THE PREDICTIVE RELATIONSHIP BETWEEN SPECIFIC TEACHER
CHARACTERISTICS AND THE PERCEIVED SENSE OF TEACHER SELF-EFFICACY OF
NON-NATIVE ENGLISH SPEAKING TEACHERS OF ENGLISH AS A FOREIGN
LANGUAGE IN RURAL THAILAND

by
Cheri Canode Crook
Liberty University

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education
Liberty University
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ABSTRACT

The goal of this quantitative, predictive correlational study is to investigate an often overlooked area of research, teacher self-efficacy among nonnative English-speaking teachers (NNESTs) who teach English as a Foreign Language (EFL). This study examines the relationship between specific teacher characteristics and perceived teacher self-efficacy among NNESTs of EFL in rural Thailand. The convenience sample in this study includes first through twelfth grade public sector NNESTs of EFL in Nan, Thailand, and represents the larger population of Northern Thai NNESTs of EFL. Data were collected from the sample via a combined Thai-language version of the paper-based *Teachers’ Sense of Efficacy Scale (TSES-SF)* (Tschannen-Moran & Woolfolk Hoy, 2001), a Thai-language version of the *Self-Report of English Proficiency Scale* (Chacón, 2005), and a self-report survey of demographics. Data were analyzed using standard multiple regression to answer the research question: Can perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, grade level taught, and instructional purpose (the predictor variables) of Thai NNESTs of EFL predict teachers’ sense of self-efficacy (the criterion variable) as measured by the *TSES-SF* (Tschannen-Moran & Woolfolk Hoy, 2001)? Longevity as a teacher and perceived English proficiency individually contributed to the model, while the linear combination of the nine predictor variables accounted for 23.2% of the variance in teacher self-efficacy. Recommendations for future research are included.

*Keywords:* social cognitive theory, teacher self-efficacy, Thailand, English as a Foreign Language
Dedication

The time and energy devoted to this study have been both well-invested and enjoyable for me, the researcher; however, I recognize there were many nights that a little more sleep would have made for a cheerier wife, mommy, sister, daughter, daughter-in-law, and friend. As such, I dedicate this dissertation to the “tee raks” of my life: my hubby, my children, my “p saow,” my family, and my Thai friends. Lastly, I dedicate this work to my late mother, who was always urging me forward while loving me unconditionally.
Acknowledgments

The six little letters that comprise the word, thanks, seem rather puny as I think about the depth of my appreciation for those who have walked along side me throughout this journey. First, Dr. Amanda Rockinson-Szapkiw, your faithful use of God’s gifting is evident in all that you do. Thank you for sharing your wisdom, experience, and counsel with me. Drs. Spaulding and Thomas, your insights and encouragement compelled me to persist in this process. Thanks! Also, without all of my Thai friends and family, this study would have been much more difficult. Thank you for your patience with my language mistakes and your willingness to partner with me. To my children, I must say that you are both incredible. I hope that each day you will love the Lord and others in a way that brings God honor, while enjoying immense joy in your own lives. To David, my friend and husband, without you, none of this would have been possible. You are simply amazing, and I am ever so grateful for who you are in my life.
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List of Abbreviations

Advanced National Educational Test (A-Net)
Association of Southeast Asian Nations (ASEAN)
Computer assisted language learning (CALL)
Central University Admission System (CUAS)
Distance learning TV (DLTV)
English as a Foreign Language (EFL)
General Teaching Efficacy (GTE)
Institutional Review Board (IRB)
Mathematics Teaching Efficacy Beliefs Instrument (MTEBI)
National Research Council of Thailand (NRCT)
Nonnative English Speakers (NNES)
Native English Speaker (NES)
Nonnative English Speaking Teacher (NNEST)
Nonnative English Speaking Teachers (NNESTs)
Ordinary National Educational Test (O-NET)
Personal Teaching Efficacy (PTE)
Reading Teaching Efficacy Beliefs Instruments (RTEBI)
Responsibility for Student Achievement Questionnaire (RSA)
Science Teaching Efficacy Belief Instrument (STEBI)
Social Cognitive Theory (SCT) (Bandura, 1977)
Teacher Efficacy Beliefs and Behaviors Scale (TEBBS)
Teacher Efficacy in Deaf-blindness Scale (TEDE)
Teaching English to Speakers of Other Languages (TESOL)

Teacher Efficacy Scale (TES)

Teacher Interpersonal Self-efficacy Scale (TISE)

Teacher Locus of Control (TLC)

Teacher Self-Efficacy (TSE)

Teacher Sense of Efficacy Scale (TSES)

Variance Influence Factor (VIF)

Writing Teaching Efficacy Beliefs Instrument (WTEBI)
CHAPTER ONE: INTRODUCTION

According to Clark (2012), by 2020 an estimated two billion people around the globe will be using the English language, and the majority of these individuals will be nonnative English speakers (NNES). In China alone, 390.16 million people speak English (Wei & Su, 2012) and already in 2007, there were fewer native English speakers (NES) than there were NNES (Foley, 2007). Some of these NNES are English as Foreign Language (EFL) teachers. In fact, the majority of English instructors are non-native English-speaking teachers (NNESTs) who teach in government educational systems in non-Western contexts: “[I]t is in such contexts that most English teaching takes place and in which least research is done” (Hayes, 2009, p. 84). In spite of the prolific use of and persistent effort to teach and learn the English language around the globe, this area of education is riddled with mediocrity (Khamkhien, 2010, 2011; Sabokrouh, 2014). Thus, research is needed to explore why there is often little improvement in EFL skills in non-Western contexts (Nasrollahi & Barjasteh, 2013; Sabokrouh, 2014).

Thailand has an educational system that relies heavily on NNESTs to teach EFL to the kingdom’s almost 20 million Thai students (Bureau of International Cooperation, 2008; Scholz, 2014). However, in spite of decades of reform, many Thai students have seen little improvement in their EFL skills (Baker, 2012; Fry & Bi, 2013; Hallinger & Lee, 2011; Khamkhien, 2010, 2011; Klanrit & Sroinam, 2012; Pattanapichet & Chinokul, 2011). Thai instructional practices and pedagogical strategies have changed little over time (Hallinger & Bryant, 2013; Morrison, 2009). In fact, Hallinger and Bryant (2013) found that ten years after Thailand’s most comprehensive educational reform initiative, which was intended to “create a more active learning environment for pupils,” (p. 401), only one-third of the teachers had “actively engaged these reforms in their teaching practices” (p. 406). If Thai teaching practices remain unchanged,
then teacher effectiveness could be at risk, and as Beck (2014) succinctly explained, “Teacher
effectiveness is at the core of student success” (p. 1). Thus, there is a compelling need to
investigate individual teacher factors that can positively affect EFL teaching and learning
practices in the Thai context.

While there are numerous variables that contribute to teaching and learning EFL, teacher
self-efficacy, which is “the belief that there is a substantive link between what the teacher does
and what positive outcomes accrue as a function of those actions” (Nunn & Jantz, 2009, p. 605),
is one factor that has rarely been studied in relation to EFL teaching and learning practices in
Thailand (Best, 2014). In other contexts, numerous studies have linked a strong sense of teacher
self-efficacy with multiple positive outcomes, such as student achievement (Beck, 2014;
Caprara, Barbaranelli, Steca, & Malone, 2006; Chong, Klassen, Huan, Wong, & Kates, 2010;
Goddard, Hoy, & Woolfolk Hoy, 2000; Klassen & Tze, 2014; Norton, 2013; Wossenie, 2014a,
2014b; Zundeans-Fraser & Lancaster, 2012); positive academic climate (Barr & Clark, 2012;
Chong et al., 2010; Hoy & Woolfolk, 1993); motivation to teach (Huangfu, 2012); persistence in
teaching (Klassen & Chiu, 2011; Norton, 2013; Oakes, Lane, Jenkins, & Booker, 2013; Skaalvik
& Skaalvik, 2010); and increased job satisfaction (Canrinus, Helms-Lorenz, Beijaard, Buitink, &
Hofman, 2012; Caprara et al., 2006; Collie, Shapka, & Perry, 2012; Guglielmi, Simbula,
Schaufeli, & Depolo, 2012; Moè, Pazzaglia, & Ronconi, 2010). Since a strong sense of teacher
self-efficacy has been found to promote many benefits for both teachers and students in a variety
of teaching and learning settings, exploring this construct in the Thai context may provide insight
into factors that increase teacher self-efficacy, improve English language teaching proficiency,
and inform innovative educational reforms for the kingdom’s overall education system (Best,
2014).
Since there is only a limited number of studies investigating teacher self-efficacy among NNESTs of EFL in the Thai context, it may seem logical to situate this study in an urban center with higher concentrations of English-speaking expatriates (Bangkok, Chiang Mai, or Chiang Rai) because the level of English proficiency among the NNESTs of EFL would likely be higher. However, according to Lounkaew (2013) a significant urban–rural student achievement differential exists in Thailand with rural schools lagging behind those in urban settings. Also, given that 44.48 million people live in rural areas compared to only 23.43 million in urban settings, the majority of education in Thailand occurs in rural settings (NationMaster, 2012). Thus, in order for this study to reflect the responses of teachers in this majority, it is vital for research to investigate the personal teacher characteristics that predict teacher self-efficacy among Thai NNESTs who teach EFL in a rural context rather than an urban one. Background information, the study rationale, problem and purpose statements, research questions, hypotheses, variables, definitions, and a research summary follow.

**Teacher Self-Efficacy: A Powerful Construct Necessitating Further Research**

According to Knoblauch and Chase (2015), “More than three decades of research has produced compelling evidence that teachers' sense of efficacy matters, for both teachers and their students” (p. 104). A positive association between teacher self-efficacy and numerous positive outcomes is evidenced in the literature across diverse contexts (Akbari & Tavassoli, 2014; Knoblauch & Chase, 2015; Mateo-Gaxiola, 2014; Wossenie, 2014b). For example, Wossenie’s (2014b) study not only found a strong link between teacher self-efficacy beliefs and higher levels of student achievement in English language acquisition classes in Ethiopia, but also highlighted teacher self-efficacy’s influence on teachers’ instructional practices, enthusiasm, commitment, and teaching behaviors. Chong et al., (2010) found that teacher self-efficacy facilitated a positive
academic climate in a Singaporean middle school context, while Zundens-Fraser and Lancaster’s (2012) and Swackhamer, Koellner, Basile, and Kimbrough’s (2009) studies both pointed to the benefits of teacher self-efficacy in professional development and in content knowledge in an Australian and American context, respectively. Norton’s (2013) study, also situated in an American context, further reported a positive association between teacher self-efficacy and persistence in teaching.

In addition to investigating positive associations between teacher self-efficacy and favorable teaching and learning outcomes, other studies have explored trends in teacher self-efficacy research, as well as unique facets of this construct. For example, Klassen, Tze, Betts, and Gordon (2011) provided an extensive literature review comparing teacher self-efficacy research from 1998 to 2009 with research conducted during 1986 to 1997. Klassen et al. (2011) found that there was a drastic increase in the number of teacher efficacy studies in general, as well as an increase in collective teacher self-efficacy in particular. Perhaps more importantly, Klassen et al. (2011) highlighted the need for more domain-specific research, such as studies exploring means to measure and models to predict teacher self-efficacy, as well as the need for even more “internationalization” (p. 33) of teacher self-efficacy research.

Another key area of teacher self-efficacy research focuses on the link between teachers’ psychological characteristics and their sense of teacher self-efficacy. For example, through a meta-analysis of the literature Klassen and Tze (2014) found a positive association between teacher self-efficacy and psychological characteristics. Moreover, others have explored the link between teacher self-efficacy and emotional intelligence in such Middle Eastern contexts as Iran and Israel (Goroshit & Hen, 2014; Hen & Goroshit, 2013; Moafian & Ghanizadeh, 2009; Rastegar & Memarpour, 2009), in an Italian context (Di Fabio & Palazzeschi, 2008), as well as
in an Ethiopian context (Wossenie, 2014a, 2014b). Irrespective of the context, all of these studies indicated a positive association between teacher self-efficacy and the emotional well-being of teachers. Without question teacher self-efficacy is a “powerful construct, related to teachers’ motivation and behavior in the classroom as well as contributing to important student outcomes” (Tschannen-Moran & Johnson, 2011, p. 751).

While teacher self-efficacy has been widely researched in some areas, in other contexts there is a dearth of study. Karimvand (2011) identified this lack of research: “Teacher self-efficacy has not been much focused on in research in the realm of ELT (English Language Teaching)” (p. 173). Likewise, Sabokrouh (2014) explained, “In the field of TESOL, inquiry into teachers’ sense of efficacy is extremely scarce” (p. 66). This lack of teacher self-efficacy research in the language teaching setting was further highlighted by Raoofi, Tan, and Chan (2012), who conducted an extensive review of empirical literature related to self-efficacy specifically in foreign or second language contexts from 2003 to 2012. This review revealed only 32 studies had investigated either the antecedents to teacher self-efficacy (e.g., strategies, sources, contexts, styles) or the subsequent effects of teacher self-efficacy (such as student achievement and learning). There were only an average of 3.5 studies in this area each year over the nine years of Raoofi et al.’s (2012) review of literature. Since Raoofi et al.’s (2012) review, the frequency of teacher self-efficacy studies in some EFL contexts has slowly increased (Akbari & Tavassoli, 2014; Cheung, Bender, & Lonner, 2013; Nejati, Hassani, & Sahrapour, 2014; Raoofi et al., 2012; Sabokrouh, 2014; Wossenie, 2014a; 2014b), which indicates that the need for and importance of teacher self-efficacy studies in the EFL context is becoming more widely recognized in some contexts (Cheung et al., 2013; Raoofi et al., 2012; Sabokrouh, 2014; Wossenie, 2014a). Perhaps this slight increase reflects Sabokrouh’s (2014) claim, “It is now
understood that teachers’ efficacy beliefs have profound effects on the educational process” (p. 66).

**Background and Conceptual Framework**

The construct of teacher self-efficacy is rooted in Bandura’s (1977, 1997) social cognitive theory (SCT), which holds to the premise that humans are capable of intentional thought and action. Thus, humans don’t merely respond to stimuli (Bandura, 1977, 1982, 1989a, 1989b, 1997, 2001). Beyond this capacity for intentional action is the more important premise that people’s perceptions rather than their actual abilities “greatly influence how one’s potential is realized and utilized” (Karimvand, 2011, p. 171). Simply stated, perceptions of self-efficacy impact every facet of the human experience (Mateo-Gaxiola, 2014). SCT is further situated in the premise of *reciprocal determinism*, which recognizes the interplay between and among the environment, personal factors, and individual behaviors (Bandura, 1997). Given this connection, “Self-efficacy beliefs are believed to mediate relationships between knowledge and behaviours while interacting within environmental contexts” (Dellinger, Bobbett, Olivier, & Ellet, 2008, p. 752). Based upon this premise, Bandura (1977) defined *self-efficacy* as “Belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3).

This triad of knowledge, behavior, and the environment is highlighted through four key influences on beliefs of self-efficacy: vicarious experiences, verbal persuasion, physiological arousal, and mastery experience (Bandura, 1997). The most important of these four influences is mastery experience, which is the notion that successes raise individuals’ expectations and affirm efficacy expectations (Eslami & Fatahi, 2008). If a teacher was successful in the past, she or he will likely expect to succeed in the present. Mastery experiences simultaneously shield self-
efficacy beliefs from negative impacts (e.g., successfully living abroad in an English-speaking
country may buffer a teacher’s perception of his or her teaching performance when the students
make low scores on an English exam).

Vicarious experiences also influence self-efficacy as they relate to the impact that live or
symbolic models have on individuals (e.g., English teachers at a school using English to
communicate with each other may motivate those observing to practice English also). “Seeing
people similar to oneself succeed by sustained effort raises observers’ beliefs that they similarly
possess the capabilities to master comparable activities required to succeed” (Karimvand, 2011,
p. 171).

Verbal persuasion involves verbal interaction including suggestions, self-instruction, and
interpretive treatments (e.g., positive or negative messages about one’s performance) (Bandura,
1977). These positive verbal messages may help to combat negative self-talk and self-doubt.
Verbal persuasion may be one teacher praising another teacher for a successful English language
camp, and from this positive verbal input, the English teacher may gain a sense of confidence,
which could increase teacher self-efficacy beliefs. On the other hand, negative verbal messages
(criticism) may also result in waning perceived teacher self-efficacy.

The fourth influence on self-efficacy that Bandura (1977, 1997) identified is
physiological arousal, which includes biofeedback cues, such as sweaty palms or rapid breathing,
symbolic desensitization, and exposure (e.g., feeling anxious prior to a test). Again, these
physiological responses can either promote or impede self-efficacy.

Grounded in the broader construct of self-efficacy is the more specific notion of teacher
self-efficacy. Numerous studies have attempted to define and quantify this construct (Ashton,
Buhr, & Crocker, 1984; Bandura, 1977; Duffin French, & Patrick, 2012; Gibson & Dembo,
1984; Enochs & Riggs, 1990; Riggs & Enochs, 1990; Tschannen-Moran & Woolfolk Hoy, 2001). However, since the instrument used in this present study was translated from Tschannen-Moran and Woolfolk Hoy’s (2001) instrument, their definition was most appropriate for this study; it states that teacher self-efficacy is the teacher’s “judgment of his or her capabilities to bring about desired outcomes of student engagement and learning” (p. 783). This present study’s model to predict teacher self-efficacy was based upon Bandura’s (1977, 1997) four constructs (vicarious experiences, verbal persuasion, physiological arousal, and mastery experiences).

The predictor variables in this study are directly linked to these sources of self-efficacy. For example, Duffin et al.’s (2012) findings succinctly demonstrate the connection between SCT’s efficacy sources and efficacy beliefs proposed by Bandura (1997). Duffin et al. (2012) found, “From these efficacy sources, individuals gain important information that influences not only the formation of their competency beliefs, but also impacts their evaluation of the tasks to be completed” (p. 832). Teachers whose college major was English, who had spent time abroad in either an English or non-English speaking country, or who had spent more years in the teaching profession with higher terminal degrees have been shown to demonstrate a greater incidence of efficaciousness, likely because of an increase of mastery and vicarious experiences, as well as heightened physiological states (e.g. being forced to navigate abroad with limited language skills) and verbal persuasion (Amuzie & Winke, 2009; Oakes et al., 2013).

Similarly, the variable, perceived English proficiency, reflects both mastery experiences and vicarious experiences. When teachers personally experience greater mastery over various English tasks, their perceived English proficiency has been found to improve (Chacón, 2002, 2005; Sabokrouh, 2014; Yilmaz, 2011). This improved perceived proficiency then facilitates a greater mastery over various English-teaching tasks, which influences the teachers’
efficaciousness in teaching English (Sabokrouh, 2014). In much the same way when teachers watch others, the observing teachers vicariously may feel a greater confidence to attempt similar tasks in their own classrooms.

Based upon prior empirical research and connections to SCT’s sources of self-efficacy, the model proposed in this study includes the following variables: perceived proficiency in English, which was investigated in Iran (Akbari & Tavassoli, 2014; Zakeri & Alavi, 2011), Venezuela (Chacón, 2005), and Turkey (Yilmaz, 2011); college major, which was explored as an influence on teacher self-efficacy in Iran (Akbari & Tavassoli, 2014) and in Hong Kong (Lam, 2012); time spent in an English speaking country, which was investigated among international students in America (Amuzie & Winke, 2009); time spent abroad (Amuzie & Winke, 2009); longevity as a teacher, which has been studied in China (Cheung, 2008), Spain (de la Torre Cruz & Arias, 2007), Iran, (Karimvand, 2011), Canada (Klassen & Chiu, 2010), and Singapore (Yeo, Ang, Chong, Huan, & Quek, 2008); longevity in English teaching (Karimvand, 2011; Norton, 2013); highest degree attained (Hoy & Woolfolk, 1993; Oakes et al., 2013); present grade taught, which has been investigated in Iran (Akbari & Tavassoli, 2014), Turkey (Eslami & Fatahi, 2008), and America (Fives & Buehl, 2010; Wolters & Daugherty, 2007); as well as instructional purpose, which to this author’s best knowledge has not yet been studied in relation to teacher self-efficacy in EFL contexts. Empirical research supports that these factors not only explain variance in teacher self-efficacy among a variety of populations and contexts, but also describe the benefits of promoting heightened perceptions of teacher self-efficacy (Alvarez-Nunez, 2012; Mojavezi & Tamiz, 2012; Wossenie, 2014b). These findings “Foster hope that similar results are possible in other cultural and linguistic contexts” (Wossenie, 2014b, p. 227). Table 1 below
shows the relationship between the predictor variables in this study and Bandura’s (1977) postulated sources of self-efficacy.

Table 1

*Predictor Variables Grounded in SCT*

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>SCT Source of Teacher Self-efficacy</th>
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<tbody>
<tr>
<td>Perceived English proficiency</td>
<td>Mastery experience</td>
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<tr>
<td></td>
<td>Vicarious experience</td>
</tr>
<tr>
<td>College major</td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
</tr>
<tr>
<td>Time spent in an English speaking country</td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
</tr>
<tr>
<td></td>
<td>Social persuasion</td>
</tr>
<tr>
<td></td>
<td>Physiological states</td>
</tr>
<tr>
<td>Time spent abroad</td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
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<tr>
<td></td>
<td>Social persuasion</td>
</tr>
<tr>
<td></td>
<td>Physiological states,</td>
</tr>
<tr>
<td>Longevity as a teacher</td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
</tr>
<tr>
<td>Longevity in English teaching</td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
</tr>
<tr>
<td>Highest degree attained</td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
</tr>
<tr>
<td>Present grade level taught</td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Social persuasion</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
</tr>
<tr>
<td>Instructional purpose</td>
<td>Social persuasion</td>
</tr>
<tr>
<td></td>
<td>Mastery experience</td>
</tr>
<tr>
<td></td>
<td>Physiological states</td>
</tr>
</tbody>
</table>
As applied to this present study, SCT holds that the predictor variables (the individual teacher characteristics) should influence the criterion variable (teacher self-efficacy) because each of these predictor variables directly relates to at least one or more of the four sources of influence on teacher self-efficacy suggested by SCT.

**Problem Statement**

Studies related to English language teaching in Thailand (Hayes, 2008; Morrison, 2009; Noomura, 2013; Pimpa, 2005; Potcharapanpong & Thongthew, 2010; Prapphal, 2008; Puntumasen, 2004; Vanichakorn, 2003; Watcharapunyawong & Usaha, 2013; Watson, 1981; Wichadee, 2011a, 2011b) and English language learning in Thailand (Khamkhien, 2011; Pattanapichet & Chinokul, 2011; Sokal, 2010; Srichanyachon, 2011; Sucaromana, 2013; Wanarom, 2012) have investigated topics ranging from teaching speaking (Khamkhien, 2010) and gaps in oral communication skills (Pattanapichet & Chinokul, 2011) to computer-assisted language learning (Khamkhien, 2012) and language assessment (Prapphal, 2008). However, as Khamkhien (2010) explained, “Although substantial efforts have been made to the reform of English language curriculum in Thailand, Thai learners’ English performance does not meet the standard required” (p. 185). Many others have documented that Thailand’s students demonstrate lagging English proficiency based upon national tests and standards (Baker, 2012; Fry & Bi, 2013; Hallinger & Lee, 2011; Khamkhien, 2010, 2011; Klanrit & Sroinam, 2012; Morrison, 2009; Pattanapichet & Chinokul, 2011), as well as in comparison to other nationalities. A recent survey indicated that Thais ranked sixty-two out of seventy nationalities in English proficiency (EF English Proficiency Index, 2015). Given the identified benefits of strong teacher self-efficacy in general (Barr & Clark, 2012; Chong et al., 2010; Collie et al., 2012; Huangfu, 2012; Norton, 2013; Zundeans-Fraser & Lancaster, 2012) and the positive relationship between teacher
self-efficacy and student achievement in the EFL context (Alvarez-Nunez, 2012; Mojavezi & Tamiz, 2012; Wossenie, 2014a, 2014b), teacher self-efficacy warrants investigation as a factor that may influence higher levels of student achievement among Thai EFL students.

