1080/00220973.1992.9943869

Cousins, J. B., & Walker, C. A. (2000). Predictors of educators' valuing of systematic inquiry in schools. *Canadian Journal of Program Evaluation*, *Special Issue*, 25-53.

Emrick, B. J. (1999). Teacher efficacy as related to satisfaction with school decision making. *Dissertation Abstracts International, 60* (7), 2301A.

Eslami, Z. R., & Fattahi, A. (2008). Teachers' sense of self-efficacy, English proficiency, and instructional strategies: A study of nonnative EFL teachers in Iran. *Teaching English as a Second or Foreign Language 11* (4), 1-19.

Freiberg, H. J. (2002). Essential Skills for New Teachers. *Educational Leadership, 59*, 56-61.

Ghaith, G., & Yaghi, H. (1997). Relationships among experience, teacher efficacy, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education, 13*, 451-458. http://dx.doi.org/10.1016/S0742-051X(96)00045-5

Ghaith, G. & Shaaban, K. (1999). The relationship between perceptions of teaching concerns, teacher efficacy, and selected teacher characteristics. *Teaching and Teacher Education, 15*, 487-496. http://dx.doi.org/10.1016/S0742-051X(99)00009-8

Giallo, R., & Little, E. (2003). Classroom behavior problems: The relationship between preparedness, classroom experiences, and self-efficacy in graduate and student teachers [electronic version]. *Australian Journal of Educational & Developmental Psychology, 3*, 21-34.

Gibson, S., & Dembo, M. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4), 569-582. doi:10.1037//0022–0663.76.4.56

Greenwood, G., Olejnik, S., & Parkay, F. (1990). Relationships between four teacher efficacy belief patterns and selected teacher characteristics. *Journal of Research and Development Education, 23*(2), 102-107.

Güven, S. & Çakir, Ö. (2012). A Study on primary school English teachers' self-efficacy beliefs. *Education and Science 37*, 43-52.

Henson, R. K. (2001). Understanding internal consistency reliability estimates: A conceptual primer on coefficient alpha. *Measurement and Evaluation in Counseling and Development, 34*, 177-189.

Hoy, W. K., & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal, 93*, 356-372. http://dx.doi.org/10.1086/461729

Hung, S. (2011). A study on teaching beliefs and teaching effectiveness of elementary school English teachers in New Taipei City (Unpublished master thesis). *Graduate School of Curriculum and Instruction of National Taipei University of Education.*

Li, J, Y. (2008). *A comparative study of teachers' beliefs and teaching willingness of teachers from different teaching training programs* (Unpublished master thesis). Department of Children English Education of National Taipei University of Education.

Liang, C. T. (2010). A study on the culture of substitute teachers in the elementary schools. *Journal of National Pingtung University of Education, 34*, 1-34。

Liao, Y. J. (2005). *An inquiry on teacher efficacy of elementary English teachers.* (Unpublished master thesis). Department of Graduate Institute of Curriculum and Instruction of Mingdao University.

Lin, C. H. (2012). *EFL English teachers' professional development and teaching difficulties: a study on English teachers with English as second major* (unpublished master thesis). Department of Applied Foreign Languages of National Yunlin University of Science and Technology.

Ministry of Education (2003). General Guidelines of Grade 1-9 Curriculum of Elementary and Junior High School Education. Taipei: Ministry of Education.

Önkol, P. E. (2002). *Organizational stress factors of English instructors working at preparatory schools of public and private universities in Turkey.* Unpublished master's thesis, Middle East Technical University, Ankara, Turkey.

Patterson, C. L. (2006). *Examination of Substitute Teachers. Excerpts from: A Qualitative Examination of Teacher Absenteeism, Student Achievement and Substitute Teacher Policies and Practices* (Unpublished master thesis). Heritage University.

Pintrich, P.R., & Schunk, D. H. (2002). Motivation in education: Theory, research,and applications (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.

Ross, J. A., Cousins, J. B., Gadalla, T., & Hannay, L. (1999). Administrative assignment of teachers in restructuring secondary schools: The effect of out-of-field course responsibility on teacher efficacy. *Educational Administration Quarterly, 35*, 782–804.

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations with strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of Educational Psychology, 99*, 611-625. doi:10.1037/0022-0663.99.3.611

Soodak, L.C., & Podell, D.M. (1994). Teachers' thinking about difficult-to-teach students. *Journal of Educational Research, 88*, 44-51.

Soodak, L. C., & Podell, D. M. (1996). Teacher Efficacy: Toward the understanding of a multi-faceted construct. *Teaching and Teacher Education, 12*(4), 401-411. DOI: http://dx.doi.org/10.1016/0742-051X(95)00047-N.

Soodak, L.C., & Podell, D.M. (1997). Efficacy and experience: perceptions of efficacy among preservice and practicing teachers. *Journal of Research and Development in Education, 30*, 214-221.

Su, K. H. (2008). *The Description and Explanation of Emotional Experiences of The Substitute Teachers in Elementary Schools* (Unpublished master thesis). Department of Graduate Institute of Education National Chung Cheng University.

Szabo, Z., Bailey, R., & Ward, R. (2005). Efficacy sources for pre-service teachers. *Academic Exchange Quarterly 9*(4), 166-171.

Tsai, J.C. (2008). Identity and Ideology in the Lives of Nomad Teachers in Taiwan (unpublished doctoral thesis). Department of Curriculum and Instruction at University of Wisconsin-Madison.

Tschannen-Moran, M., Woolfolk Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research, 68*, 202–248. doi:10.3102/00346543068002202

Tschannen-Moran, M., & Woolfolk Hoy, A.W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805. http://dx.doi.org/10.1016/S0742-051X(01)00036-1

Tschannen-Moran, M., & Woolfolk Hoy, A. (2007).The differential antecedents of self-efficacy beliefs of novice and experienced teachers. *Teaching and Teacher Education, 23*, 944-956. http://dx.doi.org/10.1016/j.tate.2006.05.003

Wang, S. R. (1992). *The investigation of Elementary teachers' self-efficacy* (Unpublished doctorial thesis). Department of Education of National Taiwan Normal University.

Weinstein, C. S. (1988). Pre-service teacher's expectations about the first year of teaching. Teaching and Teacher Education, 4, 31-40. http://dx.doi.org/10.1016/0742-051X(88)90022-4

Wertheim, C., & Leyser, Y. (2002). Efficacy beliefs, background variables, and differentiated instruction of Israeli prospective teachers. *The Journal of Educational Research, 96*, 54-63. doi:10.1080

Woolfolk Hoy, A., & Burke-Spero, R. (2005). Changes in teacher efficacy during the early years of teaching: A Comparison of four measures. *Teaching and Teacher Education, 21*, 343-356. http://dx.doi.org/10.1016/j.tate.2005.01.007

Woolfolk Hoy, A., & Davis, H. A. (2006). Teacher self-efficacy and its influence on the achievement of adolescents, In F. Pajares, & T. Urdan (Eds.), *Self-efficacy beliefs of adolescents*, 117-137, Greenwich, CT: Information Age.

Woolfolk, A. E., & Hoy, W. K., (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82*, 81-91. http://dx.doi.org/10.1037/0022-0663.82.1.81

Yang, Y. Y. (2013). *The Impact of Irregular Employment on Organizational Service Performance : The Case of Substitute Teachers in the Elementary School* (Unpublished master thesis). School of Commerce of Kainan University.