Granted, even though Jaengaksorn, Ruengtrakul, and Piromsombat (2015) recently sought to validate an instrument to measure teacher self-efficacy in this context, their study did not aim to develop a model to predict teacher self-efficacy in the Thai context. Likewise, Best’s (2014) recent study was also conducted in a Thai context; however, this study used an English language version of the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) in an urban context rather than developing a Thai language version for use in a rural context. Best’s (2014) study did not find an association between the self-perceived English proficiency and self-reported teaching efficacy levels of the elementary Thai teachers; the small sample size (30 participants) and overall purpose (determining elementary teachers’ self-efficacy scores and English proficiency scores) still leaves a significant gap in teacher self-efficacy research in this context. Simply stated, since thirty years worth of research has shown the importance of teacher self-efficacy (Knoblauch & Chase, 2015), this topic of investigation should be more extensively applied to the Thai context. Specifically, factors that can contribute to or predict teacher self-efficacy should be explored. If empirical research could identify ways to predict teacher self-efficacy, then NNESTs of EFL in Thailand and perhaps neighboring Asian countries could apply innovative strategies for promoting teacher self-efficacy in order to bring about higher levels of student achievement, as well as other positive outcomes. Thus, the problem is a lack of teacher self-efficacy research in the rural Thai context, the absence of a predictive model in this context, and an incomplete understanding of influences on teacher self-efficacy in the EFL context in general and in the Thai context in particular.
Purpose Statement

The purpose of this quantitative, predictive correlation study is to address an area lacking research by examining Bandura’s (1977, 1997) SCT as it relates to teacher characteristics (the predictor variables: perceived English proficiency, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, grade level taught, and instructional purpose) and teacher self-efficacy (the criterion variable) among Thai first through twelfth grade NNESTs of EFL in Nan province, Thailand. Using SCT as a framework, this study seeks to develop a model to predict perceptions of teacher self-efficacy in the rural Thai context so that means to improve teacher self-efficacy among NNESTs can be developed. Each variable is defined and described in detail below in the Identification of Key Variables section.

The Significance of the Study

This study is significant as it contributes to the knowledge base of SCT (Bandura, 1977, 1997) and empirical research in the Thai context. The results of this Thai-based study could provide further evidence to support Bandura’s (1977, 1997) explanation of sources of self-efficacy, as well as the “magnitude and generality of these sources of information on teachers’ efficacy beliefs” (Knoblauch & Chase, 2015, p. 104) in an Asian context. As Bandura (1977) pointed out, people’s beliefs and attitudes about their ability to successfully accomplish a task influence their behaviors. Thus, this study may not only extend SCT theory, but it may also provide empirical data regarding expanding the “existing evidence of the applicability of the TSES in a cultural context different from that for which it was originally developed” (Tsigilis, Grammatikopoulos, & Koustelios, 2007, p. 634).
This study’s practical significance cannot be understated. According to Bruner, Sinwongsuwat, and Radic-Bojanic (2015), in Thailand, “English is the language of academic advancement, social and economic growth, tourism industry, science and technology, the Internet, international businesses, and international legal contexts” (p. 11). Thus, given that Thai NNESTs’ sense of teacher self-efficacy may positively affect instruction in the Thai context (Best, 2014; Unyakiat, 1991; Vibulphol, 2004), that Thailand has a compelling need for excellent English education, and based upon the trend of slow progress, understanding Thai teachers’ sense of teacher self-efficacy may provide further insight into ways to strengthen these beliefs, which may benefit both the teachers and the students (Beck, 2014; Best, 2014; Caprara et al., 2006; Chong et al., 2010; Klassen & Tze, 2014; Mojavezi & Tamiz, 2012). Moreover, insights from this study could inform specific reforms to foster teacher self-efficacy of both pre-service and in-service NNESTs of EFL (Bamanger & Gashan, 2014). As a result, teachers may use increased critical thinking skills and be more self-reflective, leading to improved perceived English language skills, as well as stronger English teaching skills (Best, 2014; Zangenehvandi, Farahian, & Gholami, 2014). All of these benefits may promote student achievement and may address mediocre English language proficiency in Thailand (Best, 2014). Finally, as the Association of Southeast Asian Nations (ASEAN) coalition is comprised of ten countries whose representatives use English to communicate (Kirkpatrick, 2010; Okudaira, 1999; Ngowananchai, 2013), results from this present study could also benefit other countries in the coalition that are also facing the need for improved English language instruction and student proficiency.

**Research Question and Hypotheses**

As there is one criterion variable (teacher self-efficacy) and nine predictor variables (each of the individual characteristics), one primary research question focuses on the linear
combination of all the predictor variables. This main research question and the corresponding research and null hypotheses for the linear combination of variables and then each predictor variable follow:

**RQ1:** Can perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose (the predictor variables) of Thai NNESTs of EFL predict teachers’ sense of self-efficacy (the criterion variable) as measured by the Thai language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001)?

**H₁₁:** There is a statistically significant, predictive relationship between the individual characteristics (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose) of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai-language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀₁:** There is no statistically significant, predictive relationship between the individual characteristics (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose) of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai-language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁₂:** There is a statistically significant, predictive relationship between the perceived proficiency in English, as measured by the Thai language version of Chacón’s (2005) Self-reported English Proficiency Scale, of Thai NNESTs of EFL and teacher self-efficacy as
measured by the Thai-language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀2**: There is no statistically significant, predictive relationship between the perceived proficiency in English, as measured by the Thai language version of Chacón’s (2005) *Self-reported English Proficiency Scale*, of Thai NNESTs who teach EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁3**: There is a statistically significant, predictive relationship between the college major (English education or not English education), as measured by a self-report questionnaire, of Thai NNESTs who teach EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀3**: There is no statistically significant, predictive relationship between the EFL college major (English education or not English education), as measured by a self-report questionnaire, of Thai NNESTs who teach EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁4**: There is a statistically significant, predictive relationship between the time spent abroad, defined as time spent outside of Thailand and operationalized by a self-report in months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀4**: There is no statistically significant, predictive relationship between the time spent abroad, defined as time spent outside of Thailand and operationalized by a self-report in months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.
**H15**: There is a statistically significant, predictive relationship between time spent in an English speaking country, defined as time spent in a country with English as its official first language and operationalized by a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H05**: There is no statistically significant, predictive relationship between the time spent in an English speaking country, defined as time spent in a country with English as its official first language and operationalized by a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H16**: There is a statistically significant, predictive relationship between the longevity teaching, defined by the number of years inclusive of the present year with the official government title of “teacher” and operationalized via a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H06**: There is no statistically significant, predictive relationship between longevity teaching, defined by the number of years and months inclusive of the present month with the official government title of “teacher” and operationalized via a self-report in years and months of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H17**: There is a statistically significant, predictive relationship between the longevity as an English teacher, defined by the number of years and months inclusive of the present month with the official title of “English teacher” and operationalized via a self-report in both years and
months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

\(H_07\): There is no statistically significant, predictive relationship between the longevity as an English teacher, defined by the number of years and months inclusive of the present month with the official title of “English teacher” and operationalized via a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

\(H_{18}\): There is a statistically significant, predictive relationship between the highest degree attained, defined by the highest degree or certificate of record and operationalized via a self-report, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

\(H_{08}\): There is no statistically significant, predictive relationship between highest degree attained, defined by the highest degree or certificate of record and operationalized via a self-report, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

\(H_{19}\): There is a statistically significant, predictive relationship between the present grade level taught, defined by current grade-level(s) of record and operationalized via a self-report of all current grade levels of record of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

\(H_09\): There is no statistically significant, predictive relationship between the present grade level taught, defined by the current grade-level(s) of record and operationalized via a self-report of all current grade levels of record of Thai NNESTs of EFL and teacher self-efficacy as
measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁₀**: There is a statistically significant, predictive relationship between the instructional purpose operationalized via a self-report of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀₁₀**: There is no statistically significant, predictive relationship between the current instructional purpose operationalized via a self-report of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**Identification of Key Variables**

The criterion variable for this study, teacher self-efficacy, is defined as “Teachers’ beliefs in their ability to organize and execute courses of action necessary to bring about desired results” (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998, p. 202). Teacher self-efficacy is operationalized by the participants’ scores on the Thai-language version of Teachers’ Sense of Efficacy Scale--Short Form (TSES-SF) (Tschannen-Moran & Woolfolk Hoy, 2001), which was created with permission from the original authors as part of this study. Each predictor variable was included in this study based upon empirical evidence regarding each variable’s potential influence on teacher self-efficacy: perceived proficiency in English (Chacón, 2005; Eslami & Fatahi, 2008; Sabokrouh, 2014; Yilmaz, 2011; Zakeri & Alavi, 2011), college major (Ghasemboland & Hashim, 2013a; Lam, 2012), time spent in an English speaking country (Amuzie & Winke, 2009; Swackhamer et al., 2009), time spent abroad (Amuzie & Winke, 2009), longevity as a teacher (Atta, Ahmad, Ahmed, & Ali, 2012; Ghasemboland & Hashim,
longevity in English teaching (Ghasemboland & Hashim, 2013a; Norton, 2013), highest degree attained (Ghasemboland & Hashim, 2013b; Hoy & Woolfolk, 1993; Lam, 2012), present
grade-level taught (Eslami & Fahati, 2008; Ghasemboland & Hashim, 2013a), and instructional purpose (Ngowananchai, 2013). The predictor factors are defined below.

The first predictor variable in this study, perceived proficiency in English, was defined as the participants’ self-reports concerning their English language proficiency in listening,
speaking, reading, writing, and culture. Several studies have investigated the link between
teacher self-efficacy and English language proficiency (Chacón, 2005; Sabokrouh, 2014; Yilmaz, 2011; Zakeri & Alavi, 2011); however, while each of these studies noted a positive
relationship between English language proficiency and teacher self-efficacy, they varied in how they measured English language proficiency. For example, Sabokrouh (2014) used a revised
version of a Test of English as a Foreign Language (TOEFL); Zakeri and Alavi (2011) used Cambridges’s Teaching Knowledge Test for English Speakers of Other Languages (ESOL), while Chacón (2005) and Yilmaz (2011) chose to operationalize proficiency through a self-reported
measure. Given that one’s perception of ability has a powerful influence on self-efficacy beliefs, this self-evaluative measure of perceptions rather than actual proficiency is most appropriate for this study. Thus, English language proficiency is operationalized via participants’ self-reported
measures on the Thai language version of Chacón’s (2005) Self-Reported English Proficiency scale that was developed for this study. This scale asks the participants to respond to sixteen
items based upon a six-point Likert-type scale ranging from “the least ability” (1) to “the greatest ability” (6).
The second predictor variable, college major (Lam, 2012), was defined as the self-reported undergraduate degree of record to avoid confusion in the event that the participants changed their majors while pursuing their degrees. This variable will be treated as a “dummy variable” (Warner, 2013) and will be coded as (a) 1 = English education major and (b) 0 = not an English education major (Chacón, 2005).

The third predictor variable, time spent abroad, was defined as the total (cumulative) length of time spent outside of Thailand (Amuzie & Winke, 2009). While this variable was operationalized via a self-report of time in months and years, its importance to this study was reflected in Amuzie and Winke’s (2009) investigation, which used both quantitative and qualitative methods to investigate changes in learners’ beliefs based upon experiences abroad. As their study suggested, learners’ beliefs were significantly influenced by cross-cultural contexts. While Amuzie and Winke (2009) specifically investigated students who studied English abroad, Chacón’s (2005) study broadened this notion and included traveling or studying abroad. This present study also included the broader notion, time spent abroad, as the potential influences on learner beliefs are similar. Another key distinction is in quantifying this variable. Chacón’s (2005) study treated it as a binary variable (yes or no), but Amuzie and Winke (2009) assessed the effects of time spent abroad via a 10-point Likert-type scale. As this study was interested in the predictive value of time spent abroad, a more precise quantitative measure is warranted. Thus, a self-report of months and years was used to quantify this variable.

The fourth predictor variable, time spent in an English speaking country (Amuzie & Winke, 2009; Chacón, 2005), was defined as the total accumulative amount of time spent in a country with English as its national language measured via a self-report of time in months and years. As mentioned above, neither Amuzie and Winke’s (2009), nor Chacón’s (2005) study
required participants to report an exact duration of time; however, in order to ensure robust statistical analysis, this study used the actual months spent in an English-speaking country to operationalize this variable.

The fifth predictor variable, longevity in teaching, was defined as the amount of time inclusive of the current academic year (reported in years and months) that the participant held the official government title “teacher” in a Thai government school. While some studies (Atta et al., 2012; Wolters & Daugherty, 2007) investigated the concept teaching experience, defining and quantifying “experience” is difficult. For example, teaching multiple grade levels, teaching exceptional students, teaching diverse subjects, etc. are all forms of “experience” that do not reflect longevity. Thus, to clarify and objectify this construct for this study, longevity as a teacher, based solely on the duration of time, was measured using a self-report of the time in years and months (Woolfolk Hoy & Burke Spero, 2005).

The sixth predictor variable, longevity in teaching English, was defined as the amount of time inclusive of the present academic year (reported in years and months) that the participant held the official title “English teacher” in a Thai government school based upon appropriate credentials. While other studies have investigated teacher longevity in relation to teacher self-efficacy, the manner in which these researchers determined the construct “English teacher” was not discussed. As such, the above definition was used based upon its consistency with Thai conceptions of an English teacher. This variable will be measured using a self-report of the time in years (Eslami & Fatahi, 2008; Woolfolk Hoy & Burke Spero, 2005).

The seventh predictor variable, highest degree attained, was defined as the self-reported level of education indicated by selecting from one of the following choices: less than a bachelor’s degree, a bachelor’s degree, a master’s degree, or a doctorate degree.
The next predictor variable, present grade-level taught, was defined as the self-reported grade-level(s) presently taught as indicated by selecting one or more of the following grade levels ranges: first (ป. 1) to third (ป. 3), fourth (ป. 4) to sixth (ป. 6), seventh (ม. 1) to ninth (ม. 3), and 10th (ม. 4) to 12th (ม. 6). As NNESTs of EFL in Thailand may teach multiple grade-levels simultaneously, participants were instructed to check all grade levels ranges that apply. A selection of each grade range was analyzed using a binary dummy variable. While a negative response (not teaching that level) was coded as “0,” a positive response (presently teaching that level) was coded as “1.”

The last predictor variable, instructional purpose, was defined as the self-reported assessment of the participants’ primary instructional purpose (Ngowananchai, 2013). Although Ngowananchai’s (2013) study explored one instructional purpose (conversation), no link to teacher self-efficacy was made; thus, there was no precedence for ways to operationalize this construct. As such, to maintain consistency within the survey, a Likert-type scale was utilized to operationalize this variable via the participants’ rank-ordered responses (“1” indicating the least amount of instructional time spent and “4” indicating the greatest amount of instructional time spent) to the following question and choices. What is the main purpose for which you are teaching your students English? (1) so that the students can correctly pronounce English, (2) so that the students can correctly use English grammar, (3) so that the students can pass English exams, or (4) so that the students can communicate with native English speakers.

It is important to note that two additional variables, emotional intelligence and gender, have been studied in correlation with teacher self-efficacy in other contexts (Batdi, 2014; Cheung, 2006; Gavora, 2011; Rastegar & Memarpour, 2009). For instance, Rastegar and Memarpour (2009) used Schutte et al.’s (1998) Emotional Intelligence Scale in Turkey; however,
given the newness of this concept in the Thai context and the absence of a validated instrument for measuring emotional intelligence of NNESTs in the rural Thai context, this variable was excluded from the present study’s model. A qualitative, phenomenological study describing and defining this construct is warranted prior to any attempt to quantitatively measure emotional intelligence and its possible association with teacher self-efficacy.

Similarly, although other studies have investigated gender in relationship to teacher self-efficacy (Batdi, 2014; Cheung, 2006; Gavora, 2011; Ghasemboland & Hashim, 2013b; Karimvand, 2011; Nejati et al., 2014), given the contrasting findings regarding the significance of gender in predicting teacher self-efficacy, its influence is still unclear. The unique view on the issue of gender found in Thai culture further complicates including gender in this study. In many Thai circles there is a distinction between male, female, and the “third sex” (“phet tee sam”), which is deemed in Thai as the “second kind of female” (ผู้หญิงประเภทที่สอง) (Vasey & Vanderlaan, 2008; Winter, 2006). Given this cultural perception of gender in Thailand, the inclusion of gender as a variable in this study was beyond the scope of this study. However, gender-related data was collected as basic demographic information and included “a check on transgender status” (Winter, 2006, p. 50) of the participants. The participants were asked to select from three choices: male, female, and other. A selection of other also asked the participants to fill in the blank with their perception of their gender if it didn’t fall into male or female categories. Thus, even though gender was not included in the predictive model, a discussion of this variable is included in Chapter Five.

The predictor variables are visually represented in Table 2 below, which indicates the names of each variable in this study, the source of influence according to SCT, the type of
variable, and each variable’s level of measurement. Also, Figure 1 below provides a concise model of how the nine predictor variables may be combined to predict teacher self-efficacy.
Table 2

*Variables of Interest at a Glance*

<table>
<thead>
<tr>
<th>Predictor Variable</th>
<th>SCT’s Source of TSE</th>
<th>Type</th>
<th>Level of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Major</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived English proficiency</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent abroad</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social persuasion</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Physiological states</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent abroad in an English context</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social persuasion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physiological states</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longevity as a teacher</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longevity in English teaching</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Continuous</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest degree attained</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Ordinal:</td>
</tr>
<tr>
<td></td>
<td>Vicarious experience</td>
<td></td>
<td>Level 1 = &lt; BA</td>
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<td></td>
<td></td>
<td></td>
<td>Level 2 = BA</td>
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<td></td>
<td></td>
<td></td>
<td>Level 3 = MA</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Level 4 = Doctorate</td>
</tr>
<tr>
<td>Present grade-level taught</td>
<td>Social persuasion</td>
<td>Predictor</td>
<td>Nominal</td>
</tr>
<tr>
<td></td>
<td>Physiological states</td>
<td></td>
<td>Level 1 = Grade 1-3</td>
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<td></td>
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<td>Level 2 = Grade 4-6</td>
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<td>Level 3 = Grade 7-9</td>
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<td>Level 4 = Grade 10-11</td>
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<tr>
<td>Instructional Purpose based on time spent</td>
<td>Mastery experience</td>
<td>Predictor</td>
<td>Ordinal</td>
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<td></td>
<td>Social persuasion</td>
<td></td>
<td>(1 least 4 most time):</td>
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<tr>
<td></td>
<td>Physiological states</td>
<td></td>
<td>Pronunciation, grammar,</td>
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<td></td>
<td></td>
<td></td>
<td>testing, communication</td>
</tr>
<tr>
<td>Perceived teacher self-efficacy</td>
<td>Social cognitive theory</td>
<td>Criterion</td>
<td>Continuous</td>
</tr>
</tbody>
</table>
Perceived English Proficiency

College Major

Longevity as an English Teacher

Time Spent Abroad

Longevity as a Teacher

Highest Degree Attained

Time Spent Abroad in an English-speaking Country

Present Grade-level Taught

Instructional Purpose

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**Figure 1.** Proposed predictive model of teacher characteristics that contribute to perceptions of Thai NNESTs of EFL teacher self-efficacy.
Definitions

Below are definitions of the terms pertinent to this present study:

1. *English as a Foreign Language (EFL)* - EFL programs are English language programs of studies in countries where English is not the common or official language (International Teacher Training Organization, 2014).

2. *Mastery Experiences* - Mastery experiences are defined by Bandura (1994) as “Experience in overcoming obstacles through perseverant effort” (p. 71).

3. *Nonnative English Speaking Teacher (NNEST)* - A teacher of the English language who has learned English as a second, foreign, or additional language rather than as his or her first language (Hayes, 2009).

4. *Nonnative English Speaking Teachers (NNESTs)* - Teachers of the English language who have learned English as a second, foreign, or additional language rather than as their first language (Hayes, 2009).

5. *Perceived English Proficiency* - The participants’ self-assessment of their English ability in listening, speaking, reading, writing, and culture. This concept is based upon and operationalized by Chacón’s (2005) self-reported English proficiency scale.

6. *Perceived Self-efficacy* - People’s beliefs about their capabilities to produce intended effects (Bandura, 1994).

7. *Physiological Changes* - This concept includes the “somatic and emotional states” (Bandura, 1994, p. 72) (mood, stress, negative or positive emotions) considered in judging one’s self-efficacy (Bandura, 1994).

8. *Self-efficacy* - “Beliefs in one’s own capability to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p. 3).
9. **Social Persuasion** - A “way of strengthening people’s beliefs that they have what it takes to succeed” (Bandura, 1994, p. 71). This includes the verbally “persuasive boosts” (Bandura, 1994, p. 72) based upon affirmation from others.

10. **Teacher Self-efficacy (TSE)** - “Teachers’ beliefs in their ability to organize and execute courses of action necessary to bring about desired results” (Tschannen-Moran et al., 1998, p. 202).

11. **Vicarious Experiences** – Vicarious experiences are experiences observed through social models. Bandura (1994) explains, “Seeing people similar to oneself succeed by sustained effort raises observers’ beliefs that they too possess the capabilities to master comparable activities required to succeed” (p. 71).

**Research Summary**

As this is a new area of research within the population and context being examined, this study used predictive correlation and standard multiple regression to explore the possible predictive relationship between nine predictor variables and one dependent variable (Warner, 2013). This design was used in similar studies (Chong et al., 2010; Huangfu, 2012; Lam, 2012; Nosratinia, Saveiy, & Zaker, 2014) to explore predictive relationships related to teacher self-efficacy. However, as no previous studies have developed Thai language versions of either the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) or Chacón’s (2005) perceived English proficiency instrument and no existing research has investigated teacher self-efficacy of NNESTs of EFL in a rural Thai setting, this study was timely and necessary.
CHAPTER TWO: REVIEW OF LITERATURE

Studies about self-efficacy transverse many fields of inquiry, including medicine (Mystakidou et al., 2013; Schwerdtfeger, Konermann, & Schönhofen, 2008); business (Languna, 2013; Rainayee & Zaffar, 2012), psychology (Hunagund & Hangal, 2014), and many more. In fact, Pajares (1996) highlighted phobias, depression, social skills, assertiveness, smoking, pain control, and athletic performance as examples of other areas using self-efficacy precepts. A focus on these constructs was beyond the scope of this study, as this review of literature will explore the theoretical foundations of self-efficacy and the narrower concept, teacher self-efficacy, in the field of education.

In order to situate this issue of teacher self-efficacy “in a broader scholarly and historical context” (Boote & Beile, 2005, p. 3), this review of literature has been divided into various components. First, this review offers a careful description of self-efficacy and teacher self-efficacy’s theoretical underpinnings, namely, Bandura’s (1997) social cognitive theory (SCT). Then, the following areas are discussed: (1) the evolution of general teacher self-efficacy research including attempts to operationalize this construct, (2) trends in general teacher self-efficacy research, (3) teacher self-efficacy’s foray into the realm of nonnative English-speaking teachers (NNESTs) of English as a Foreign Language (EFL), (4) a brief overview of the Thai education system, and (5) teacher self-efficacy among NNESTs of EFL in Thailand. A summary offers a synthesis concerning what is known and unknown regarding teacher self-efficacy and the gap in the literature that this study addresses.

Theoretical Framework: Social Cognitive Theory

SCT has influenced approaches to teaching and learning since its entrance into the world of psychology and education. An earlier theory, social learning theory, was a response to
behaviorism and psychoanalytic theories (Bandura, Ross, & Ross, 1961). Social learning theory highlighted the social component of learning; namely, that humans also learn by observation, imitation, and modeling (Bandura et al., 1961, Bandura, Ross, & Ross, 1963; Sears, 1941). Originally studied in relation to the therapeutic process, social learning theory was also shown to explain frustration and aggressive behaviors in children (Bandura et al., 1961; Pajares, 2002). However, beyond its impact in the realm of psychology, social learning theory also sparked a transition in learning theories and led to Bandura’s subsequent SCT.

Social cognitive theory (SCT) proposed a more cognitive approach to social learning theory and allowed “for therapeutic and counseling efforts to be directed at personal, environmental, or behavioral factors” (Pajares, 2002, para. 3). Based upon James’ (1890/1981) contention that introspective observation influences behavior, SCT has been shown to be a valid means for predicting and explaining human behavior, especially in the learning process (Pajares, 2002). SCT was largely developed to explain human behavior and learning that could not be accounted for via psychoanalytic and behavioral theories of learning, and its most distinctive feature is the role of self-beliefs (Bandura, 1977, 1989a, 1997). Unlike behaviorism, psychoanalytic theory, or other theories that “overemphasize the role that environmental factors play” (Pajares, 2002, para. 4), Bandura’s (1977) addition of the notion of self-efficacy to SCT helped to further validate this theory.

**Reciprocal Determinism**

According to Bandura (1989a), “Social cognitive theory favors a model of causation involving triad reciprocal determinism” (p. 2), which includes behavior, cognition, and personal factors, as well as environmental influences. Learning is not merely a result of observations, but a result of these three components of reciprocal determinism, which vary in their frequency and
degree of influence. According to SCT, expectations, perceptions of self, goals, and beliefs can influence behaviors and collectively affect the learning process (Andersen & Chen, 2002; Bandura, 1989a, 1989b).

**Human Agency**

The concept of human agency is also vital to SCT in general and to self-efficacy in particular, as Bandura (1982) pointed out “the centrality of the self-efficacy mechanism in human agency” (p. 122). Human agency is the notion that humans can make choices as opposed to merely responses as behaviorism held. Bandura (1989b) explained that while the nature and locus of human agency has been described as autonomous, mechanical, or emergent interactive, SCT “subscribes to a model of emergent interactive agency” (p. 1175). Individuals are neither independent agents (who experience no outside influences), nor are they “mechanical conveyers of animating environmental influence” (Bandura, 1989b, p. 1175). The premise of SCT instead suggests that the choices humans make are impacted by both internal and external influences. Bandura (1989a) claimed that people are both “products and producers of their environment” (p. 4). This premise reflects Rotter’s (1966) concept of locus of control: people’s perceptions of their ability to control the environment are important to feelings of self-efficacy, determinism, and motivation. In fact, Bandura (2001) described the conscious capacity to exercise control as, “the very substance of mental life that not only makes life personally manageable but worth living” (p. 3). Thus, human agency is significantly impacted by an individual’s efficaciousness (Bandura, 1989b, 2001; Henson, 2001). As self-efficacy beliefs may be “self-aiding or self-hindering” (Bandura, 1989b, p. 1175), self-efficacy can impact individual choices, life paths, persistence, effort, motivation, and commitment, as well as many other areas reflected in human agency (Bandura, 1989b; Henson, 2001).
These basic tenets of SCT advance conceptions of self-efficacy, as they highlight that human learning and behavior are not merely passive in nature (Bandura 1977, 1989a, 1989b, 1997, 2001; Henson, 2001; Pajares, 1996). Furthermore, SCT considers how society affects individual behaviors and may help explain contextual and social influences on the perceptions of teacher self-efficacy of NNESTs who teach EFL. As such, the origins of self-efficacy research in general and the advent of the more specific notion of teacher self-efficacy (Tschannen-Moran & Woolfolk Hoy, 2001) are examined next.

**Self-efficacy**

In his original SCT, Bandura (1977) included the notion of *self-efficacy*, which he defined as, “Belief in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). Bandura (1997) highlighted four key influences or sources of self-efficacy beliefs: vicarious experiences, verbal persuasion, physiological arousal, and mastery experience.

**Sources of self-efficacy.** The concept *vicarious experience* is linked with symbolic or live models of a behavior. For example, in the Thai context student teachers are required to complete a minimum of one year as a teaching intern. One of these intern teachers may watch a more experienced NNEST of EFL using classroom management strategies. Seeing the more experienced teacher’s success in using these strategies may decrease the novice teacher’s fear; simultaneously this vicarious experience may increase the novice teachers’ efficacy beliefs and willingness to try similar strategies. According to Bandura’s (1977) SCT, vicarious experiences allow people to draw “inferences from social comparison” (p. 197) in order to gauge their own sense of self-efficacy.
The second key source of self-efficacy belief is verbal persuasion. Simply stated, verbal persuasion is positive input that encourages a person’s sense of his or her capability to master a challenging task. According to Bandura (1977), verbal persuasion includes verbal interaction and may take any of the following modes of induction: suggestion, exhortation, self-instruction, and interpretive treatments. For example, even though an NNEST of EFL in Thailand may lack confidence to use English as the medium of instruction every day, other teachers may suggest or exhort teachers to do so at least one hour of instruction per week. This verbal persuasion could be strong enough to overcome feelings of inadequacy and boost individuals’ self-efficacy. It is important to note that both vicarious experience and verbal persuasion can be either positive or negative depending upon how individuals process the input.

Bandura (1977) further explained that physiological arousal is also an important source of self-efficacy. This source relates to the biological responses to input, which includes biofeedback cues, symbolic desensitization, and exposure. This source of self-efficacy has largely been associated with reducing individual phobias. For example, if a person is fearful of snakes, then slowly exposing him or her to pictures of snakes, models of snakes, etc. to arouse a physiological response in a controlled manner can help the individual eventually be more confident in dealing with snakes. This source of efficacy also has important implications outside of treating phobias. For example, the physiological arousal component of self-efficacy sources may be the anxiety and nervousness NNESTs of EFL feel before teaching an EFL class solely in English. This anxiety may reduce self-efficacy beliefs for some, yet enhance self-efficacy beliefs in others.

The final source of self-efficacy, referred to as performance accomplishments or mastery experiences, is perhaps the most important (Bandura, 1977). “Successes raise mastery
expectations; repeated failures lower them . . . after strong efficacy expectations are developed through repeated success, the negative impact of occasional failures is likely to be reduced” (Bandura, 1977, p. 195). Thus, mastery experiences help affirm efficacy expectations, which fortifies these self-beliefs against negative impacts; if teachers have experienced numerous professional successes then these successes would likely offset the impact of a small failure. However, it is important to acknowledge that the latter two influences on self-efficacy can also be either positive or negative depending on one’s perspective (Tschannen-Moran & Johnson, 2011; Tschannen-Moran & McMaster, 2009).

**Efficacy-activated processes.** Bandura (1994) further explained that there are three distinct processes by which self-efficacy influences human behavior. They are cognitive processes, selection processes, and affective processes. Bandura (1994) referred to these processes as “efficacy-activated processes that enable people to create beneficial environments and exercise some control over those they encounter day in and day out” (p. 77). Cognitive processes include the necessary ability to process ambiguous information. According to Bandura (1994), most actions that people take were initially a result of their thought patterns prior to the particular action. Bandura claimed, “A major function of thought is to enable people to predict events and to develop ways to control those that affect their lives” (p. 74). Thus, self-efficacy is clearly a cognitive process. However, perceptions of one’s self-efficacy also influence motivation, as these beliefs influence whether failures are due to lack of effort (something within a person’s control) or lack of ability (something beyond a person’s control) (Bandura, 1994).

Affective and selection processes are the final two efficacy-activating processes that Bandura’s (1994) theory highlights, since low perceptions of self-efficacy often parallel feelings of depression or anxiety. According to Bandura (1994), the selection process suggests that
perceptions of self-efficacy can influence beliefs and impact decisions regarding activities, environments, colleagues, and behavior. One’s perceived self-efficacy has important implications for many areas of an individual’s life—including the lives of teachers. Thus, from self-efficacy comes the narrower term, teacher self-efficacy, which will be discussed next.

The Evolution of General Teacher Self-efficacy Research

The concept of teacher self-efficacy or educator’s self-efficacy has been linked to educational studies for over three decades (Armor et al., 1976; Ashton et al., 1984; Ashton, Olejnik, Crocker, & McAuliffe, 1982; Bandura, 1977; Canrinus et al., 2012; Chacón, 2005; Henson, 2001; Hoy & Woolfolk, 1993; Huberman, 1989; İnceçay & Dollar, 2013; Klassen et al., 2011; KURT, 2014; NEJATI et al., 2014; Oakes et al., 2013; Tschannen-Moran & Johnson, 2011; Tschannen-Moran & Woolfolk Hoy, 2001). Defined as “the judgment of his or her capabilities to bring about desired outcomes of student engagement and learning” (Tschannen-Moran & Woolfolk Hoy, 2001, p. 783), numerous research designs have been used to explore this construct, various instruments have been developed, and distinct trends are apparent in the literature.

Research Designs in the Literature

A variety of research designs have been used to explore teacher self-efficacy across numerous populations. Lam (2012) used analysis of variance in his study of teacher self-efficacy in Hong Kong, while others used predictive correlation (Akinbobola & Adelede, 2012; Huangfu, 2012; Raoofí et al., 2012; Sabokrouh, 2014; Inandi & Esen, 2013). Causal comparative design was used to explore the effects of gender and teaching experience on teacher self-efficacy among teachers in India (Atta et al., 2012). Chueng et al. (2013) and Raoofí et al. (2012) made significant contributions to teacher self-efficacy research via extensive reviews of literature.
relating to different facets of teacher self-efficacy as either a predictor or criterion variable. In addition to the above research designs, teacher self-efficacy research can also be discussed in light of the various instruments and approaches to measure teacher self-efficacy.

**Instruments to Measure Teacher Self-efficacy**

Teacher self-efficacy investigations originated with the Rand Corporation’s study of Los Angeles teachers’ perceived ability to control outcomes in order to investigate teachers’ perceptions of their own capabilities (Armor et al., 1976; Henson, 2001; Klassen et al., 2011; Tschannen-Moran & Woolfolk Hoy, 2001).

This first attempt to study teacher self-efficacy was founded upon Rotter’s (1966) locus of control theory, which emphasized internal versus environmental influences, (Tschannen-Moran & Woolfolk Hoy, 2001). Armor et al. (1976) posed the following two questions: “When it comes right down to it, a teacher really can’t do much because most of a student’s motivation and performance depends on his or her home environment,” and “If I really try hard, I can get through to even the most difficult or unmotivated students” (Armor et al., 1976, p. 73). The teachers responded to a five-point Likert-type scale to indicate the level of agreement ranging from 1 (strongly agree) to 5 (strongly disagree). If the teachers expressed a high level of agreement with the first question, their sense of teacher self-efficacy was deemed low; however, if they indicated a high level of agreement with the second question, their sense of teacher self-efficacy was determined to be high. Thus, these two simple questions were the initial attempts to explore the notion of teacher self-efficacy. From this simple assessment two other constructs emerged: general teaching efficacy (GTE), which related to external school factors’ influences, and personal teaching efficacy (PTE), which related to an individual teacher’s personal beliefs

General instruments to measure teacher self-efficacy. Influenced by Armor et al.’s (1976) attempt to operationalize teacher self-efficacy, soon other researchers sought to quantify this construct (Ashton et al., 1982; Bandura, 1977; Brouwers & Tomic, 2001; Dellinger et al., 2008; Duffin et al., 2012; Gibson & Dembo, 1984; Guskey, 1981; Kushner, 1993; Nunn, Janz, & Butikofer, 2009; Riggs & Enochs, 1990; Rose & Medway, 1981; Schwarzer, Schmitz, & Daytner, 1999; Tschannen-Moran & Woolfolk Hoy, 2001). In the early stages of teacher self-efficacy research, instruments were still designed based upon Rotter’s (1966) locus of control theory and were largely interested in “causal perceptions” (Rose & Medway, 1981, p. 185). For example, according to Tschannen-Moran and Woolfolk Hoy (2001), “Shortly after the first RAND study was published Guskey developed a 30-item instrument measuring responsibility for student achievement” (p. 785). This Responsibility for Student Achievement Questionnaire (RSA) scale explored teacher self-efficacy through 28 scenarios that referred either to student success or failure (Guskey, 1981); the teachers selected “either an internal (teacher) or external (student) explanation for the student outcome” (Henson, Kogan, & Vacha-Haase, 2001, p. 406).

Rose and Medway (1981) also developed a scale to assess teacher self-efficacy based upon causal perceptions, which was entitled the Teacher Locus of Control (TLC). This scale consisted of 28 items that required the participants to assign a percent value (dividing 100 percent) to either an internal or an external source of control (Henson et al., 2001). Based upon data collected from fourth grade teachers, this study investigated the possible “link between teachers’ locus of control and teacher behavior” (Rose & Medway, 1981, p. 376). Rose and Medway (1981) found that teachers with a higher internal control scores tended to have students
who achieved at higher levels. They also found that teachers who had a higher sense of internal control demonstrated more positive classroom behaviors, such as using fewer commands. Likely because of its specificity to the teaching context and its 28-question, forced-choice format, this instrument was perceived as a more effective predictor of teacher behaviors than Rotter’s (1966) original scale (Tschannen-Moran & Woolfolk Hoy, 2001). However, this instrument was soon replaced by yet another measurement.

Gibson and Dembo’s (1984) Teacher Efficacy Scale (TES), which for a time “became the standard instrument in the field” (Henson, 2001, p. 405) for measuring teacher self-efficacy, was also heavily influenced by Rotter’s (1966) notion of locus of control. This 16-item tool asked participants to respond to a six-point Likert-type scale and attempted to expand the original Rand instrument (Armor et al., 1976) as it investigated both personal teacher efficacy and general self-efficacy (Henson, 2001; Tschannen-Moran & Woolfolk Hoy, 2001). However, based upon poor validity and reliability, this scale was widely criticized and subsequently fell out of popular use (Klassen et al., 2011). Emmer and Hickman (1991) attempted to expand Gibson’s and Dembo’s (1984) instrument by creating a 36-item survey that focused on classroom management, personal teaching efficacy, and external influence (Cheung, 2008); however, this scale was also not widely used.

While the quest for a robust instruments continued, Bandura (1997) also developed a teacher self-efficacy instrument, which was, oddly, also seldom used. It contained 30 items, which attempted to highlight data in the following seven areas: efficacy to influence decision making, to influence school resources, to enlist parental involvement, to enlist community involvement, and to create a positive school climate, as well as both instructional and disciplinary efficacy (Cheung, 2008). Coladarci and Fink (1995) also added to this body of
instrument development research as they compared various instruments to determine if they were actually measuring the same construct. The next phase of instrument development was based upon SCT’s premise that self-efficacy was context and content specific (Bandura, 1977).

**Content-specific instruments to measure teacher self-efficacy.** Content-specific teacher self-efficacy instruments were the next wave in teacher self-efficacy research. Riggs and Enochs (1990) developed the Science Teaching Efficacy Belief Instrument (STEBI), which required teachers to respond to a 25-item, Likert-type scale from five to one. In their study, Riggs and Enochs (1990) heralded the importance of investigating teachers’ beliefs so that teachers’ behaviors could be more readily understood. While this instrument again highlighted the relationship between teacher self-efficacy and teachers’ behaviors, interestingly, Riggs and Enochs (1990) deliberately developed the STEBI so that the items reflected questions about either outcome expectancy or internal self-efficacy rather than a combination of both as other instruments had done.

According to Isbell and Szabo (2015), Riggs and Enochs’ (1990) instrument paved the way for similar assessment tools in math, such as the Mathematics Teaching Efficacy Beliefs Instrument (MTEBI) (Enochs, Smith, & Huniker, 2000), the Writing Teaching Efficacy Beliefs Instrument (WTEBI) (Hughey, 2010), and the Reading Teaching Efficacy Beliefs Instruments (RTEBI), (Szabo & Makhtari, 2004), and other context specific scales all reflect this trend to develop context specific instruments. Bandura’s (2006) guide for creating self-efficacy instrument that extended beyond the realm of education to such fields as psychology, medicine, sports, and business, also helped to further extend domain specific self-efficacy research. This trend still prevails in present research, as Hartmann (2012) developed the Teacher Efficacy in Deaf-blindness Scale (TEDE) as a means for assessing efficacy beliefs of teachers who teach
children who are deaf-blind, while Akbari and Tavassoli (2014) recently offered an exciting instrument intended specifically for the English language teaching (ELT) context. This 32-item, five-point Likert-type scale used a scenario approach to help ground the instrument in the ELT context. This scale attempted to specify subcomponents of necessary skills for effective ELT, such as efficacy in teaching listening, reading, speaking, and writing, as well as efficacy in teaching grammar, vocabulary, pronunciation, efficaciousness in developing tests, etc. (Akbari & Tavassoli, 2014). Each of these content-specific instruments reflect Bandura’s conceptualization of teacher self-efficacy as a specific construct, having “contextual characteristics rather than being a global concept” (Batdi, 2014, p. 23).

Affective-influenced instruments to measure teacher self-efficacy. Other researchers developed instruments that focused less on the subject area and more on the affective influence of the teacher’s beliefs on teacher self-efficacy (Nunn, 1998; Schwarzer et al., 1999; Brouwers & Tomic, 2001; and Dellinger et al., 2008). The Teacher Efficacy Beliefs and Behaviors Scale (TEBBS) (Nunn, 1998) is an example of a scale based upon SCT that emphasized teacher’s beliefs; the TEBBS highlighted teachers’ perceived skills in intervention, motivation, and external control via a 23-item, six-point Likert-type scale. This scale asked questions such as, “Teachers are prepared and willing to teach all subjects assigned to them,” and “Most students are just not motivated to learn in school” (p. 1). Similarly, Schwarzer et al.’s (1999) Teacher Self Efficacy scale, developed in Turkey to assess German-speaking Turkish teacher trainers, focused on evaluating teachers beliefs concerning their abilities. As Skaalvik and Skaalvik (2007) pointed out, Schwarzer et al.’s (1999) instrument closely followed Bandura’s (1997) recommendation for developing an instrument to assess self-efficacy, as the ten-item, four-point
Likert-type scale “clearly asked for mastery expectations because of personal competence” (Skaalvik & Skaalvik, 2007, p. 612).

Brouwers and Tomic’s (2001) Teacher Interpersonal Self-efficacy Scale (TISE) also focused on the affective aspect of teachers; it was developed in the Netherlands and consisted of an 18-item, five-point Likert-type scale aimed at assessing perceptions of classroom management skills, support from colleagues, and support from administration (Batdi, 2014). The Teachers’ Efficacy Beliefs System-Self is another scale that focused on the teachers’ affective beliefs (Dellinger et al., 2008). According to Dellinger et al. (2008), it is important to differentiate between teacher efficacy and teacher self-efficacy beliefs in the context of classrooms, as the notion teacher efficacy emphasizes teachers’ ability to affect student performance, while the concept, teacher self-efficacy, considers the successful completion of “specific teaching tasks” (p. 753). Thus, for Dellinger et al. (2008), teacher self-efficacy is less about students’ performance and more about teachers’ behavior.

However, in spite of the numerous scales (general, content-specific, and affective-influenced) to assess various facets of teacher self-efficacy, Tschannen-Moran and Woolfolk Hoy’s (2001) Teacher Sense of Efficacy Scale (TSES) has been most widely used cross-culturally. The TSES integrated both locus of control and SCT theoretical tenets through its measure of efficacy for classroom management, student engagement, and instructional strategies (Henson, 2001; Lam, 2012). While Tschannen-Moran and Woolfolk Hoy’s (2001) TSES has not escaped criticism by both interpretivist paradigm and critical theorists, it has been extensively used over the last decade and consistently has been found to be a valid instrument that provides reliable results for assessing teacher self-efficacy in both Western and non-Western contexts (Khan, 2012; Klassen, Usher, & Bong, 2010; Labone, 2004; Tsigilis, Koustelios, &
Grammatikopoulos, 2010). In fact, Woolfolk and Spero (2005) suggested that the stable factor structure of the TSES-SF made it “superior to previous measures of teacher efficacy” (p. 354).

Without question, teacher self-efficacy research has a rich history of inquiry with diverse instruments to measure this construct. The context and theoretical foundations for these various instruments may differ, yet each of these studies found that teacher self-efficacy is a complex, multi-faceted construct, and that teacher self-efficacy plays a key role in various aspects of the teaching and learning process. As such, further trends in general teacher self-efficacy research are discussed next.

**Trends in General Teacher Self-efficacy Research**

As the field of teacher self-efficacy research evolved and instruments were developed to quantify this construct, other researchers sought to understand the importance of teacher self-efficacy. Thus, several trends in the research literature emerged; namely, studies that focused on the benefits of teacher self-efficacy to students as well as the benefits to teachers. Regarding the specific benefits that higher perceptions of teacher self-efficacy afford teachers, research seemed to cluster around three main facets: school, professional, and emotional factors. These trends will be discussed next.

**Research Regarding Teacher Self-Efficacy’s Benefits**

**Studies analyzing benefits to students.** Numerous studies reflect the trend in research to examine the potential benefits of teacher self-efficacy to the students (Caprara et al., 2006; Goddard et al., 2000; Khan, 2012; Mohamadi & Asadzadeh, 2012). According to Beck (2014), teacher self-efficacy is the most “influential factor in student outcomes” (p. v). In fact, teacher self-efficacy has been found to have a positive influence on student achievement in America, Italian, Pakistani, Ethiopian, and other contexts (Caprara et al., 2006; Goddard et al., 2000;
Khan, 2012; Norton, 2013; Swackhamer et al., 2009; Wossenie, 2014a; Zundeans-Fraser & Lancaster, 2012). For example, Caprara et al. (2006) enlisted 2000 teachers in 75 Italian junior high schools to self-report via a questionnaire their self-efficacy beliefs. Students’ final averages were collected at the end of two years and analyzed for correlations. Using structural equation modeling, the authors highlighted that teacher self-efficacy beliefs showed a positive impact on students’ academic scores at the school level, as teachers who had a higher sense of self-efficacy had students with higher levels of achievement.

These achievement gains were also found among students in Pakistan in both math and English (Khan, 2012). While Khan (2012) also investigated gender difference in perceived teacher self-efficacy and found that male teachers in the study were more efficacious in teaching math while female teachers in the study were more efficacious in teaching English, the results indicated that higher teacher self-efficacy beliefs influenced greater student achievement. Using a Persian language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) with 284 Iranian high school teachers, Mohamadi and Asadzadeh’s (2012) structural equation model found similar results. Specifically, they identified a positive association between two sources of teacher self-efficacy: mastery experiences (.18) and vicarious experiences (.15) and student achievement, as well as two subscales of the TSES-SF: classroom management (.17) and student engagement (.33) and student achievement.

The correlation between student achievement and teacher self-efficacy may be explained by the improved instructional quality found among teachers with higher perceptions of teacher self-efficacy (Holzberger, Phillip, & Kunter, 2013; Jie-yung, 2011). In Holzberger et al.’s (2013) study of 155 German secondary math teachers and almost 3500 secondary students, research indicated that “teachers with higher self-efficacy beliefs showed higher instructional quality as
indicated by the three dimensions of cognitive activation, classroom management, and individual learning support” (p. 782). Improved instructional quality as an effect of elevated perceptions of teacher self-efficacy was found in an Italian context, as well (Caprara et al., 2006). Using the notion of didactic innovations, Caprara et al. (2006) also showed that teachers with higher perceptions of teacher self-efficacy were more likely to use “classroom management approaches and adequate teaching methods that encourage students’ autonomy” (p. 474). Given this superior quality of instruction, students received numerous academic benefits. As such, many student benefits and possible reasons behind these benefits have been examined, yet another trend in teacher self-efficacy research is the attempt to explore the possible benefits of teacher self-efficacy beliefs to the teachers themselves. Studies within this trend of research follow.

**Studies analyzing benefits to teachers.** Strong teacher self-efficacy has been shown to benefit teachers in a variety of cultural contexts across three main facets: school factors, professional factors, and personal factors.

**School factors.** Several benefits of teacher self-efficacy can be characterized as school-related factors. Barr and Clark’s (2012) qualitative study among American ESL teachers in Texas found that higher perceptions of teacher self-efficacy facilitated a positive academic climate based on the evidence that both students and teachers were more positive when overall teacher self-efficacy was high; these findings were consistent with Chong et al.’s (2010) findings among teachers in Singapore. In Collie et al.’s (2012) study of 664 elementary and secondary teachers in Canada, the relationship between perceptions of school climate and social-emotional learning with teachers’ sense of stress, self-efficacy, and job satisfaction was analyzed. Relevant to this present study, Collie et al. (2012) found that higher perceptions of teacher self-efficacy were positively related to teachers’ sense of job satisfaction. This beneficial link between teacher
self-efficacy and job satisfaction was also found in other studies (Viel-Ruma, Houchins, Jolivette, & Benson, 2010). For example, Moë et al. (2010) investigated the relationship between three aspects of job satisfaction in an Italian context among 399 teachers. These three aspects were positive affect, teacher self-efficacy, and teaching practice. They found that both positive affect and high levels of teacher self-efficacy were needed in order to effect high job satisfaction. However, only teacher self-efficacy was statistically significantly related to job satisfaction (.22). Canrinus et al. (2012) also investigated the job satisfaction of 1214 Dutch secondary teachers. In this study, the researchers attempted to develop a model to link self-efficacy, job satisfaction, commitment, and motivational changes as they relate to professional identity. The authors further tested the relationship between and among these variables across three different levels of teaching experience. They found a significant positive association between classroom self-efficacy and change of level of motivation, commitment, and relational satisfaction, highlighting this beneficial link.

Another school related benefit to teachers associated with teacher self-efficacy is in the area of decreased attrition, persistence, and willingness to implement reform (Cerit, 2013; Klassen & Chiu, 2011; Norton, 2013; Oakes, et al, 2013; Skaalvik & Skaalvik, 2010). Teachers with higher perceptions of teacher self-efficacy have been shown to persist in teaching, resist quitting, and strive for excellence in their teaching (Eren, 2009). For example, Norton’s (2013) phenomenological study of 12 American teachers supported the significance of teacher self-efficacy in relation to persistence. The belief that teachers were making a difference in the students’ lives compelled them to persist in their teaching careers, as well as facilitate their perceptions of teacher self-efficacy. Also, teacher self-efficacy beliefs have been shown to be a significant predictor of Turkish student teachers’ conceptions about teaching and learning (Eren,
Eren (2009) concluded that high teacher self-efficacy beliefs of student teachers were associated with a higher degree of constructivist classroom practices, which subsequently effected numerous positive outcomes. Teachers’ attitudes and perceptions of teacher self-efficacy influence classroom control and teacher self-efficacy (Kurt, 2014). In a recent study of 135 Turkish biology teachers, Kurt (2014) reported, “medium level positive significant relationships between teachers’ sense of efficacy and attitudes and beliefs on classroom control” (p. 285), as teacher self-efficacy explained 16.1% of the variance in classroom control beliefs.

Closely related to persistence is the issue of teacher burnout, including emotional exhaustion, depersonalization, and personal accomplishment. Studies have shown both significant and statistically insignificant associations between burnout and teacher self-efficacy in a variety of contexts (Skaalvik & Skaalvik, 2010; Oakes et al., 2013). Skaalvik and Skaalvik (2010) studied 2,249 Norwegian elementary and middle school teachers, and teacher self-efficacy was negatively correlated with two constructs within the overall construct burnout; namely, emotional exhaustion (-.29) and depersonalization (-.41). Thus, there is some evidence that teacher self-efficacy and burnout are related.

In addition to persistence and burnout, teacher self-efficacy has also been found to influence teachers’ willingness to implement reform. Cerit’s (2013) study of 225 Turkish classroom teachers connected Bandura’s (1997) notions of choice behavior and effort expenditures (experiences impacted by perceptions of teacher self-efficacy) with curriculum reform. Using the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001), this study showed that teachers’ efficacy for student engagement was significantly, positively related with teachers’ willingness to accept and implement proposed curriculum reforms. Clearly, the impact of
teacher self-efficacy in the educational process is extensive as many factors ranging from teacher attitudes to curriculum reform influence or are influenced by teacher self-efficacy.

**Professional factors.** Benefits of teacher self-efficacy can also be characterized as professional factors, as there is a positive association between teacher self-efficacy and strong professional identity. Zundes-Fraser and Lancaster’s (2012) and Swackhamer et al.’s (2009) studies both pointed to the benefits of teacher self-efficacy in professional development and in the area of content knowledge, as teachers with higher teacher self-efficacy simultaneously excelled in their content knowledge and more readily embraced professional development efforts. Calik, Sezgin, Kavgaci, and Kilinc (2012) examined an additional professional factor; namely, the relationship between principal’s leadership approaches, teacher self-efficacy, and collective teacher efficacy. This study asked 328 teachers to respond to several scales including the Turkish language version of the TSES (Tschannen-Moran & Hoy, 2001). Calik et al. (2012) found that teacher self-efficacy and collective efficacy increased “depending on the instructional leadership” of school principals; they concluded that there was likely a “reciprocal . . . two-way relationship” (Calik et al., 2012, p. 2501) between these variables.

This positive association between teacher self-efficacy and collective educators’ self-efficacy was also studied in a Nigerian context. Akinbobola and Adeleke (2012) used a sample size of 99 participants and found that perceptions of teacher self-efficacy of individual teachers had a predictive effect on collective teachers’ self-efficacy. In other words, “The higher the self efficacy of an academic staff, the higher the collective self efficacy he/she will present in the group during collaborative work” (Akinbobola & Adeleke, 2012, p. 66). These findings have also been found among special educators in the United States, as Viel-Ruma et al.’s (2010) study suggested that collective self-efficacy directly impacted teacher self-efficacy.
In addition to highlighting the association between teacher self-efficacy and collective teacher self-efficacy, other studies endeavored to understand what (if any) factors could enhance collective teacher self-efficacy (Chong & Kong, 2011). Chong and Kong’s (2011) study revealed insight into a method, namely, collaborative lesson planning to foster teacher self-efficacy and collective teacher efficacy. Using an exploratory, qualitative methodology, ten teachers from various departments in a Singaporean high school participated in group discussions, observations, written reflections, and interviews. The researchers found that using collaborative processes can “foster teacher efficacy, which in turn enhance student achievement and sustained positive teacher behaviors” (Chong & Kong, 2011, p. 278). They also concluded that this collaborative lesson planning approach facilitated a greater sense of collective efficacy. Thus, these studies highlighted another trend in teacher self-efficacy research and show how social and school factors influence teacher self-efficacy.

**Emotional factors.** Several benefits of teacher self-efficacy can be characterized as emotional factors. Studies by Di Fabio and Palazzeschi (2008) and Wossenie (2014b) illustrated some of these emotional factors as both of these studies investigated teacher self-efficacy’s relationship with emotional intelligence. While these studies were distinct in their contexts and participants (Italian high school teachers and Ethiopian English teachers, respectively) both studies indicated a significant positive relationship between emotional intelligence and self-efficacy: teachers with a higher level of emotional intelligence, especially stronger intrapersonal skills, were also strong in their perceptions of teacher self-efficacy (Di Fabio & Palazzeschi, 2008). Jamil, Downer, and Pianta (2012) further pointed out, “Bandura (1993) suggests that people with a low sense of efficacy in a given situation fall easy victim to stress and depression because they take difficult tasks and their perceived inability to deal with them personally” (p.
Thus, another benefit of strong teacher self-efficacy is the buffer that it provides for teachers against stress and depression. Goroshit and Hen (2014) and Hen and Goroshit (2013) also studied teacher self-efficacy in relation to teachers’ affect. Specifically, Goroshit and Hen (2014) focused on the construct *emotional self-efficacy*, which they defined as “peoples’ judgment regarding their own capacity to process emotional information accurately and effectively” (p. 26). They found that among the 273 Israeli teachers across 10 schools, emotional self-efficacy was significantly able to predict teacher self-efficacy. Similarly, Hen and Goroshit (2013) highlighted the internal and external nature of influences on teacher self-efficacy. They found in their study of 620 Israeli teachers that emotional self-efficacy accounted for 36% of the variance in teacher self-efficacy.

Each of the preceding studies provides insight into research trends of this complex construct; understanding these trends is particularly informative when applied to pre-service teachers since such studies help inform reform measures, teacher education program curriculum, and other facets of teacher preparation and teacher professional development (Cheung et al., 2013; İnceçay & Dollar, 2013; Jie-ying, 2011). As Bumen and Ozaydin’s (2013) longitudinal study of 32 pre-service teachers highlighted, teacher self-efficacy beliefs are malleable and can be positively impacted via preparatory teacher training programs; thus, it is vital to continue to investigate unexplored facets of this construct, such as teacher self-efficacy research in EFL contexts among NNESTs.

**Teacher Self-efficacy Research in EFL Contexts among NNESTs**

As the preceding overview of literature indicated, teacher self-efficacy has been investigated both broadly and deeply in a variety of settings; however, to date there are only a limited number of studies concerning the perceptions of teacher self-efficacy of NNEST who
teach EFL around the globe (Cheung et al., 2013; Eslami & Fatahi, 2008; Hayes, 2009; Huangfu, Jie-ying, 2012; 2012; Klassen et al., 2011; Klassen & Tze, 2014; Lam, 2012; Raoofi et al., 2012; Sabokrouh, 2014; Yaman et al., 2013; Yilmaz, 2011; Zakeri & Alavi, 2011). According to Jie-ying (2011), “Teachers, apart from the methods and materials they use, are central to improving English language teaching” (p. 35). Given that teacher self-efficacy in the EFL context among NNESTs has been underexplored, teachers and students in this context may not have access to possible reforms that such research could foster. Several authors call for more research in this area. According to Ghasemboland and Hashim (2013b), “More research studies are needed to assess the teachers’ sense of efficacy of teachers of English as a foreign language” (p. 1989). Similarly, Wossenie (2014a) pointed out that “there is a dearth of research in this area which may curtail new insights and development in teaching and learning the target language . . .” (p. 216). While Khan (2012) highlighted that the relationship between general teacher self-efficacy and student achievement was documented almost 40 years ago, only recently have studies investigated the benefits of teacher self-efficacy in EFL contexts among NNESTs. The following studies have responded to these calls for more research in this area and offer insight into what is already known about teacher self-efficacy in an EFL context among NNESTs, yet they fail to provide a concise model for predicting teacher self-efficacy among NNESTs of EFL in the Thai context.

**Benefits of teacher self-efficacy in the EFL context.** Similar to other educational contexts, teacher self-efficacy in EFL setting has been shown to benefit both students and teachers. Student achievement is one area that has been shown to be positively associated with teacher self-efficacy in the EFL context (Mojavezi & Tamiz, 2012; Wossenie, 2014b). Wossenie’s (2014b) study of 39 NNESTs of EFL and 585 Ethiopian students found a significant
positive correlation ($r = 0.397, p < 0.05$) between EFL teachers’ self-efficacy beliefs and students’ academic achievements in English. Similarly, in a study of 80 high school NNESTs of EFL and 150 Iranian students across four different cities in Iran, Mojavezi and Tamiz (2012) not only found this positive association between teacher self-efficacy and student achievement, but also found a statistically significant association between teacher self-efficacy and student motivation ($r = .446, p < .01$).

These positive effects of elevated perceptions of teacher self-efficacy among NNESTs of EFL extend to teachers across numerous cultural contexts (Huangfu, 2012; Jie-ying, 2011; Zangenehvandi et al., 2014). Research shows that teacher self-efficacy influences NNESTs behaviors as these teachers tend to have higher expectations for their students, exhibit greater levels of planning and organization, and are more passionate in teaching (Jie-ying, 2011). Jie-ying (2011) further explained that in addition to its inclusion in teacher training programs, teacher self-efficacy should be nurtured by teachers and recommends that teachers should “keep a journal noting their successes, seek models, focus on strengths of colleagues and learn grow them” (p. 38).

Also, teacher self-efficacy beliefs among NNESTs of EFL may predict motivational teaching behaviors such as strategies for generating initial motivation, strategies for maintaining student motivation, and strategies for facilitating positive student self-assessment. In Huangfu’s (2012) study of teacher self-efficacy among 112 NNESTs of EFL in China, teacher self-efficacy accounted for one third of the variance in the teachers’ motivational behaviors; thus, the higher one’s perceptions of teacher self-efficacy, the greater one’s ability to motivate the students. Mojavezi and Tamiz (2012) also confirmed Huangfu’s (2012) findings, as they found that teachers with increased perceptions of teacher self-efficacy tended to be more enthusiastic,
committed, and satisfied with their teaching. These positive traits were also shown to have a positive influence on student well-being (Majavezi & Tamiz, 2012).

Elevated teacher self-efficacy beliefs among NNESTs of EFL have been shown to be beneficial to teachers’ critical thinking ability (Zangenehvandi et al., 2014). Using the TSES-Long Form (Tschannen-Moran and Woolfolk Hoy, 2001), Zangenehvandi et al. (2014) found that teacher’s critical thinking skills were significantly, positively related to teacher self-efficacy beliefs among 120 Iranian NNESTs of EFL. The higher teachers’ perceptions of their teacher self-efficacy, the greater their use of critical thinking skills. This use of critical thinking skills is related to another benefit of higher perceptions of teacher self-efficacy among NNESTs of EFL and foreign language teachers, namely, professional attrition due to lack of confidence in teaching cultural knowledge. While attrition is a problem across various facets of education, it is especially problematic among NNESTs of EFL and foreign language teachers (Swanson, 2012). According to Swanson’s (2012) findings, “teachers tend to leave the profession as a result of a lack of confidence to teach cultural knowledge” (p. 78). While Swanson’s study was set among American and Canadian foreign language teachers, this sample (N = 1065) is closely related to NNESTs of EFL. Using the TSES (Tschannen-Moran & Woolfolk Hoy, 2001), he found that foreign language teachers’ perceived efficacy in controlling disruptive classroom behavior (beta = -.21), as well as teachers’ perceived efficacy in calming a disruptive student (beta = .14) were the main variables that could predict attrition for his study’s sample (R² = 13). Thus, higher perceptions of these subcomponents of teacher self-efficacy were shown to help teachers persist in their teaching profession.

Elevated perceptions of teacher self-efficacy have also been shown to be a benefit to pre-service student NNESTs of EFL. İnceçay and Dollar (2012) used the TSES (Tschannen-Moran
& Woolfolk Hoy, 2001), as well as other instruments and questionnaires in order to assess how student NNESTs of EFL’s teacher self-efficacy correlated with teachers’ classroom skills in actual teaching contexts. While İnceçay and Dollar (2012) focused primarily on classroom management efficacy, one the three subscales of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001), they found a significant relationship between preservice NNESTs’ classroom management efficacy and their readiness to manage disruptive student behaviors (İnceçay & Dollar, 2012). Thus, another benefit of higher perceptions of teacher self-efficacy is stronger classroom management skills.

**Personal and contextual factors of influence among NNESTs of EFL.** Ghasemboland and Hashim (2013b) emphasized the importance of teacher self-efficacy in the EFL context as they explained that teachers’ perceptions of teacher self-efficacy influence teacher judgments and environmental contexts. Thus, it is important to understand both the personal and contextual factors that influence NNESTs perceptions of teacher self-efficacy in the EFL context.

**NNESTs’ teacher self-Efficacy and perceived English proficiency.** One of the greatest internal factors influencing the teacher self-efficacy of NNESTs of EFL is the teacher’s perception of his or her own English language proficiency. Research has highlighted this positive association in a number of Middle Eastern and South American contexts: Iranian (Eslami & Fatahi, 2008; Sabokrouh, 2014), Turkish (Ghasemboland & Hashim, 2013a, 2013b; Yılmaz, 2011), and Venezuelan (Chacón, 2005). For example, Sabokrouh (2014) researched EFL teachers’ attitudes toward their English proficiency and their sense of teacher self-efficacy using a quantitative approach and found that attitude was “significantly related with all of the English teaching-specific efficacy” (p. 72). In other words, in order to feel efficacious, teachers needed to have a positive belief in their English proficiency. This contention reflects a basic
tenet of SCT in general and of self-efficacy in particular: “Self-efficacy is a motivation construct based on self perception of competence rather than actual level of competence” (Ghasemboland & Hashim, 2013b, p. 1983). It seems that actual competence in English does not necessary guarantee a high sense of teacher self-efficacy. Instead, the teachers’ perceptions of their proficiency and their attitudes towards English are more powerful predictors and more extensively impact their self-efficaciousness in teaching (Chacón, 2005; Ghasemboland & Hashim, 2013b; Sabokrouh, 2014; Yilmaz, 2011). Ghasemboland and Hashim (2013a) further analyzed the relationship between perceived proficiency in English, use of communicative teaching strategies, and teacher self-efficacy; their results also reflected the significant relationship between these three variables. Furthermore, through surveying 54 Turkish NNESTs of EFL, Yilmaz (2011) found similar result as the teachers’ perceptions of teacher self-efficacy was positively correlated with their perceived English proficiency.

Several of these studies investigated NNESTs’ perceived English proficiency and teacher self-efficacy using the TSES (Tschannen-Moran & Woolfolk Hoy, 2001). For example, (Chacón, 2005) collected data from 100 middle school NNESTs of EFL and found a statistically significant correlation between the perceived English proficiency of NNESTs who teach EFL in Venezuela and teacher self-efficacy. Eslami and Fatahi (2008) utilized both the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) and Chacón’s (2005) perceived English proficiency instrument and found a positive significant relationship between perceptions of teacher self-efficacy and perceived English proficiency among a sample of 40 Iranian EFL teachers. Eslami and Fatahi (2008) further analyzed the correlation between the three subscales of the TSES (self-efficacy beliefs for students' interactive engagement, classroom management, and instructional strategies) with the subscales of the proficiency in English (listening, speaking, reading, and
writing skills). The correlation coefficients for the teachers' sense of efficacy for classroom management and speaking skills \((r = 0.31)\), instructional strategies, and proficiency in listening \((r = 0.30)\), speaking \((r = 0.39)\), and writing \((r = 0.38)\) were statistically significant, showing a clear association between the various subcomponents of these constructs.

**NNESTs’ teacher self-efficacy among pre-service EFL teachers.** Based in Turkey, Atay (2007) studied change in preservice NNESTs’ of EFL perceptions of teacher self-efficacy. Using the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) as well as qualitative methodology (e.g., analysis of transcripts of focus group discussions), Atay (2007) found, among the practicum students in the study, that “the efficacy scores for instructional strategies decreased at a statistically significant level, whereas the classroom management and student engagement efficacy scores increased, the latter at a significant level” (p. 213). Simply stated, among the three sub-scales within the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) two (efficacy for classroom management and efficacy for student engagement) were positively related at a statistically significant level, while efficacy for instructional strategies was negatively related at a statistically significant level. At first glance these findings may seem counterintuitive; however, the author concluded that this decrease in instructional strategy efficacy reflected the influence of mastery experiences proposed by Bandura (1997) as a source of self-efficacy. To explain this decrease, Atay (2007) claimed that as the student teachers began to teach, they became more aware of their lack of ability (lack of mastery) in the area of instructional strategy. Prior to this actual classroom experience, the student teachers were likely not aware of their lacking ability to use instructional strategies. This raised awareness of the student teachers’ lack of mastery negatively impacted their perception of teacher self-efficacy.
It is noteworthy, however, that these perceptions of teacher self-efficacy have been shown to be dynamic as opposed to fixed and rigid (Topkaya & Yavu, 2011; Wyatt, 2010). In their study of perceptions of teacher self-efficacy among preservice NNESTs, Topkaya, and Yavu (2011) focused on democratic beliefs, gender, experience (based on year of study), and after graduation plans. This study was set among Turkish preservice teachers with 294 participants, and perceptions of teacher self-efficacy were collected using the Turkish language version of the TSES (Tschannen-Moran & Woolfolk Hoy, 2001). While gender difference was not found to be statistically significant, experience was found to be statistically significant, as fourth year preservice teachers were more efficacious than students in years one through three of study. These findings clearly indicate that perceptions of teacher self-efficacy can develop over time.

**NNESTs’ teacher self-Efficacy, emotional intelligence, and gender.** Gender and emotional intelligence have also been studied among NNESTs of EFL (Rastegar & Memarpour 2009; Nejati et al., 2014). In Rastegar and Memarpour’s (2009) study of Iranian NNESTs of EFL, they found a positive significant correlation existed between NNESTs’ emotional intelligence and perceived teacher self-efficacy ($r = .5$). This study also investigated possibly significant relationships between emotional intelligence, teacher self-efficacy, and such variables as gender, age, and teaching experience; however, as the data showed no statistically significant correlation for these latter variables, the authors concluded that “both male and female EFL teachers with different age range and experiences can be successful in teaching” (p. 705). Nejati et al. (2014) also explored gender among NNESTs of EFL in Iran and its relation to the various subscales of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES. While this study used a small sample size ($N = 34$), its results indicated that a statistically significant difference existed for
gender, student engagement, and instructional strategies. Specifically, male NNESTs of EFL were shown to be more efficacious in student engagement, while female NNESTs of EFL were found to be more efficacious in using instructional strategies.

Although much is already known about the benefits of teacher self-efficacy of NNESTs who teach EFL, Chong et al. (2010) rightly concluded, “Despite being conceptualized in individualistic western cultures, results . . . indicate that self-efficacy does have relevance for practice in the Asian educational context” (p. 188). Furthermore, Cheung et al. (2013) highlighted the need to investigate “teacher self-efficacy around the world . . . and to compare our teacher efficacy with other cultural contexts” (p. 1). However, comparing teacher self-efficacy among cultures is merely a preliminary step, as a robust model to predict teacher self-efficacy is required. To date, the existing body of teacher self-efficacy research has failed to develop such a predictive model that can reliably predict teacher self-efficacy among NNESTs of EFL, especially in the Thai rural context. Given the absence of such a model, the nine predictor variables included in this study have been carefully analyzed in light of the target Thai context, as well as in light of existing research in other contexts. As such, the inclusion or exclusion of a given variable in this study’s predictive model was a result of extensive deliberation and study, as every effort has been made to include all relevant variables in this study’s model. Before reviewing the scant literature relating to teacher self-efficacy of NNESTs of EFL in the Thai setting, a brief overview of the Thai educational system in general, Thai English education practice in particular, as well as a brief treatment of Thai educational reforms is warranted.

**Thai Education and Thai English Education**

**Historical context.** Education in Thailand is unequivocally rooted in Thailand’s Buddhist heritage (Foley, 2005). The first schools in the Thai context were the Buddhist temple
schools, so this Buddhist heritage was “the foundation of the Thai world-view” (Foley, 2005, p. 227). Foley (2005) further explained, “Thus, teaching and learning of English in Thailand also involves an understanding of Thai culture” (p. 227). Perhaps the most important Buddhist concept in relationship to teaching and learning is the concept of karma. Simply put, karma is the accumulation of one’s good and bad deeds. If one is kind in this present life, then she or he will enjoy good karma in the next reincarnation; this belief encourages a fatalistic approach to life (Mosel, 1966). For example, the “operation of certain suprahuman forces” (Mosel, 1966, p. 192) predisposes situations to specific outcomes that are largely beyond an individuals’ control. In this mindset, if a student achieves poorly, neither the teacher nor the student is held fully responsible as these suprahuman forces are also a recognized influence. This cultural belief in suprahuman forces may impact both students’ and teachers’ perceptions of their control over the teaching and learning process.

Another key Buddhist concept important to the Thai educational context is the notion of bunkhun (Foley, 2005). This concept is “the benefit and benevolence rendered to someone” (Foley, 2005, p. 228). For example, since the Thai mother gave the child life, there is often a great amount of bunkhun towards one’s mother. As such, since the Thai child has received much from his or her mother, it is the child’s responsibility to repay the mother’s kindness and favor. This concept of bunkhun is also strong between the teacher and the student. “‘Bunkhun’ for the teacher is second only to the parents” (Foley, 2005, p. 228). Because teachers daily make sacrifices for their students, the students owe the teachers a moral debt, which has to be repaid (Foley, 2005). As Buddhist ideology has such a strong influence on Thai thought and teacher self-efficacy studies and measures have been largely based in Western, non-Buddhist contexts, it is appropriate and necessary to conduct this research in the Thai context.
While Buddhist ideology may not be unique to Thailand in comparison to neighboring countries, the fact that Thailand was never colonized is. While this is a strong point of national pride because Thailand was never colonized, the country’s educational system did not receive the same level of foreign language influence from outsiders that countries such as Myanmar, Vietnam, and Laos did from the British, French/Russians, and French, respectively. However, as Raudenbush, Bhumirat, and Kamali (1992) pointed out, “The benefit of Thailand’s experience is that it has faced the problem of instructional quality earlier than most other developing nations and has already tried a great diversity of strategies for improvement” (p. 166). Some of these reform efforts are briefly discussed below.

**Thai education reforms and present conditions.** While teacher self-efficacy research in the Thai context is scarce, studies investigating educational reform and discussing present conditions of Thailand’s educational system abound (Baker, 2012; Fry & Bi, 2013; Hallinger & Lee, 2011; Khamkhien, 2010, 2011; Klanrit & Sroinam, 2012; Ngowananchai, 2013; Pattanapichet & Chinokul, 2011; Prappal, 2008; Sokal, 2010). In fact, Hallinger and Bryant (2014) expertly highlighted the changes in the Thai educational system over a 15-year span. “During the 1990s, Thailand, like other rapidly developing nations in Southeast Asia, had focused upon expanding access to education for its youth” (p. 400). In a country in which the majority of the population remains in rural context, providing basic access to education can be challenging (Hallinger & Bryant, 2013). However, in the Thai context, “There was a developing consensus that expanded educational access had simply increased the number of students being exposed to the ‘pedagogy of the worksheet’” (Hallinger & Bryant, 2013, p. 400). Thus, some contend that educational reforms in Thai education often emphasized quantity of graduates more than the actual quality of learning (Fry & Bi, 2013; Hallinger & Bryant, 2013). Presently,
increasing emphasis is placed upon test scores on national exams. However, given large class sizes and the difficult teaching loads of most Thai teachers, a secondary tutoring system has sprung up to help students prepare for examinations. Another new phenomenon in the Thai educational system is satellite instruction. In order to provide more extensive and equitable access to education throughout the kingdom, satellite instruction by expert teachers in Bangkok was made available to rural schools that may be understaffed (Foochalern, 2015). This royal project known as distance learning TV (DLTV) was implemented in its first term in 15,369 schools in rural contexts across the kingdom and was found to have made promising improvements in student achievement in every area except English language (Foochalern, 2015). Thus, while present reforms and changes have great potential to address the needs found within this educational system, English education in Thailand is open for further development.

**English education in Thailand.** English education in Thailand enjoys a rich history (Hayes, 2008, 2009; Khamkhien, 2010, 2011; Ngowananchai, 2013). Beginning with King Rama III (1824-1851), English began to gain importance to wealthy Thais and government officials. “However, it was not until 1921 that English became a compulsory subject for students beyond Grade 4” (Foley, 2005, p. 224). Further emphasis on learning English for communication with native English speakers developed in response to the Indo-China war in the 1960s (Foley, 2005). This emphasis on English was short lived, however, as the Thai government relegated language classes as electives and no longer as mandatory subjects (Foley, 2005). In response to changing economics, English was once again mandated in 1996, as the government required English language instruction starting with grade one (Foley, 2005). The 1999 National Education Act brought about even more extensive requirements for English
language teaching and learning as it emphasized learner-centered pedagogy assessed by performance-based assessments (Lounkaew, 2013).

However, according to Bolton (2008), of Thailand’s nearly 65 million people, 10% speak English, while in the Southeast Asian region there are an estimated 812 million users of English (Baker, 2012; Bolton, 2008). Khamkhien (2010) further explained, “It is extremely difficult for Thai leaners to master the English language in terms of speaking and listening” (p. 185). Khamkhien (2010) went on to state, “While English is considered the most important and popular foreign language taught in schools,” (p. 185) many Thais have struggled to see significant gains in their English language competency. Hallinger and Lee (2011) explained, “The lack of results is linked to a reform strategy that has emphasized top-down implementation and a cultural predisposition to treat change as an event rather than as a long-term process” (p. 139). However, in spite of the meager gains in English proficiency, the importance of English in Thailand cannot be understated. As Ngowananchai (2013) expertly pointed out, “. . . the importance of English in Thailand will be significant in 2015 as it is a time for the full effect of the ASEAN Economic Community” (p. 398).

**Thai EFL classroom setting:** Several characteristics of the Thai EFL classroom setting have been noted in the literature and provide important contextual information for this study. For example, the medium of instruction in most Thai EFL classroom is Thai, not English. Most teachers who teach English to Thai learners are Thai NNESTs, and according to Khamkhien (2010), their language input “. . . leads to the use of unnatural language and creating the failure of genuine interaction in the language classroom” (p. 184). As pointed out above, another common characteristic in Thai EFL classes is that teacher-student interaction is more common than student-student interactions (Essien, 2015). This characteristic further limits the incidence
of English language use in the Thai EFL classroom, as one teacher interacting with thirty students individually is quite time consuming.

Large class size is another characteristic in most Thai EFL classes. The large class size poses a challenge to the Thai NNEST, as “it is not easy for a teacher to manage an English class with a large number of non-native speakers of English” (Ngowananchai, 2013, p. 397). While the above characteristics are critical, perhaps the most important prevailing characteristic is the “emphasis of teaching reading and grammatical structure as well as vocabulary rather than emphasizing speaking skills” (Ngowananchai, 2013, p. 399). Although Thai NNESTs may feel more confident in focusing on these traditional areas of English instruction, another likely reason for this limited instructional purpose is the great emphasis on English in Thai national testing. As Ngowananchai (2013) explained, students, “just learn English for a test” (p. 399). Thus, the motivation for many Thai students for learning English is quite limited. Bruner, Sinwongsuwat, and Radic-Bojanic (2015) succinctly summarized EFL teaching in Thailand: “Classroom practices involved in the development of oral English communication skills have been shown to be very problematic” (p. 13).

**Teacher Self-efficacy of NNESTs of EFL in Thailand**

While studies focusing on teacher self-efficacy in an EFL context are not widespread, even more limited in number are studies investigating this issue in a Thai context. Two notable exceptions follow. Vibulpol (2004) investigated pre-service EFL teachers’ beliefs in the Thai context. While Vibulpol’s study focused on beliefs about language learning and classroom practices, this mixed method study suggested that pre-service EFL teachers in Thailand held similar beliefs to their students, that these beliefs were influenced by their own learning, and that the difficulty of the English language intimidated the teachers, thus decreasing their willingness
to use English. Unyakiat (1991) also investigated teachers’ perceptions. Her study sought to understand Thai secondary EFL teachers’ perceptions of their preparedness to teach EFL in Thailand. Using quantitative self-report measures, the data suggested that pre-service teachers did not feel prepared to teach EFL, resulting in a low sense of teacher self-efficacy. Thongnoum (2002) analyzed the relationship between self-efficacy and academic goals; however, this latter study focused primarily on student self-efficacy and self-regulated learning more than teacher self-efficacy. Raudenbush et al. (1992), however, did address teacher self-efficacy in the Thai context. Specifically, they analyzed teachers’ sense of efficacy and students’ perceptions of instructional quality in relationship to the success or failure of educational reforms. While this study conceptualized teacher self-efficacy as an absence of obstacles, the study clearly articulated both cognitive and objective components of teacher self-efficacy.

As alluded to above, Best’s (2014) study analyzed the relationship between Thai English teachers’ English proficiency and their perceptions of teacher self-efficacy. Using a mixed methods approach, Best (2014) collected data via a questionnaire from a sample of 33 elementary Thai teachers of English. The first aim of Best’s (2014) study was to provide basic descriptive data regarding elementary Thai teacher’s perceptions of English proficiency as well as their perceptions of teacher self-efficacy. Best’s (2014) second aim was to analyze the data to see if any correlation existed between these two variables. As this study did not find a correlation between self-perceived English proficiency and self-reported English teaching efficacy, follow-up research is vital. Most recently Jaengaksorn et al. (2015) published research that overlapped this present study. In Jaengaksorn et al.’s study, a similar tool to measure teacher self-efficacy was developed. However, while this instrument was based upon Tschannen-Moran and Woolfolk Hoy’s (2001) scale, Jaengaksorn et al. (2015) used the full
version of the instrument and merely evaluated and confirmed its appropriateness for the Thai context. Since there is a dearth of direct teacher self-efficacy studies, only Best’s (2014) English language version and Jaengaksorn et al.’s recent analysis of the long form of the TSES (Tschannen-Moran & Woolfolk Hoy, 2001) instrument in the Thai context, Thailand still offers fertile ground for teacher self-efficacy studies that could contribute to the understanding of SCT in a Thai context, as well as could help support NNESTs’ efforts to teach EFL.

Summary

As this review of literature highlights, much is already known about teacher self-efficacy, as it plays a significant role in the teaching and learning process. Presently, research evidence suggests a significant, positive association between teacher self-efficacy and such constructs as motivation to teach, persistence in teaching, student achievement, and many others. However, what is not fully understood is what factors predict teacher self-efficacy among NNESTs of EFL in general and more specifically in a rural Thai context. In short, a predictive model has not yet been proposed for this context. As teacher self-efficacy has been largely unexplored in Thailand, this present study is both timely and warranted. The development and use of the Thai language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) is also vital, as this instrument has never been developed or used in the Thai context. While it remains to be seen whether this instrument is reliable in the Thai context, gaining a better understanding of predictive factors that influence teacher self-efficacy among NNESTs of EFL in rural Thailand is critical. Thus, this study has great potential to address the gap in empirical knowledge regarding the effectiveness of the Thai language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001). The methodology utilized in this study to investigate teacher self-efficacy will be described in the next chapter.
CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this predictive, correlational study is to test sources of self-efficacy as proposed in Bandura’s (1977, 1997) social cognitive theory (SCT) in the Thai context by investigating individual factors (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade level-taught, and instructional purpose) that may predict teacher self-efficacy of non-native English-speaking teachers (NNESTs) of English as a Foreign Language (EFL) teaching first to twelfth grade in Thai government schools. While Tschannen-Moran and Woolfolk Hoy (2007) used parallel hierarchal regression analysis to explore differential antecedents (both inclusive and exclusive of teacher characteristics) of teacher self-efficacy beliefs, as the predictor variables in this study focus solely on teachers’ individual characteristics and the research is exploratory, a standard multiple regression was used to evaluate the relationship between the predictor variables and the criterion variable, teacher self-efficacy (Karimvand, 2011; Sabokrouh, 2014). This chapter discusses the study’s design, research question, hypotheses, participants, and setting and describes the instrumentation, procedures, and data analyses.

Design

This quantitative study used a predictive, correlational research design to investigate the predictive relationship between the nine variables (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose) and one criterion variable, teacher self-efficacy (Field, 2005; Mundfrom,
Perrett, Schaffer, Piccone, & Roozeboom, 2006) among K-12 grade Thai teachers who teach EFL in rural contexts. This design was most appropriate as this exploratory research seeks to identify relationships that may exist between the variables based upon existing conditions without any treatment (Warner, 2013). Predictive, correlational design was also chosen based upon its use in similar studies examining teacher self-efficacy (Chong et al., 2010; Huangfu, 2012; Karimvand, 2011; Lam, 2012; Nosratinia et al., 2014; Sabokrouh, 2014).

**Threats to Validity**

Given the chosen research design and its implementation, several limitations existed in this study. The first threat to internal validity was omitted variable bias. Warner (2013) explained, “It is not possible to be certain that we have a complete list of causes or complete assessment of sources of bias” (p. 556). Thus, the researcher cannot claim that this study is a complete model for possible predictors of teacher self-efficacy in the Thai context. However, to lessen the likelihood of omitted variable bias, the researcher conducted an extensive search of literature to identify variables previously found to influence teacher self-efficacy that were simultaneously rooted in Bandura’s (1977, 1997) SCT model.

Another threat to the internal validity of this study was error-in-variable bias, which points to possible errors in measurements (Gall, Gall, & Borg, 2007). However, the careful design of this study, the extensive effort to validate the instruments, and the double blind scoring procedure limited errors in measurements. An additional threat to internal validity was simultaneous causality bias (reversed causality) (Kaufmann, 2013), which considers whether both the criterion and predictor variables reciprocally cause each other. In this study, there was a potential that perceived proficiency in English (or other variables) could reciprocally have caused increased teacher self-efficacy and vice versa; however, the researcher analyzed strength
and direction of the variables to address any issues of reciprocal causality; none were found.

Given that only teachers within one province of NNESTs in Thailand participated in this study, the generalizability of findings to other provinces and contexts is also limited. Also, as only data from those participants who chose to participate were included, perhaps the data from the non-participators would have revealed different results. Non-ignorable, non-responses to survey items could have also proven to be a limitation of this study, as suggested means to compensate for non-responses such as further attempts to contact the initial non-responders was impossible due to the anonymity of the instruments (Wood, White, & Hotopf, 2005). Thus, although 331 teachers participated ($N = 331$), given the omission of key data, only 257 survey responses were used for analysis ($N = 257$).

**Research Question and Hypotheses**

The research questions for this study are as follows:

**RQ1**: Can the following individual characteristics: perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose (the predictor variables) of Thai NNESTs of EFL predict teacher self-efficacy (the criterion variable) as measured by the Thai language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001)?

**H1**: There is a statistically significant, predictive relationship between the individual characteristics (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose) of Thai NNESTs of EFL
and teacher self-efficacy as measured by the Thai-language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀1**: There is no statistically significant, predictive relationship between the individual characteristics (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose) of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai-language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁2**: There is a statistically significant, predictive relationship between the perceived proficiency in English, as measured by the Thai language version of Chacón’s (2005) Self-reported English Proficiency Scale, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai-language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀2**: There is no statistically significant, predictive relationship between the perceived proficiency in English, as measured by the Thai language version of Chacón’s (2005) *Self-reported English Proficiency Scale*, of Thai NNESTs who teach EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁3**: There is a statistically significant, predictive relationship between the college major (English education or not English education), as measured by a self-report questionnaire, of Thai NNESTs who teach EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.
**H₀₃:** There is no statistically significant, predictive relationship between the EFL college major (English education or not English education), as measured by a self-report questionnaire, of Thai NNESTs who teach EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁₄:** There is a statistically significant, predictive relationship between the time spent abroad, defined as time spent outside of Thailand and operationalized by a self-report in months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀₄:** There is no statistically significant, predictive relationship between the time spent abroad, defined as time spent outside of Thailand and operationalized by a self-report in months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₁₅:** There is a statistically significant, predictive relationship between time spent in an English speaking country, defined as time spent in a country with English as its official first language and operationalized by a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀₅:** There is no statistically significant, predictive relationship between the time spent in an English speaking country, defined as time spent in a country with English as its official first language and operationalized by a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.
**H16:** There is a statistically significant, predictive relationship between the longevity teaching, defined by the number of years inclusive of the present year with the official government title of “teacher” and operationalized via a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H06:** There is no statistically significant, predictive relationship between longevity teaching, defined by the number of years and months inclusive of the present month with the official government title of “teacher” and operationalized via a self-report in years and months of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H17:** There is a statistically significant, predictive relationship between the longevity as an English teacher, defined by the number of years and months inclusive of the present month with the official title of “English teacher” and operationalized via a self-report in both years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H07:** There is no statistically significant, predictive relationship between the longevity as an English teacher, defined by the number of years and months inclusive of the present month with the official title of “English teacher” and operationalized via a self-report in years and months, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H18:** There is a statistically significant, predictive relationship between the highest degree attained, defined by the highest degree or certificate of record and operationalized via a self-
report, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

H₀8: There is no statistically significant, predictive relationship between highest degree attained, defined by the highest degree or certificate of record and operationalized via a self-report, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

H₁9: There is a statistically significant, predictive relationship between the present grade level taught, defined by current grade-level(s) of record and operationalized via a self-report of all current grade levels of record of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

H₀9: There is no statistically significant, predictive relationship between the present grade level taught, defined by the current grade-level(s) of record and operationalized via a self-report of all current grade levels of record of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

H₁10: There is a statistically significant, predictive relationship between the instructional purpose operationalized via a self-report of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

H₀10: There is no statistically significant, predictive relationship between the current instructional purpose operationalized via a self-report of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.
Participants

Participants were identified for this study through convenience sampling of English teachers who teach at government schools in Nan, Thailand, during the 2015-2016 school year. The Thai school year is in session from May until October with a four week break, and then from November to March with a seven week break. According to Gall et al. (2007), convenience sampling is appropriate when a researcher needs to use an accessible population and not using the convenience sample available would “threaten the ability” (p. 175) to do the study. This present study falls within this category. However, in addition to convenience sampling, snowball sampling was also used to gather qualified participants. The population from which the participants was drawn is ethnicity quite diverse (Khamwongsa, 2012). In addition to the rich ethnic heritage of Thai citizens found in this population, which includes Northern Thai (Khon Muang), tribal (Hmong, Mien, Lua, Kamut, Mabri, Tai Lu), Central Thai, Southern Thai, and Northeastern Thai (Isaan), other expatriate NNESTs of EFL also teach in the Nan province (Filipino, German, Norwegian, Swedish, etc.). Given this diversity of ethnicity among NNESTs of EFL in Nan province, the linguistic ability represented in this population is profound. Another key feature of the population of NNESTs of EFL in the Nan province is that teachers may teach in either private or government schools, yet many others teach in more informal settings such as language or children’s centers.

According to Warner (2013), the needed sample size to ensure appropriate power is \( N \geq 104 + k \) where “\( N \) is the minimal sample size and \( k \) is the number of predictor variables” (p. 456). Thus, while 113 participants \( N > 104 + 9 \) were required to detect a medium effect size given a statistical power of .7 and a significance at \( p = .05 \), this study exceeded this minimal standard and included 331 total cases with 257 being complete and suitable for analysis. Thus,
out of 450 total surveys distributed and the total of 331 returned surveys, there was a response rate of 73.5%.

Several characteristics of this particular sample deserve attention. Given the prevalence of transgendered females in Thai culture, a check for gender status was included; it was found that 12 participants (4.7%) classified their gender identify as “other,” while 44 reported being male (17.1%) and 201 reported being female (78.2%). The sample ranged in age from 23 to 60 years old with a mean age of 42. Participants reported the following distribution of ethnicity: Northern Thai \(n = 255\), Isaan (Northeastern Thai) \(n = 1\), and Southern Thai \(n = 1\). Regarding the sample’s marital status the majority reported being married \(n = 159\), while 94 reported being single \(n = 94\), and two reported their marital status as “other” \(n = 2\). Another key characteristic of the sample was their linguistic abilities: the participants reported speaking Central Thai \(n = 246\); Northern Thai \(n = 243\), Isaan (Northeastern Thai) \(n = 31\), Southern Thai \(n = 5\), Chinese \(n = 5\), English \(n = 209\), local tribal languages \(n = 16\), and other languages not otherwise included \(n = 6\). Buddhism represented the major religion \(n = 254\) of the sample while the only other religion reported was Christianity \(n = 3\). The demographics portion of the questionnaire was used to collect data, which was analyzed further and is discussed in Chapter Four.

All of the participants in this study except for two held the appropriate credentials to be considered a full-fledged government teacher (ข้าราชการ), which includes a bachelor’s degree and successful completion of the national teacher’s test with an adequate score to meet the government established quota for the given year. It should be noted that given the variation in school administration, credentialing, and school cultures between private and public schools in Thailand and the need to strive for a homogeneous sample, private school NNESTs of EFL were
excluded from this study (Khamkhien, 2010). Expatriate NNESTs of EFL were also excluded from the sample, as these NNESTs are beyond the scope of this study. Table 3 below presents the survey of demographic data.
### Table 3

**Participant Demographic Data Questions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unit of Measure</th>
<th>Sample question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Number of years</td>
<td>Age ___ years อายุ…………ปี</td>
</tr>
<tr>
<td>Gender</td>
<td>Male/Female/Other</td>
<td>Gender ___ male ___ female ___ other ___ เพศ ___ชาย ___หญิง ___อื่นๆ โปรดระบุ………..</td>
</tr>
<tr>
<td>Marital status</td>
<td>Married/Single</td>
<td>Marital status: ____ married ____ single สถานภาพ ____สมรส ____โสด โปรดระบุ…………………</td>
</tr>
<tr>
<td>Religion</td>
<td>Buddhist/Christian/Muslim/other</td>
<td>Religion ___ Buddhist ___ Christian ___ Muslim ___ Other please identify นับถือศาสนา ___พุทธ ___คริสต์ ___อิสลาม ___อื่นๆ โปรดระบุ…………………</td>
</tr>
<tr>
<td>Regional origin</td>
<td>North/South/ Central/Northeastern/other</td>
<td>Region of origin: ____ North ____ South ____ ภาค ___เหนือ ___ใต้ ___กลาง ___อีสาน ___อื่นๆโปรดระบุ…………………</td>
</tr>
<tr>
<td>Languages spoken</td>
<td>Central Thai, Northern Thai, Isaan, Southern Thai, Tribal language, Chinese, English, other</td>
<td>What language can you speak? (Please the blank). ___ Central Thai ___ Northern Thai ___ Isaan ___ Southern Thai ___ English ___ Tribal language__, Chinese, other ___ท่านสามารถพูดภาษาอะไรได้บ้าง? ___ภาษาไทยกลาง ___ภาษาคำเมือง ___ภาษาจีน ___ภาษาอีสาน ___ภาษาใต้ ___ภาษาอีสานทุติยา ___ภาษาเขมร (ระบุภาษา) ___อื่นๆ โปรดระบุ…………………</td>
</tr>
</tbody>
</table>

### Setting

“Despite trends towards urbanization and increased manufacturing, Thailand is still largely a rural nation with more than 60% of the population located in rural provinces” (Hallinger & Bryant, 2013, p. 408). Nan province represents one such rural province situated in
Northern Thailand. It is located about 500 miles from the country’s capital, Bangkok. Nan province is divided into the following 15 districts: Muang Nan, Mae Charim, Ban Luang, Na Nai, Pua, Tha Wang Pa, Tha Wiang Sa, Thung Chang, Chiang Klang, Na Muen, Santisuk, Bo Kluea, Song Khwae, Phu Phiang, Chaloem Prakiat (Thanakwang, Ingersoll-Dayton, & Soonthorndhada, 2012). Given that the providential center is Muang Nan (Nan city) it is necessary to explain that this study will include the entire province of Nan, which includes the above districts and not merely the city of Nan. This site was selected because even though the majority of the 87,104 public schools in Thailand are located in rural contexts, most studies focused on Thai English education in Thailand are situated in large cities or universities (Prappal, 2008, p. 135). Thus, the rural setting is much more typical and is appropriate for this present study.

Previous studies investigating NNESTs’ teacher self-efficacy were also situated in predominantly urban settings (Praver, 2014). As such, it was vital to expand this area of research to rural contexts as well. Given the convenience and the access that the primary researcher had in this province from living in Nan over six years, its rural context and the need for empirical research concerning this topic in non-urban settings in Thailand, this province was chosen for the study. Figure 2 below pinpoints the setting on the map.
Additionally, the specific school setting of this study was Thai government schools across both elementary and secondary levels. Thailand’s education system is divided into the following three levels: (a) Level one: Anuban one to three (three years to five years old), (b)
Level two: Prathomsuksa (Grades one to six and ages six to 11), and (c) Level 3: Mattayomsuksa (grades seven to 12 and ages 12 to 18) (Foley, 2005). Prathomsuksa one to Mattayomsuksa three (ninth grade) are compulsory. Students are required to take an end of the grade test that must be passed independently or at least with teacher coaching upon subsequent attempts. Should students wish to continue studying past the compulsory Mattayomsuksa three, they are required to take the Ordinary National Educational Test (O-NET); after the completion of Mattayomsuksa six (12th grade), students must then pass the Advanced National Educational Test (A-Net) to graduate (Foley, 2005). A final important test within the Thai educational system is the Central University Admission System (CUAS), which determines entry into university. CUAS is based upon the combined O-NET and A-Net scores, as well as the students’ grade point averages during their tenth grade year (Mattayomsuksa four) (Poovudhikul, 2013).

English language instruction and corresponding classrooms are nestled within this overall structure. Thai English classrooms in the rural context do not vary tremendously. Given that the researcher lived and worked in the Thai EFL field spanning over twenty years, several consistencies across most English classrooms in Thailand have been observed. For example, most classrooms in Nan continue to have a blackboard or a white board for teacher-fronted instruction. Another frequently observed characteristic of English language classes in Nan province and throughout the kingdom is the language of instruction—mostly Thai (Khamkhien, 2010). Class size is also fairly consistent across the various classes in Nan province as Thai EFL classes typically include 30 to 40 students per teacher; thus, rote memorization is common and worksheet driven pedagogy persists (Hallinger & Bryant, 2013). Essien (2015) confirmed another common observation about Thai EFL classes in Nan; few interactions activities are included to promote cooperative learning and student-student collaboration in English. Clearly,
not every English language class and classroom reflects these general trends; however, the above description adequately describes this present researcher’s observations of the EFL language classrooms in the rural Thai context over twenty years. A detailed description of the instrumentation, including the setting in which teachers completed the instrument in this study follows.

**Instrumentation**

A single instrument comprised of demographically based questions, Thai language versions of both the Self-reported Proficiency in English scale (Chacón, 2005) and the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) were used to measure the identified variables in this study. While Jaengaksorn et al. (2015) were simultaneously developing a Thai language version of the long form of the TSES, the author did not have knowledge of or access to this instrument. Thus, all instruments were developed and used for this present study. Participants received the paper-based survey via the Thai post to their school addresses, through personal delivery, and through snowball sampling. In one area of the province, this snowball sampling led to other English teachers completing their surveys by hand and then scanning and returning their responses via email to the Nan Area One Education Office. The administrators of this office then printed the surveys and submitted them to the researcher in person. In order to improve the participants’ response rates and to provide the most convenient setting for completion of the instrument, the participants self-selected a place and time to complete the instrument. The instrument was translated into Thai to make it accessible to teachers of diverse levels of English language ability rather than only those advanced enough to complete the instrument in English. 

An overview of the rigorous translation process used in this study, as well as a description of the content, origin, and applicability of the instrument follows.
Instrument Translation and Validity Process

Regarding the importance of construct validity, Dray, Lowenthal, Miszkiewicz, Ruiz-Primo, and Marczynski (2011) explained that construct validity is achieved when the instrument is subjected to a “rigorous process” (p. 33) that examines both the face and content validity. As the researcher chose to translate the instrument for this study into Central Thai, without question the process was iterative and rigorous in nature and followed four major steps to ensure both content and face validity: (1) parallel translation of the original instruments, (2) the consolidation of parallel translations, (3) item analysis, (4) revisions and adjustments based upon the item analysis of these experts, and (5) final proof-reading. These steps are discussed in more detail below.

Parallel translation of the original instruments. According to Douglas and Craig (2007), “It is critical to use a team or committee approach to ensure a reliable and effective translation” (p. 39). Based upon this premise parallel (double) translation was utilized; according to Douglas and Craig (2007), this process should include at least two translated versions of the same instrument. First, the demographic questions, the perceived English proficiency (Chacón, 2005), as well as the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001), were combined into a single English language version of all three of these parts. Three Thai bilingual (Thai first language) translators with a minimum of a bachelor’s degree and at least three years experience as a translator received this English language version of the combined instrument. They each worked independently to translate the instrument.

Consolidation of parallel translations. The next step was to consolidate these parallel translations, so two additional translators with at least 10 years or more teaching experience compared these separate translations for similarities and differences. They collaborated to
combine the three different translations into one comprehensive translation. This approach followed Douglas and Craig’s (2007) “committee approach” (p. 33). It was deemed important that translators with teaching experience be included at this stage in the instrument’s development as a large portion of the instrument referred directly to situations specific to classroom teachers. As such, these translators met at a local school and worked collaboratively to consolidate the parallel translations.

**Item analysis.** The resulting instrument then underwent item analysis by three other Thai language experts to establish the content validity. The minimum requirements to be considered “qualified” to conduct the item analysis included being Thai/English bilingual, holding a Bachelor’s degree or higher in English or Thai, and having a minimum of three years of formal or informal experience in translating between Thai and English. As these experts were in separate locations, the expert team approach allowed for input from various experts without having to be in the same geographic location (Douglas & Craig, 2007).

According to Douglas and Craig (2007), when translating questionnaires it is necessary to conduct an “equivalence check” (p. 33). Some expressions or constructs cannot literally be translated into another language. As such, the experts conducted item analysis to assess how accurately the translations represented the original constructs, as well as how clearly each question was posed by responding to a Likert-type scale ranging from 0 to 10 and the following open-ended questions/statements regarding each item: (a) *How well did this item reflect the construct?* (b) *To what degree does this item confuse you?* (c) *How clear is this item? Please suggest any necessary changes.* The instrument was emailed to the three expert reviewers for analysis over a two-week period. Feedback from the expert reviewers was sent to the researcher via email.
Revisions based upon the item analysis. Feedback was then analyzed by a committee of two, including the researcher (an English/Thai bilingual speaker) and one of the bilingual teachers (Thai/English bilingual) who helped to consolidate the parallel translations. Changes were then made to the instrument as indicated in order to improve the clarity of the translation. Although it was planned that if two or more reviewers indicated a low level of content validity and a high level of confusion, then the item would be edited and re-reviewed by the experts. However, no major discrepancies and only a few minor syntactical problems were found.

Final proofreading. The final step in this process was conducting a final proofreading of the instrument for typographical and spelling errors by these same two experts. This final review resulted in a few minor corrections. Thus, given this rigorous process, the instrument should be considered to be a valid translation holding excellent content validity.

Instrument Description

The instrument developed for this study was a paper-based survey comprised of three parts: a demographic section, the Thai version of the Self-reported Proficiency in English scale (Chacón, 2005), and TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) (See Appendix G). While demographic and English proficiency sections both include 16 forced-choice items, the teacher self-efficacy portion of the survey contained 12 force-choice items. The Cronbach’s alpha coefficient was calculated and has been reported below for the Thai language version of both the Self-reported Proficiency in English scale (Chacón, 2005) and the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) in this present study as well. The entire instrument, including its subcomponents, took the participants less than 30 minutes to complete. The sections of this instrument are described in greater detail below.
**Predictor variable: Perceived English proficiency.** A Thai language version of the Self-reported Proficiency in English scale (Chacón, 2005) was developed and used to measure the first predictor variable, perceived English proficiency. This variable is generally defined as the participants’ self-reports concerning their English language proficiency in listening, speaking, reading, writing, and culture. This self-report is comprised of sixteen items based upon the professional literature (Chacón, 2005). Originally developed for use with EFL teachers in Venezuela, the items in this scale are based on a six-point Likert-type scale ranging from “Strongly Disagree” (1) to “Strongly Agree” (6). The following is a sample question: “I know how to act in social English-speaking situations” (Chacón, 2005, p. 263). Each score ranged from 0 to 96, with higher scores reflecting higher perceived proficiency in English. As Chacón (2005) pointed out, “The higher the score, the more proficient teachers self-reported themselves in reading, writing, listening, speaking, and culture” (p. 263). The reliability of the original scale was reported using Cronbach’s alpha coefficient, which yielded an alpha level of .92. Eslami and Fatahi (2008) showed the translated (Farsi) version of the Self-reported English Proficiency Scale to be a reliable measure and reported Cronbach’s alpha to be .85, while Mohamadi and Asadzalah (2012) reported an alpha level of .837 for their Persian language version. Other studies successfully used the English language version in EFL contexts (Ghasemboland & Hashim, 2013a; Yilmaz, 2011). Cronbach’s alpha coefficient for this present study’s Thai language version of the Self-reported Proficiency in English scale was found to be $\alpha = .98$, which can be interpreted as a high level of reliability (Warner, 2013).

While a measure of the participants’ English language *achievement* was the initially planned way to operationalize proficiency, upon deeper examination of Bandura’s (1977, 1997) theory and further analysis of existing literature, *perceived* ability was assessed instead. The
basis of teacher self-efficacy is not merely the person’s actual achievement, but rather his or her perception of proficiency (Klassen et al., 2011; Pajares, 1996). For example, Sabokrouh’s (2014) study indicated that in order to feel efficacious, teachers needed to have a positive belief in their English proficiency. As such, based upon the literature, perceived proficiency was included instead of English achievement (Eslami & Fatahi, 2008; Ghasemboland & Hashim, 2013a; Lee, 2009; Topkaya & Yavu, 2011; Zakeri & Alavi, 2011). Given that this instrument is based upon self-report, no administration details were required beside the instructions to complete the questionnaires honestly and individually. As alluded to above, the entire instrument including its subcomponents took the participants less than 30 minutes to complete.

**Other demographic and predictor variables.** The remaining predictor variables were measured by a Thai language paper-based self-report survey, which included basic demographic information (age, gender, marital status, Thai heritage, languages spoken, SES, religion). This demographic data is present in Table 3 above. The predictor variables (college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade level taught, and instructional purpose) were also assessed via the self-report questionnaire. Table 2 above highlights each variable and its type of measurement. This self-report format is consistent with that of other similar studies (Akbari & Tavassoli, 2014; Chacón, 2005; Eslami & Fatahi, 2008; Ghasemboland & Hashim, 2013a; Lee, 2009; Sabokrouh, 2014; Zakeri & Alavi, 2011).

**Criterion variable: Teacher self-efficacy.** Participants’ scores on the Thai language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) operationalized teacher self-efficacy, the criterion variable. The TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) is a 12-question, self-report survey that uses a Likert-type rating of 1 (“Not at all”) to 9 (“A great
This instrument is grounded in Bandura’s SCT (1997) and is built on the earlier work of the RAND researchers and Gibson and Dembo’s (1984) earlier self-efficacy scale (Fives & Buehl, 2010). A sample question follows: “To what extent can you craft good questions for your students?”

TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) has been shown repeatedly to be an appropriate measure of teacher self-efficacy even across cultures (Cerit, 2013; Chong et al., 2010; Eslami & Fatahi, 2008; Klassen et al., 2009; Kurt, 2014; Tschannen-Moran & Woolfolk Hoy, 2001; Yeo et al., 2008). According to Cerit (2013), “In research exploring the validity of TSES in five countries it was found that the TSES showed convincing evidence of reliability and validity across the five countries” (p. 259). Sabokrouh (2014) also used this instrument among NNESTs in Iran. Chong et al. (2010), Huangfu (2010), and Lam (2012) successfully used TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) among Asian teachers, while Jaengaksorn et al. (2015) recently found the long version of the TSES to be a valid scale in an urban Thai context. Likewise, Kurt (2014) employed a Turkish language version of the TSES (long form) (Tschannen-Moran & Woolfolk Hoy, 2001) in Turkey among a sample of biology teachers, while Khan (2014) used the English language version of the TSES (long form) (Tschannen-Moran & Woolfolk Hoy, 2001) in Pakistan. Furthermore, Klassen et al. (2011) pointed out that this instrument most closely aligns with Bandura’s conceptualization of teacher self-efficacy; thus, the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) is consistent with this study’s conceptualization of teacher self-efficacy. Finally, the originators of the TSES-SF granted permission and indicated support for translating and using this instrument in the Thai context (See Appendices A-C).
Regarding the composition of the TSES-SF, the aggregate range of scores is from 0 to 108, combining the three subscales: Efficacy in Student Engagement: Items, 2, 4, 7, 11; Efficacy in Instructional Strategies: Items 5, 9, 10, 12; and Efficacy in Classroom Management: Items 1, 3, 6, 8. Thus, the higher the score the more efficacious teachers tend to be. Also, Tschannen-Moran and Woolfolk Hoy (2001) discussed the content validity of this instrument in depth and reported that the TSES-SF had high content validity when compared with other instruments.

Regarding construct validity, given its close alignment with Bandura’s (1997) conceptualizations of self-efficacy sources, the scale possesses strong construct validity (Klassen et al., 2011). The TSES-SF has a reliability alpha level of .94 for the overall efficacy scale, .87 for engagement efficacy, .91 for instructional efficacy, and .90 for management efficacy (Tschannen-Moran & Woolfolk Hoy, 2001) (Aee Appendix B). The Cronbach’s alpha coefficient for this study’s Thai language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001) was found to be .95 for the overall scale, .84 for engagement efficacy, .91 for instruction efficacy, and .85 for management efficacy. Based upon Warner (2013), these scores can all be interpreted as reflecting a high reliability.

Given the robustness of this tool cross-culturally and its trend in producing reliable results (Henson et al., 2001), the TSES-SF was the best instrument for this study. Granted, as mentioned above, Akbari and Tavassoli’s (2014) instrument, the ELT Teacher Efficacy Instrument, (ELTEI) for English language teaching contexts holds promise for future teacher self-efficacy studies in the Thai context; however, given the ELTEI’s use of complex scenarios to assess teacher self-efficacy, the limited English proficiency of this study’s participants, and the challenges in verifying accurate translation from English to Thai, the TSES-SF remains the best choice for this study as to the researcher’s best knowledge a Thai language version of the
TSES-SF has never been developed or used in the rural Thai context and could possibly extend SCT and issues of teacher self-efficacy in the Thai context.

**Procedures**

As the approval process for conducting research in a foreign country can be a lengthy and difficult one, the first step was to submit all the necessary documents to the National Research Council of Thailand (NRCT) in order to gain official approval to conduct research as an American expatriate living in Thailand. As part of this overarching site approval process, both Nan District Education Officers were required to approve this study. Once this local approval was granted, subsequent supporting documents were sent to the NRTC requesting national approval. Notification of official approval came via the Thai post (see Appendix H). Given this official NRCT approval, the next step was to submit and defend the research proposal. Once proposal approval was granted, the Institutional Review Board (IRB) application was completed, submitted, and approved (see Appendices I-J). After gaining IRB approval, data collection began.

To elicit participation in the study, each Thai NNEST of EFL teaching first through twelfth grade at a government school in Nan province Thailand received one packet via the Thai post at their school address, in person, or through a fellow English teacher. The packets contained the following: (a) an introductory letter in Thai explaining the study and the date to return the surveys; (b) a brief letter in Thai and English providing the researcher’s contact information, as well as a brief professional and personal introduction; (c) the Thai language version instrument which included the following: the informed consent information as required by Liberty University’s IRB, the Thai language translation of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001), the Thai language translation of the Self-report English Proficiency Scale
(Chacón, 2005), and the survey questions about general demographic and teacher characteristics; and (d) a stamped, self-addressed envelope to return the completed instruments and optional incentive information (Appendices A-F).

The needed sample size was based upon Warner’s (2013) recommendations to ensure appropriate power \( N \geq 104 + k \) where “\( N \) is the minimal sample size and \( k \) is the number of predictor variables” (p. 456). Thus, this study aimed to include a sample with a minimum of 113 participants \((104 + 9)\) but far exceeded this goal. The mailed packets were returned within two weeks, the deadline stated in the packet. The packets given in person were immediately returned upon completion, and the packets collected by the administrators of the Nan Area One Office were picked up by the researcher on the stated deadline. While originally it was thought that if the response rate was too low to satisfy this minimal sample size, a follow-up letter would need to be sent asking each principal to encourage the teachers to participate before the end of the third week. However, due to the overwhelming response rate (73.5%), this follow-up step was deemed unnecessary. Also important to note is even though each school received a set number of packets (based upon the most recent data regarding the number of NNESTs of EFL at each particular school), some teachers may have been unavailable during the time of data collection (e.g., on maternity or sick leave, on vacation, or transferred to another position). Thus, some of the non-responses may have been due to such extenuating circumstances rather than a conscious choice not to participate.

In order to incentivize the participants, a raffle giving away four baskets of household items was included. While the surveys were anonymous, at the end of the survey the following statement was included at the bottom of the page: “If you would like to participate in an optional prize drawing, please complete the following information and return your completed forms in the
self-addressed, stamped envelope included in your packet by (the established date). All identifying information will be immediately removed upon receipt and will never be reconnected so that anonymity can be maintained.” Prizes were drawn based upon the submitted names and were sent via the Thai post.

Each questionnaire was numerically coded beginning with the number 1 to 400. This code was manually written on the back of each survey. However, given that snowball sampling also occurred, several surveys were returned without the code, which was manually added upon receipt of the surveys (401 to 450). Once all of the surveys were received, both the main researcher and a trained assistant separately recorded and scored the demographic information section, the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001), and the Self-reported English Proficiency Scale (Chacón, 2005) based upon scoring guides provided by the authors. While it was planned that if discrepancies occurred in the scoring, the two scorers would review the survey in question to come to an agreed upon score; however, no discrepancies occurred. Data for each coded case was recorded into an Excel spreadsheet; this data was then imported into IBM SPSS Statistics Version 20 software for analyses. In order to ensure proper data handling, the questionnaires were kept in a locked filing cabinet and the scoring data were kept on password-protected computers. In order to highlight any relationships between and among the variables, the data was analyzed via SPSS software following the prescribed analyses below.

**Data Analysis**

To analyze each null hypothesis, a standard multiple regression with a significance level set at $p = .05$ was used. According to Gall et al. (2007), standard multiple regression utilizes “research participants’ scores on two or more predictor variables to predict their performance on the criterion variable” (p. 345). As this predictive study contains multiple predictor variables and
one criterion variable and aims to analyze possible relationships between the predictor variables and the criterion variable, standard multiple regression analysis was the most appropriate. While a MANOVA was considered; it was rejected because it is suited for two or more criterion variables, and this study only has a single criterion variable (Warner, 2013). Standard (simultaneous) regression rather than a hierarchical regression in this present study of the perceived self-efficacy of Thai NNESTs of EFL is also consistent with similar studies in other contexts (Akinbobola & Adeleke, 2012; Hashemi & Ghanizadeh, 2011). Granted, Lam (2012) utilized hierarchical regression to analyze the association between educational trainings and level of education with teacher self-efficacy while controlling for gender; however, the present research data in this area is still too scant and is insufficient to provide the compelling theoretical and empirical grounding necessary to make decisions required by hierarchical multiple regression analysis. Thus, the predictor variables were entered into the regression model at the same time (Warner, 2013). As such, “The predictive usefulness of each $X_i$ predictor is assessed while statistically controlling for any linear association of $X_i$ with all other predictor variables in the equation” (Warner, 2013, p. 559). Thus, the regression equation is as follows: 

$$\hat{Y} = b_0 + b_1X_1 + \ldots + b_pX_p.$$ 

Prior to conducting any regression analysis, the researcher conducted the following assumption tests: (a) independence of observations; (b) homoscedasticity; (c) the presence of a linear relationship between the predictor variables and the criterion variable; (d) absence of multicollinearity; (e) no significant outliers; and (f) approximately normally distributed random errors (residuals). The assumptions were assessed using the following methods.

The assumption of independence of observation (no autocorrelation) was assessed and interpreted using Durbin-Watson’s original values (Field, 2000). Homoscedasticity and linearity
were examined using scatterplots (Gall et al., 2007), and partial regression plots using studentized residuals were used to further check linearity (Field, 2005). Cook’s distance was also calculated using the formula \( 4/(n - k - 1) \), where \( n \) is the number of cases and \( k \) is the number of independent variables to determine the “effect of a single case” (such as any outliers) on the model (Field, 2005, p. 165). A value greater than one was considered to be an extreme outlier.

According to Field (2009), multicollinearity is a “situation in which two or more variables are very closely linearly related” (p. 790). Multicollinearity was evaluated using variance influence factor (VIF), the correlation matrix, and tolerance values (Field, 2009). A value of 10 or higher on the VIF was the threshold used to determine multicollinearity. A correlation matrix was also used to present the analyzed bivariate relationships between the individual predictor variables and the criterion variable (Gall et al., 2007). The relationship among the predictor variables was analyzed using correlation in order to help determine if there were any strong relationships among the predictors. Each correlation coefficient was checked for significance (\( p < .05 \)) with an established cutoff correlation coefficient of .7 (Field, 2005). Ideally, the predictor variables should have a strong relationship with the criterion variable, but not with other predictor variables (Mundfrom et al., 2006). Tolerance values were also considered with a value of less than .1 were interpreted as being problematic (Field, 2005), yet no such values were found.

To test for normality, a histogram (including a normal curve superimposed) was used to “examine the shape of the distribution of scores” (Warner, 2013, p. 550). A P-P Plot was also used to determine the tenability of this assumption; a relatively straight, diagonal line indicated normality (Field, 2005). Each of these assumption tests was tenable, and these results are
presented in Chapter Four. Finally, in order to assess the reliability of the instrument used in this study, Cronbach’s alpha coefficient was calculated.

Multiple regression was used to examine the null hypotheses; thus, in addition to the assumption testing following Morgan, Reichert, and Harrison’s (2002) recommendations, the following statistics are reported (see Chapter Four) for the overall model: descriptive statistics \((M, SD)\), number \((N)\), degrees of freedom \((df)\), multiple \(R\) or effect size \((R^2)\), observed \(F\) \((F)\), significance level \((p)\), beta, and power. Also, for each predictor the following information is reported: “unstandardized regression coefficient \((B)\), standardized regression coefficient \((\beta)\), observed \(t\)-value \((t)\), significance level \((p)\), semi-partial correlations (variance accounted for per variable)” (Morgan et al., 2002, p. 69). The \(F\)-test was used to determine whether or not to reject the null hypothesis. To analyze the individual contributions of each variable, \(t\)-tests were examined to see if any of the regression coefficients were individually significant (Field, 2005). As mentioned above, Pearson’s product-moment correlation \(r\) was used to measure effect size. Adjusted \(R^2\) (coefficient of determination) was used to measure the amount of linear association between teacher self-efficacy (the \(y\) variable) and the nine predictor variables.

In order to conduct the multiple regression analysis, nominal predictor variables were dummy coded (Warner, 2013). Dummy coding allows for groups of people to be represented using values of 0 and 1, as well as provides a means for analyzing potential relationships between the predictor variables and the criterion variable (Field, 2005). As Tables 4 and 5 show, a value of 1 indicates a selection of the particular choice and a value of 0 indicates unselected choices. The coding for college major and grade level taught are listed in Tables 4 and 5 below. While initially the researcher planned to use an ordinal scale to capture data regarding the grade level taught, numerous participants indicated that they taught across several grade levels. Thus,
it was deemed more appropriate to treat this variable as a nominal variable (Field, 2005). For the variable “Highest degree attained,” and “Instructional Purpose” ordinal scales were used. For example, if a participant selected bachelor’s as the highest degree attained, then a value of 2 was entered into the data, while a selection of master’s was entered as a value of 3. Similarly, for the variable “Instructional Purpose” the participants were asked to rank the various instructional purpose based upon the time they devoted to that purpose in their teaching. A selection of “1” indicated the least amount of time spent, but a selection of “4” indicated the most duration of time spent on that particular instructional purpose. Tables 5 and 7 visually present these scales.

Table 4

Dummy Coding for College Major

<table>
<thead>
<tr>
<th>College Major</th>
<th>D₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not an English Education Major</td>
<td>0</td>
</tr>
<tr>
<td>English Education Major</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 5

Nominal Scale for Grade Level Taught

<table>
<thead>
<tr>
<th>Grade Level Taught</th>
<th>D₀</th>
<th>D₁</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade 1 to 3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Grade 4 to 6</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Grade 7 to 9</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Grade 10 to 12</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>
Thus, each of the null hypotheses was tested using multiple regression, as there were more than two predictor variables (dichotomous or continuous) and one (continuous) criterion variable (Gall et al., 2007). All appropriate assumptions tests were applied (as detailed above) and were found to be tenable (see Chapter Four for detailed results). Significance level was set at \( p = .05 \) for a medium effect size based upon the correlation coefficients with small = .10, medium = .30 and large = .50 (Green & Salkind, 2012). Results from the \( F \)-test were reported.
based upon the ANOVA for multiple regression, as each of the null hypotheses states that neither the model, nor the individual predictor variables, has any predictive power.

**Conclusion**

Chapter Three addressed the design, research question, hypotheses, participants, the setting, as well as described the instrumentation, procedures, and data analyses in this study that investigated possible associations between specific teacher characteristics and teacher self-efficacy. In Chapter Four each hypothesis, descriptive statistics, as well as the pertinent results are reported.
CHAPTER FOUR: FINDINGS

The purpose of this quantitative, predictive correlational study was to propose and test a model to predict teacher self-efficacy among non-native English Speaking teachers (NNESTs) of English as a Foreign Language (EFL) in rural Thailand, as well as to address a significant empirical gap regarding factors that may influence teacher self-efficacy among NNESTS of EFL in non-Western contexts. Data was collected from 331 teachers, but given nonresponse to some key survey items, listwise exclusion of the data was utilized and only 257 respondents’ answers were used for analyses (Field, 2005).

Research Question and Hypotheses

The primary research question for this study is as follows: Can perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose (the predictor variables) of Thai NNESTs of EFL predict teachers’ sense of self-efficacy (the criterion variable) as measured by the Thai language version of the TSES-SF (Tschannen-Moran & Woolfolk Hoy, 2001)? The corresponding null hypotheses are:

Ho1: There is no statistically significant, predictive relationship between Thai NNESTs’ who teach EFL individual characteristics (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade-level taught, and instructional purpose) and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

Ho2: There is no statistically significant, predictive relationship between Thai NNESTs’ who teach EFL perceived proficiency in English as measured by the Thai language version of
Chacón’s (2005) Self-reported English Proficiency Scale and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀3:** There is no statistically significant, predictive relationship between Thai NNESTs’ who teach EFL college major (English education or not English education) as measured by a self-report questionnaire and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀4:** There is no statistically significant, predictive relationship between time spent abroad defined as the total amount of time spent outside of Thailand and operationalized by a self-report of months and years by Thai NNESTs and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀5:** There is no statistically significant, predictive relationship between Thai NNESTs’ who teach EFL time spent in an English speaking country, defined as the total amount of time spent in a country with English as its official first language and operationalized by a self-report in months and years, and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀6:** There is no statistically significant, predictive relationship between Thai NNESTs’ who teach EFL longevity teaching, defined by the number of years (inclusive of the present year) with the official government title of “teacher” and operationalized via a self-report in months and years, and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀7:** There is no statistically significant, predictive relationship between Thai NNESTs’ who teach EFL longevity as an English teacher, defined by the number of months and years (inclusive of the present month/year) with the official title of “English teacher” and
operationalized via a self-report in months and years, and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀8:** There is no statistically significant, predictive relationship between Thai NNESTs’ who teach EFL highest degree attained, defined by the highest degree or certificate of record and operationalized via a self-report, and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀9:** There is no statistically significant, predictive relationship between the present grade level taught, defined by the current grade-level(s) of record and operationalized via a self-report, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**H₀10:** There is no statistically significant, predictive relationship between instructional purpose, operationalized via a self-report, of Thai NNESTs of EFL and teacher self-efficacy as measured by the Thai language version of Tschannen-Moran and Woolfolk Hoy’s (2001) TSES-SF.

**Descriptive Statistics**

**Demographics**

Descriptive statistics paint a cursory picture of the participants’ basic demographic features as well as this sample’s scores on other key variables (Gall et al., 2007). The number of women (n = 201) far outweighed the number of men (n = 44) in this sample. Most of the participants fell within the 30 to 39 age range (n = 79, 30.7%) or the 50 to 59 year old group (n = 87, 34.4%). Likewise, the majority of the participants indicated that they were married (n = 159, 61.9%) versus single (n = 94, 36.6%) with two participants selecting “other.” As mentioned above, both the Thai language and culture reflect the existence of a third gender. Thus, the
researcher included a check for transgendered identity, and as Table 8 illustrates, 12 of the participants self-reported that their gender identity did not fall within the traditional categories of male and female identities. This and other demographic data are presented in Table 8.

Table 8

Frequency Count of Selected Variables (N = 257)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender a</td>
<td>Male</td>
<td>44</td>
<td>17.1</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>201</td>
<td>78.2</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>12</td>
<td>4.7</td>
</tr>
<tr>
<td>Age b</td>
<td>20 to 29 yrs</td>
<td>42</td>
<td>16.3</td>
</tr>
<tr>
<td></td>
<td>30 to 39 yrs</td>
<td>79</td>
<td>30.7</td>
</tr>
<tr>
<td></td>
<td>40 to 49 yrs</td>
<td>48</td>
<td>18.6</td>
</tr>
<tr>
<td></td>
<td>50 to 59 yrs</td>
<td>87</td>
<td>33.8</td>
</tr>
<tr>
<td></td>
<td>60 to 69 yrs</td>
<td>1</td>
<td>0.3</td>
</tr>
<tr>
<td>Marital Status c</td>
<td>Married</td>
<td>159</td>
<td>61.9</td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>94</td>
<td>36.6</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>2</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>2</td>
<td>0.75</td>
</tr>
<tr>
<td>Annual Income d</td>
<td>&lt; 40,000</td>
<td>70</td>
<td>27.67</td>
</tr>
<tr>
<td></td>
<td>40,000 - 50,000</td>
<td>31</td>
<td>12.25</td>
</tr>
<tr>
<td></td>
<td>50,001 - 60,000</td>
<td>23</td>
<td>9.09</td>
</tr>
<tr>
<td></td>
<td>60,001 - 70,000</td>
<td>4</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>70,001 - 80,000</td>
<td>4</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>80,001-90,000</td>
<td>4</td>
<td>1.58</td>
</tr>
<tr>
<td></td>
<td>90,001 to 100,000</td>
<td>11</td>
<td>4.35</td>
</tr>
<tr>
<td></td>
<td>&gt; 100,000</td>
<td>106</td>
<td>41.9</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>4</td>
<td>1.58</td>
</tr>
</tbody>
</table>

a Male = 0, Female = 1, Other = 2
b \( M = 42, SD = 11.0 \)
c Married = 1, Single = 2, Other = 3
d Income is reported in Thai baht; the current exchange rate is one U.S. dollar to 35 Thai baht.
As is shown in Figure 3 below, the vast majority of the participants reported the highest level of an annual income, which was more than 100,000 baht \((n = 106, 41.2\%)\); however, the second largest category of reported annual income was the lowest level, which was less than 40,000 baht \((n = 70, 27.7\%)\). These results highlight the great disparity between teachers’ annual income and the relatively minimal medium ranges of annual income.

**Figure 3.** The distribution of participants’ reported annual income.

In addition to these basic demographic and general data, the variable regarding reported languages spoken needs consideration. As descriptive data was collected regarding various language abilities, the participants’ self-report regarding selected languages spoken is presented below in Figure 4.
Figure 4. Self-report of language abilities.

It is noteworthy that even though all of the participants in this study were NNESTs of EFL, almost 20% of the participants chose not to self-report English as one of the languages they could speak.

Predictor Variables

The predictor variables (college major, grade level taught, instructional purpose, highest degree earned, longevity as a teacher, longevity as an English teacher, time abroad, time abroad
in an English context, and perceived proficiency in English can be divided into categorical and continuous variables; however, all of the predictor variables provide further insight the characteristics of this sample. For the predictor variable regarding college major, a slight majority of the participants indicated that their degree of record was in English education 53.7% \((n = 138)\), while the minority indicated a degree of record other than English education \((n = 119)\). For the highest degree of record variable, none of the participants indicated a doctoral level degree and two participants indicated that they held less than a bachelor’s degree. Thus, bachelor’s level \((n = 181, 70.4\%)\) and master’s level \((n = 74, 28.8\%)\) of education were the most commonly held degrees \((Mdn = 2.0, Mode = 2)\).

For the variable present grade level taught, the fewest number of teachers from this sample taught at the upper high school level \((n = 42, 16.3\%)\), while the majority of the teachers in this sample taught fourth to sixth grades \((n = 125, 48.6\%)\). This sample indicated that 40.5\% \((n = 104)\) of the teachers taught first through third grade, while only 32.7\% \((n = 84)\) reported teaching seventh to ninth grades. It is important to note that as many Thai NNESTs of EFL are required to teach across multiple grade levels, the frequency percentages reported here exceed 100\%, highlighting the multiple grades taught. The data from the next variable, instructional purpose, was also quite insightful. The mean and the mode for each instructional purpose were as follows: pronunciation \((Mdn = 3.0, Mode = 2)\), grammar \((Mdn = 3.0, Mode = 3)\), testing \((Mdn = 3.0, Mode = 4)\), communication \((Mdn = 2.0, Mode = 1)\). Given that the selection of “1” indicated the least amount of time and a selection of “4” indicated the most amount of time spent, the data clearly shows that the “least amount of time spent” was most frequently selected for communication \((32.7\%)\). Pronunciation as an instructional purpose was divided between the second least and the second most amount of time spent \((28\%)\). Consistent with findings of other
studies (Khamkhien, 2010), the participants in this study reported spending the most or second most time teaching grammar \((n = 148, 57.56\%)\). Table 9 presents the frequency counts for each of the categorical variables.

**Table 9**

*Frequency Counts for Categorical Predictor Variables (N = 257)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>(n)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Major</td>
<td>English Education</td>
<td>138</td>
<td>53.7</td>
</tr>
<tr>
<td></td>
<td>Not English Education</td>
<td>119</td>
<td>46.3</td>
</tr>
<tr>
<td>Highest Degree of Record</td>
<td>Less than a BA</td>
<td>2</td>
<td>.8</td>
</tr>
<tr>
<td></td>
<td>BA</td>
<td>181</td>
<td>70.4</td>
</tr>
<tr>
<td></td>
<td>MA</td>
<td>74</td>
<td>28.8</td>
</tr>
<tr>
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<td>Doctorate</td>
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<td>0</td>
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<td>Present Grade Level Taught</td>
<td>Grades 1 to 3</td>
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<td>Grades 4 to 6</td>
<td>125</td>
<td>48.6</td>
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<td>Grades 7 to 9</td>
<td>84</td>
<td>32.7</td>
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<tr>
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<td>Grades 10 to 12</td>
<td>42</td>
<td>16.3</td>
</tr>
<tr>
<td>Instructional Purpose: Pronunciation</td>
<td>Least time “1”</td>
<td>50</td>
<td>19.5</td>
</tr>
<tr>
<td></td>
<td>Second least time “2”</td>
<td>72</td>
<td>28.0</td>
</tr>
<tr>
<td></td>
<td>Second most time “3”</td>
<td>72</td>
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</tr>
<tr>
<td></td>
<td>Most time “4”</td>
<td>63</td>
<td>24.5</td>
</tr>
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<td>Instructional Purpose: Grammar</td>
<td>Least time “1”</td>
<td>32</td>
<td>12.5</td>
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<tr>
<td></td>
<td>Second least time “2”</td>
<td>77</td>
<td>30.0</td>
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<tr>
<td></td>
<td>Second most time “3”</td>
<td>92</td>
<td>35.7</td>
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<tr>
<td></td>
<td>Most time “4”</td>
<td>56</td>
<td>21.8</td>
</tr>
<tr>
<td>Instructional Purpose: Passing exams</td>
<td>Least time “1”</td>
<td>74</td>
<td>28.8</td>
</tr>
<tr>
<td></td>
<td>Second least time “2”</td>
<td>51</td>
<td>19.8</td>
</tr>
<tr>
<td></td>
<td>Second most time “3”</td>
<td>56</td>
<td>21.8</td>
</tr>
<tr>
<td></td>
<td>Most time “4”</td>
<td>76</td>
<td>29.6</td>
</tr>
</tbody>
</table>
Instructional Purpose: Communicate with Native English Speaker

| Least time “1”                  | 84  | 32.7 |
| Second least time “2”           | 53  | 20.6 |
| Second most time “3”            | 50  | 19.5 |
| Most time “4”                   | 70  | 27.2 |

Table 10 shows the descriptive statistics for the predictor variables that were continuous in nature. These include the following: perceived English proficiency, length of time spent abroad, length of time abroad in an English speaking context, longevity as a teacher, and longevity as an English teacher.

Table 10

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Minimum Maximum</th>
<th>M</th>
<th>SD</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived English Proficiency (PEP)</td>
<td>16</td>
<td>16 - 96 points</td>
<td>54.68</td>
<td>15.34</td>
<td>.98</td>
</tr>
<tr>
<td>Time Abroad in an English-speaking Country</td>
<td>0 – 36 months</td>
<td>.43</td>
<td>3.11</td>
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</tr>
<tr>
<td>Time Abroad</td>
<td>0 – 444 months</td>
<td>3.18</td>
<td>32.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longevity as a Teacher</td>
<td>3 – 489 months</td>
<td>211.58</td>
<td>146.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Longevity as an English Teacher</td>
<td>0 – 485 months</td>
<td>146.30</td>
<td>128.54</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 10 illustrates, the mean and standard deviation of this sample (N = 257) for perceived English proficiency was 54.68 (SD = 15.34); this means perceived proficiency score is well below the target 96 points. Cronbach’s alpha reliability coefficient for this 16-item scale was .98, which indicates a high degree of internal reliability (Tavakol & Dennick, 2011). Also
important to note is the fact that participants in this study indicated spending less than a month \((M = .43, SD = 3.13)\) abroad in an English-speaking country. Regarding time abroad in any context, the results indicated that participants had spent a longer duration in this context than in the English-only context \((M = 3.18, SD = 32.15)\). Also interesting to note is the mean and standard deviation of the sample for (a) longevity (in months) as a teacher \((M = 211.6, SD = 146.7)\) and (b) longevity (in months) as an English teacher \((M = 146.3, SD = 128.5)\). From this data, it is evident that some of these teachers may not hold the position of English teacher throughout the duration of their teaching career.

**Criterion Variable**

Table 11 below presents the descriptive statistics related to the criterion variable, teacher self-efficacy, as well as descriptive statistics for the three sub-scales of this instrument. While these subscales were not included in the final analysis of this initial exploratory research, in order to compare these subscale’s data in this Thai to teacher self-efficacy data from around the world, it is vital for them to be included here. The results indicated means, standard deviations, and reliability for (a) the overall instrument \((M = 84.9, SD = 10.6, \alpha = .95)\) out of a possible 108 points, (b) self-efficacy for student engagement \((M = 28.3, SD = 3.7, \alpha = .84)\) out of a possible 36 points, (c) self-efficacy for instructional strategies \((M = 28, SD = 3.9, \alpha = .91)\) out of a possible 36 points, and (d) self-efficacy for classroom management \((M = 28.6, SD = 3.6, \alpha = .85)\) out of a possible 36 points. The overall scale, as well as its sub-scales, showed a high level of reliability, and the data indicated that teachers in this sample felt that their self-efficacy in classroom management was slightly higher than for either student engagement or instructional strategies.
Table 11

*Psychometric Characteristics for the Criterion Variable: Teacher Self-efficacy (N = 257)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Minimum Maximum</th>
<th>M</th>
<th>SD</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Self-Efficacy</td>
<td>12</td>
<td>52 - 108</td>
<td>84.88</td>
<td>10.55</td>
<td>.95</td>
</tr>
<tr>
<td>Teacher Self-Efficacy for Engagement</td>
<td>4</td>
<td>6.82 - 7.52</td>
<td>7.05</td>
<td>3.68</td>
<td>.84</td>
</tr>
<tr>
<td>Teacher Self-Efficacy for Classroom Management</td>
<td>4</td>
<td>6.9 - 7.41</td>
<td>7.15</td>
<td>3.57</td>
<td>.85</td>
</tr>
<tr>
<td>Teacher Self-Efficacy for Instructional Strategies</td>
<td>4</td>
<td>6.89-7.19</td>
<td>7.0</td>
<td>3.91</td>
<td>.91</td>
</tr>
</tbody>
</table>

These scores from the Thai-based study were quite similar to studies about teacher self-efficacy in other contexts. Table 12 below presents a summary of data that other pertinent studies reported compared to this study’s results.
<table>
<thead>
<tr>
<th></th>
<th>Date</th>
<th>Context</th>
<th>Composite Score</th>
<th>Student Engagement</th>
<th>Classroom Management</th>
<th>Instructional Strategy</th>
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</thead>
<tbody>
<tr>
<td>Best</td>
<td>2014</td>
<td>Thailand</td>
<td>7.02</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Crook</td>
<td>2016</td>
<td>Thailand</td>
<td>7.08</td>
<td>7.05</td>
<td>7.15</td>
<td>7.00</td>
</tr>
<tr>
<td>Ghasemboland &amp; Hashim</td>
<td>2013</td>
<td>Turkey</td>
<td>7.21</td>
<td>7.54</td>
<td>7.10</td>
<td></td>
</tr>
<tr>
<td>Klassen &amp; Chui</td>
<td>2010</td>
<td>Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pre-service</td>
<td>7.00</td>
<td>7.12</td>
<td>7.42</td>
<td></td>
</tr>
<tr>
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<td></td>
<td>Practicing</td>
<td>6.83</td>
<td>7.52</td>
<td>7.53</td>
<td></td>
</tr>
<tr>
<td>Lee, Cawthon, &amp; Dawson</td>
<td>2012</td>
<td>America (TX)</td>
<td>7.16</td>
<td>7.64</td>
<td>7.23</td>
<td></td>
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<tr>
<td></td>
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<td>Elementary</td>
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<td>Secondary</td>
<td>6.30</td>
<td>7.03</td>
<td>6.30</td>
<td></td>
</tr>
<tr>
<td>Chong et al.</td>
<td>2010</td>
<td>Singapore</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>High Track</td>
<td>6.54</td>
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<td></td>
<td></td>
<td>Low Track</td>
<td>5.99</td>
<td>6.35</td>
<td>6.58</td>
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</tbody>
</table>
Statistical Analyses

Correlations

In addition to descriptive statistics, pairwise correlations were calculated. Table 13 presents the Pearson product-moment intercorrelations among several predictor variables and the criterion variable. The largest statistically significant association was between longevity as an English teacher and longevity as a teacher ($r = .697, p < .01$). College major and perceived English proficiency were also moderately correlated ($r = .449, p < .01$). The variable present grade level taught indicated numerous small, significant associations with other variables. Teaching grades one to three was negatively associated with perceived proficiency in English ($r = -.223, p < .01$), longevity as a teacher ($r = -.153, p < .05$), longevity as an English teacher ($r = -.289, p < .01$), college major ($r = -.125, p < .05$), and testing as an instructional purpose ($r = -.128, p < .05$). However, teaching grades 10 to 12 was positively associated with teacher self-efficacy ($r = .139, p < .05$), perceived English proficiency ($r = .21, p < .01$), longevity as an English teacher ($r = -.282, p < .01$), and college major ($r = .305, p < .01$). Pronunciation as an instructional purpose was found to only be statistically significantly associated with teaching grades four to six ($r = .140, p < .05$). Time abroad and time abroad in an English speaking context was not found to be significantly associated with any other variable except testing as an instructional purpose ($r = 1.24, p < .01$). Other significant associations were both positive and negative in the small to moderate range. The correlation data are presented in Table 13.
### Table 13

**Intercorrelations among the Predictor Variables** ($N = 257$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
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<td>1. Teacher Self-Efficacy</td>
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<tr>
<td>2. Perceived English Proficiency</td>
<td>.39**</td>
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</tr>
<tr>
<td>3. Longevity as a Teacher</td>
<td>.15**</td>
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</tr>
<tr>
<td>4. Longevity as an English teacher</td>
<td>.25**</td>
<td>.10</td>
<td>.70**</td>
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</tr>
<tr>
<td>5. Time Spent Abroad</td>
<td>.10</td>
<td>.02</td>
<td>.09</td>
<td>.15**</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Time Abroad English Context</td>
<td>.07</td>
<td>.15*</td>
<td>-.04</td>
<td>.01</td>
<td>.09</td>
<td>—</td>
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<tr>
<td>7. College Major</td>
<td>.07</td>
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<td>.10</td>
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<td>-.08</td>
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<td>8. Highest Degree Attained</td>
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<td>.22**</td>
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<td>-.00</td>
<td>-.05</td>
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</tr>
<tr>
<td>9. Present Grade Level Taught</td>
<td></td>
<td></td>
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<td>.01</td>
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<td>.05</td>
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<td>-.03</td>
<td>.05</td>
<td>.05</td>
<td>-.07</td>
<td>.00</td>
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<td>-.01</td>
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<td>.06</td>
<td>.07</td>
<td>.12*</td>
<td>-.05</td>
<td>-.10</td>
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<td>.02</td>
<td>.000</td>
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<td>-.04</td>
<td>.16**</td>
<td>.01</td>
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</table>

*Note: Values are correlation coefficients. ** indicates p < .01; * indicates p < .05.
<table>
<thead>
<tr>
<th>Variable</th>
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<tr>
<td>3. Longevity as a Teacher</td>
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<tr>
<td>4. Longevity as an English teacher</td>
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<td></td>
</tr>
<tr>
<td>5. Time Spent Abroad</td>
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<td></td>
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</tr>
<tr>
<td>6. Time Abroad English Context</td>
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<td>7. College Major*</td>
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<td>8. Highest Degree Attained*</td>
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<td>9. Present Grade Level Taught*</td>
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<td>Grades 1 to 3</td>
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<td>Grades 7 to 9</td>
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</tr>
<tr>
<td>Grades 10 to 12</td>
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<td></td>
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<td>10. Instructional Purpose*</td>
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<td>Pronunciation</td>
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<td>.03</td>
<td>-.19**</td>
<td>-.42**</td>
<td>-.33**</td>
<td></td>
</tr>
</tbody>
</table>

*a College major: 1 = English Major, 0 = Not an English Major  
b Highest Degree Attained: 1 = less than a BA, 2 = BA, 3 = MA, 4 = Doctoral level  
c Present Grade-level Taught: 0 = No, 1 = Yes  
d Instructional Purpose: 1 = least time, 2 = second least time, 3 = second most time, 4 = most time  
* p < .05, ** p < .01
Preliminary Analysis: Testing the Assumptions for Linear Regressions

Prior to conducting any regression analysis, assumption tests were conducted and assessed for tenability. Specifically, the following assumptions were tested: (a) independence of observations, (b) homoscedasticity, (c) the presence of a linear relationship between the predictor variables and the criterion variable, (d) absence of multicollinearity, (e) no significant outliers, and (f) approximately normally distributed random errors (residuals). The results and conclusions based upon these assumption tests follow.

There was independence of residuals, as assessed by a Durbin-Watson statistic, which indicates the assumption of independence of observations is tenable. Homoscedasticity of the criterion variable with each predictor variable were examined using scatterplots (Gall et al., 2007). Inspection of the scatterplot showed no gross violations of the assumption of homoscedasticity. Inspection of the scatterplot and partial regression plots revealed no gross violations of the assumption of linearity. Thus, this assumption was assumed to be tenable.

Multicollinearity was evaluated using variance influence factor (VIF), a correlation matrix, and tolerance values (Field, 2005). For VIF a value of 10 or higher was considered to represent multicollinearity, but none of the variables approached this threshold (the highest was 3.12). The correlation matrix (see Table 13) further demonstrates that the assumption of multicollinearity is not violated as there are no significant correlation coefficients greater than 0.7. In addition, all of the tolerance values in this data set are greater than 0.1 (the lowest is 0.464), further indicating that the assumption of multicollinearity is not violated. Regarding the assumption of no extreme multivariate outliers, the inspection of casewise diagnostics and studentized deleted residuals indicated one case in this sample that was an extreme outlier. The case in questioned showed a standardized residual of -3.033, a predicted value of 87.24 compared to an observed value of 59.
which is an error in prediction (residual) of -28.24. There are several ways to address such an extreme outlier to achieve normal distribution, such as using transformations or removing extreme outlier scores (Tabachnick & Fidell, 2007). However, based upon a re-check of the case, data entry error was ruled out as a possible error, so the case reflected a person in the study and was not excluded (Warner, 2013).

Upon further examination of Cook’s $D$ and the leverage value, no gross concern about leverage points and the large residuals (outliers) were found. Thus, the assumption of no extreme outliers was accepted as tenable. Finally, to test for normality of the residuals, a histogram (including a normal curve superimposed) and a P-P Plot were visually examined to analyze the shape of distribution (Warner, 2013). As there were no gross violations of these assumptions, both of these preliminary tests were tenable as the P-P Plot produced a relatively straight, diagonal line to indicate normality (Field, 2005). As such, the results from these six assumption tests suggested that there were no gross violations of any of these assumptions.

**Multiple Regression**

Given that the assumptions for using multiple regression were all met, the primary null and nine sub null hypotheses for this study were analyzed using multiple regression, as there were more than two predictor variables (dichotomous or continuous) and one (continuous) criterion variable (Gall et al., 2007). The primary null states no statistically significant predictive relationship exists between Thai NNESTs’ who teach EFL individual characteristics (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade level taught, instructional purpose, and teacher self-efficacy. Table 14 below shows the decision to reject or fail to reject each null hypothesis.
Table 14

*Summary of Tested Null Hypotheses Findings*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Stated Null</th>
<th>Overall Model/$R^2$</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>$H_01$</td>
<td>Individual teacher characteristics will not significantly predict perceived teacher self-efficacy.</td>
<td>.277</td>
<td>Reject*</td>
</tr>
<tr>
<td>$H_02$</td>
<td>“Perceived English proficiency” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Reject*</td>
</tr>
<tr>
<td>$H_03$</td>
<td>“College major” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Fail to reject</td>
</tr>
<tr>
<td>$H_04$</td>
<td>“Time spent abroad” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Fail to reject</td>
</tr>
<tr>
<td>$H_05$</td>
<td>“Time spent in an English speaking country” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Fail to reject</td>
</tr>
<tr>
<td>$H_06$</td>
<td>“Longevity as a teacher” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Reject*</td>
</tr>
<tr>
<td>$H_07$</td>
<td>“Longevity as an English teacher” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Fail to reject</td>
</tr>
<tr>
<td>$H_08$</td>
<td>“Highest degree attained” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Fail to reject</td>
</tr>
<tr>
<td>$H_09$</td>
<td>“Present grade level taught” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Fail to reject</td>
</tr>
<tr>
<td>$H_{10}$</td>
<td>“Instructional purpose” will not significantly predict perceived teacher self-efficacy.</td>
<td></td>
<td>Fail to reject</td>
</tr>
</tbody>
</table>

*Note.* *$p < .001$*
The evidence from the multiple regression analysis supports the rejection of the primary null hypothesis as the results for the overall model were found to be $R^2 = .277$ (adjusted $R^2 = .232$), $F (15, 241) = 6.144, p < .001$. The linear combination of predictor variables accounted for 23.2% of the variance in teacher self-efficacy indicating a small to medium effect size according to Cohen’s (1988) classification. This percentage of variance is based upon the adjusted $R^2$ values, as according to Field (2005), adjusted $R^2$ is used to account for the “loss of predictive power” had the data been taken from the entire populations from which this sample was drawn (p. 221). Only two of the variables (“longevity as a teacher” and “perceived English proficiency”) were found to individually contribute to this model at a statistically significant level (see Table 15). As a teacher’s longevity in teaching ($\beta = .37, p < .001$) and English proficiency ($\beta = .51, p < .001$) increased, so did his or her teacher self-efficacy. Thus, the second null hypothesis, which stated that there was no statistically significant predictive relationship between Thai NNESTs’ perceived proficiency in English and teacher self-efficacy, was rejected as “perceived English proficiency.” The sixth null hypothesis stated that there was no statistically significant, predictive relationship between Thai NNESTs’ longevity as a teacher and their teacher self-efficacy was rejected. However, given the results from this multiple regression analysis, no other null hypothesis was rejected as the remaining variables did not individually contribute to explaining the variance in teacher self-efficacy.
Table 15

Contributions of Predictor Variables (N = 257)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Zero-Order $r$</th>
<th>Partial $r$</th>
<th>$\beta$</th>
<th>SE B</th>
<th>B</th>
<th>$t$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived English Proficiency</td>
<td>.39**</td>
<td>.42</td>
<td>.51</td>
<td>.05</td>
<td>.35</td>
<td>7.10*</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>College Major$^a$</td>
<td>.07</td>
<td>-.04</td>
<td>-.05</td>
<td>1.60</td>
<td>-.98</td>
<td>-.62</td>
<td>.54</td>
</tr>
<tr>
<td>Highest Degree Attained$^b$</td>
<td>.18**</td>
<td>.11</td>
<td>.10</td>
<td>1.34</td>
<td>2.34</td>
<td>1.75</td>
<td>.08</td>
</tr>
<tr>
<td>Longevity: English Teacher</td>
<td>.25**</td>
<td>-.05</td>
<td>-.07</td>
<td>.01</td>
<td>-.01</td>
<td>-.70</td>
<td>.49</td>
</tr>
<tr>
<td>Longevity: Teacher</td>
<td>.18**</td>
<td>.24</td>
<td>.37</td>
<td>.01</td>
<td>.03</td>
<td>3.80*</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Time Spent Abroad</td>
<td>.10</td>
<td>.09</td>
<td>.08</td>
<td>.02</td>
<td>.03</td>
<td>1.40</td>
<td>.17</td>
</tr>
<tr>
<td>Time Abroad: English</td>
<td>.07</td>
<td>.00</td>
<td>-.01</td>
<td>.19</td>
<td>-.03</td>
<td>-.13</td>
<td>.90</td>
</tr>
<tr>
<td>Present Grade-level Taught$^c$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 3</td>
<td>-.11</td>
<td>.05</td>
<td>.05</td>
<td>1.46</td>
<td>1.10</td>
<td>.78</td>
<td>.44</td>
</tr>
<tr>
<td>4 to 6</td>
<td>-.02</td>
<td>.03</td>
<td>.03</td>
<td>1.41</td>
<td>.58</td>
<td>.41</td>
<td>.68</td>
</tr>
<tr>
<td>7 to 9</td>
<td>.06</td>
<td>-.01</td>
<td>-.15</td>
<td>1.55</td>
<td>-.34</td>
<td>-.22</td>
<td>.83</td>
</tr>
<tr>
<td>10 to 12</td>
<td>.14*</td>
<td>.06</td>
<td>.07</td>
<td>2.00</td>
<td>1.99</td>
<td>1.00</td>
<td>.319</td>
</tr>
<tr>
<td>Instructional Purpose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pronunciation</td>
<td>-.05</td>
<td>-.05</td>
<td>-.06</td>
<td>.75</td>
<td>-.62</td>
<td>-.83</td>
<td>.41</td>
</tr>
<tr>
<td>Grammar</td>
<td>-.02</td>
<td>-.10</td>
<td>-.11</td>
<td>.77</td>
<td>-1.17</td>
<td>-1.50</td>
<td>.13</td>
</tr>
<tr>
<td>Testing</td>
<td>-.01</td>
<td>-.04</td>
<td>-.05</td>
<td>.71</td>
<td>-.46</td>
<td>-.66</td>
<td>.51</td>
</tr>
<tr>
<td>Communication</td>
<td>.01</td>
<td>-.04</td>
<td>-.05</td>
<td>.71</td>
<td>-.42</td>
<td>-.60</td>
<td>.55</td>
</tr>
</tbody>
</table>

Note. *$p < .05$, **$p < .01$

Full Model: $F$ (15, 241) = 6.144, $p < .001$.

$R^2 = .277$ (adjusted $R^2 = .232$).
Summary

In summary, 257 teachers provided the data to investigate factors that influence teacher self-efficacy among first through 12th grade NNESTs of EFL in Thailand. The tested null hypotheses for each individual variable and results are summarized in Table 14. The overall model significantly predicts NNESTs’ perceived teacher self-efficacy, meaning that the linear combination of all the variables explained variance in teachers’ perceived self-efficacy. The linear combination of predictor variables accounted for 23.2% of the variance in teacher self-efficacy. However, not every variable individually contributed to the model. Only the two variables, perceived English proficiency and longevity, made statistically significant individual contributions to explaining the variance in perceived self-efficacy. In the next and final chapter, these findings will be discussed in light of existing literature, conclusions will be offered, and recommendations for further research will be proposed.
CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this predictive, correlational study was to develop a model to test sources of self-efficacy as proposed in Bandura’s (1977, 1997) social cognitive theory (SCT) in the Thai context by investigating individual factors that may predict the teacher self-efficacy of non-native English-speaking teachers (NNESTs) of English as a Foreign Language (EFL) teaching first to 12th grades in Thai government schools. A comprehensive instrument comprised of the following three parts was utilized: demographics, a perceived English proficiency scale (Chacon, 2005), and the Teacher Sense of Self-Efficacy Scale Short Form (TSES-SF) translated into Thai with permission from Tschannen-Moran and Woolfolk Hoy (2001). The researcher used convenience and snowball sampling to elicit Thai NNESTs’ of EFL participation in this study. A standard multiple regression was used to analyze the data collected from the sample ($N = 257$) of NNESTs of EFL in Nan province Thailand. This discussion aims to (a) situate this study’s findings in the context of the existing literature and the theoretical foundations of teacher self-efficacy, (b) suggest implications and limitations of this study, and (c) provide further recommendations for future teacher self-efficacy studies. Given the multiple predictor variables in this study’s model, the discussion is organized around each hypothesis.

Discussion

**Hypothesis One: The Overall Model**

The overall model was found to be statistically significant. The linear combination of the predictor variables included accounted for 23.2% of the variance in teacher self-efficacy in this sample. These findings align with Bandura’s (1977, 1997) sources of self-efficacy and suggest that vicarious experiences, verbal persuasion, physiological arousal, and mastery experience (Bandura, 1997) serve as sources of Thai NNESTs’ teacher self-efficacy. This study’s findings,
highlighting the importance of mastery experience to support teacher self-efficacy, cannot be understated and are consistent with Kosevic and Loh’s (2015) findings regarding the positive association between experience and self-efficacy. Likewise, in this study, the two significant individual factors, proficiency in English and longevity as a teacher, both highlight this notion of mastery experience. As Bandura (1977, 1997) proposed, these sources are influenced by positive or negative input. As such, these findings help to support the appropriateness of Bandura’s proposed sources of efficacy in the Thai context. The overall findings also support Bandura’s (1997) premise regarding self-efficacy; namely, self-efficacy is influenced by reciprocal determinism, which is the interplay between and among the environment, personal factors, and individual behaviors. As Dellinger et al. (2008) pointed out, self-efficacy beliefs mediate associations between behaviors and knowledge within specific environmental contexts. Given that the overall model, perceived English ability and longevity as a teacher, were all found to be statistically significant and that each of these variables were rooted within these three aspects of Bandura’s reciprocal determinism, this model highlights the interplay of this triad in the Thai context.

This study further confirms Jaengaksorn et al.’s (2015) findings that Tschannen-Moran and Woolfolk Hoy’s TSES (2001) is a valid and reliable instrument to use in the Thai context. In addition to providing further evidence to Bandura’s (1977, 1997) theory of sources of self-efficacy in a Thai context and offering further evidence of the appropriateness of the TSES (Tschannen Moran & Woolfolk Hoy, 2001) in Thailand, these findings have other practical and empirical contributions. As no previous model to predict perceived teacher self-efficacy among NNESTs of EFL in Thailand has ever been proposed (to the researchers’ best knowledge), this exploratory study provides initial insights into key factors that should be included in subsequent
predictor models to assess Thai NNESTs of EFL teacher self-efficacy.

The study also provides impetus for further investigation in light of the results suggesting 76.8% of the variance in perceived teacher self-efficacy is still unexplained. Only perceived proficiency in English ($\beta = .51, p < .001$) and longevity as a teacher ($\beta = .37, p < .001$) individually contributed at a significant level in the predictive model. Perhaps such variables as professional development, minimal English-speaking qualifications for NNESTs of EFL in Thailand, willingness to teach English, class size, the gap between existing and desired English proficiency (Lee, 2009), emotional intelligence, and workaholism (Kosevic & Loh, 2015) could further contribute to perceived self-efficacy of teachers in Thailand. While every effort to include variables that had been shown to influence teacher self-efficacy in other contexts were included in this present study, given that they only account for about 23.2% of the variance in perceived self-efficacy, other variables need to be explored and a more robust model developed.

Inclusion of additional variables in a model to predict self-efficacy, however, is not without obstacles. The challenge inherent in including other variables in a Thai context is the absence of validated instruments in the Thai language to measure these constructs. Moreover, as little research in this area has been conducted, additional variables to include in the model may be elusive or uncounted for in research conducted with other populations. As such, instrument development is fertile ground for further research and development in the Thai context. Moreover, qualitative approaches could also be used to identify other possible predictor variables based upon the Thai NNESTs’ insights. Perhaps the reason that the variables (which were firmly rooted in the research literature) were not as successful in predicting variance in Thai teacher self-efficacy is because other, more culturally-relevant but yet to be identified variables are at work (Goker, 2006).
Hypothesis Two: Perceived English Proficiency

The whole model was significant; however, not each variable significantly, individually contributed to the explanation of variance in teacher self-efficacy. The following discussion of hypotheses focus on these significant and non-significant contributions.

This study found a statistically significant association between perceived English proficiency and teacher self-efficacy. These findings are consistent with similar studies in Turkey (Yilmaz, 2011), Iran (Eslami & Fatahi, 2008; Sabokrouh, 2014), and in Malaysia (Ghasemboland & Hashim, 2013), which all found statistically significant, positive associations between perceived English proficiency and teacher self-efficacy. Thus, this study’s findings support mastery experiences as a source of efficacy and confirms Chacón’s (2005) earlier findings which led her to conclude, “. . . the more proficient in the language skills the teachers rated themselves, the higher their self-efficacy” (p. 265). Likewise, these findings highlight the cognitive component of Bandura’s (1997) reciprocal determinism as it is the cognitive awareness and acceptance of one’s proficiency that promotes a higher sense of efficacy.

This cognitive component is especially important to point out in the Thai cultural context, which values, humility, showing deference, and group (rather than individual) success (Hallinger & Bryant, 2013). Given the cultural value of humility and deference, it may be more challenging for Thai NNESTs of EFL to embrace their actual proficiency in English, which may impact their perceived teacher self-efficacy. For instance, even if a teacher is quite proficient in his or her English ability, Thai cultural norms compel individuals to devalue individual achievement. Thus, such teachers would be expected to respond to verbal flattery and recognition with accepted platitudes such as, “mai keng towrai” (ไม่เก็งเท่าไร), which means, “I am not really as good as you say.” This constant tendency to demonstrate socially expected humility may be an
obstacle for teachers as they try to embrace their true sense of teacher self-efficacy and proficiency. Interestingly, in the demographic portion of the instrument, teachers were asked to identify which languages they spoke. The findings in this section of the instrument indicated that almost 20% of the participants failed to select English as one of their spoken languages. However, in spite of these results in the demographic data, the teachers in this study reported an adequate level of perceived English proficiency to create a statistically significant, predictive relationship with teacher self-efficacy. One explanation for this outcome could be the fact that the instrument used to measure perceived English proficiency included all four of the language arts (listening, speaking, reading, and writing). Thus, while teachers may have assessed themselves as having little or no spoken English competence, their strong skills in reading, writing, or listening could have led to adequate perceived English proficiency scores.

**Hypotheses Three and Eight: College Major and Highest Degree Attained**

While Nasrollahi and Barjasteh (2013) found that college major was positively correlated with teacher self-efficacy among Iranian teachers; similar to Lam’s (2012) study set in Hong Kong, this present study found that college major and higher levels of education did not individually contribute to the prediction of teacher self-efficacy. Lam (2012) concluded, based upon these findings, that neither teacher training (college major) nor degree attained, should be one of the “assessment criteria in employment” (p. 5); however, Lam failed to raise the more significant issue by asking why neither of these factors significantly influence perceived teacher self-efficacy.

It would appear that teachers whose major was English education or those who had advanced degrees should benefit from these specialized trainings in ways that promote greater perceptions of teacher self-efficacy than those who have not had such training. For example,
Ngowananchai (2013) described a common training process for English teachers in the Thai context, tracing the first training college for secondary teachers to Chandrakasem Rajabhat University in Bangkok, founded in 1940, and changed to Chandrakasem Rajabhat Institute in 1991. Ngowananchai (2013) explained that non-English majors must take and pass six credits (two courses) in English, while business English and English majors are required to take 45 credits (15 courses) of required classes in addition to another 39 credits (13 courses) of elective English courses. While other universities may have slightly different program requirements, this example clearly shows that English majors are held to a much higher standard than non-English majors. This higher standard and increased level of English learning would seem to provide tangible benefits to the teachers in their teaching career, yet since being an English major and attaining higher degrees did not significantly impact a teachers’ perceived self-efficacy, perhaps the increased level of English language learning benefits was offset by the teachers’ increased awareness in their inability or general weakness in their English language skills. Much like hikers who are confident in their abilities to make it to the summit while the summit is covered by thick clouds may lose heart when the clouds move and the reality of the task ahead hits, the increased training may be tantamount to the clouds parting and heighten awareness settling. This increased awareness also may highlight Bandura’s (1977, 1997) contention that the sources of self-efficacy can have positive or negative influences.

**Hypothesis Four and Five: Time Abroad and Time in English Contexts**

Bandura (1997) indicated that mastery experiences influence an individual’s perception of self-efficacy, as well as highlighted the importance of cognitive influence on teacher self-efficacy. Traveling abroad demands at least some level of challenge and offers great potential for mastery and vicarious experiences (both sources of self-efficacy), as well as cognitive
influence (Amuzie & Winke, 2009). However, similar to Amuzie and Winke’s (2009) study of English language learners in America, this present study found no statistically significant influence on perceived self-efficacy by either time abroad or time abroad in an English-speaking context. These findings reflect Holzberger et al.’s (2013) claim that it is not teachers’ success, but “the cognitive processing of success” (p. 782) that influences the self-efficacy beliefs. Even though friends and colleagues may view simply going to, staying in, and returning from an English-speaking country to be a great accomplishment, teachers could have spent a lot of time abroad without ever having processed their time spent as “success.” Without this cognitive analysis of one’s success, teachers’ perceptions of their teacher self-efficacy may remain low. Granted, Amuzie and Winke’s (2009) study did find, “Comparisons between pre- and during study-abroad beliefs revealed that learners experienced changes in their beliefs on learner autonomy and the role of the teacher” (p. 366), which suggests that time abroad can and does influence belief change. However, reasons why these belief changes did not include improved perceptions of self-efficacy is still unknown.

In this present study, the participants had only spent an average of .43 and 3.18 months abroad in an English-speaking context and abroad in any context, respectively. Perhaps more extensive time abroad would effect greater change in beliefs about NNESTs’ of EFL teacher self-efficacy. Amuzie and Winke (2009) concluded, “Learning context and length of context exposure influence belief changes” (p. 366). However, it remains unclear how much time and in what contexts these belief changes would include perceived teacher self-efficacy.

**Hypothesis Six: Longevity as a Teacher**

The sixth hypothesis addressed longevity as a teacher and its association with teacher self-efficacy. This present study found a statistically significant, predictive relationship between
this variable and teacher self-efficacy. These findings are consistent with Wolters and Daughtery’s (2007) findings; namely, a positive correlation between years of experience as a teacher and teacher self-efficacy. Lee, Cawthon, and Dawson (2013) pointed out that self-efficacy had previously been shown to influence “... teachers’ decisions about staying on or leaving the profession” (p. 114). More recently, Chesnut and Burley (2015) also found self-efficacy to influence teachers’ persistence in teaching. Thus, based upon these earlier findings that show teacher self-efficacy as a possible predictive variable for teacher persistence and this variable’s connection to Bandura’s (1997) source of efficacy (mastery experience), it is not surprising that a significant association was found.

It is also important to view these results through the filter of Thai culture. Respect for the elderly in general and more specifically for teachers is a cultural value in Thailand (Scott, 1998). With longevity as a teacher comes maturity, but also greater respect from students, parents, and fellow teachers. This cultural norm can easily be characterized using Bandura’s (1997) sources of self-efficacy as verbal persuasion and mastery experience.

While longevity as a teacher was positively associated with teacher self-efficacy in this Thai study, these results contrast Klassen and Chiu’s (2011) findings. Klassen and Chiu’s (2011) results among Canadian teachers indicated a curvilinear relationship between longevity as a teacher and perceived teacher self-efficacy with a peak at the 25 years experience mark. Based upon Klassen and Chiu’s (2011) structural equation model results, after this peak there was a negative relationship between years of experience and teacher self-efficacy. They concluded, “Self-efficacy is lower at early career stages and rises until mid-career, after which it falls into late career” (p. 128). No such decline was apparent in this present study’s findings, which is likely reflective of Thai culture and values. As teacher self-efficacy continues to be investigated,
this present study and others like it highlight the importance of not only examining longevity as a teacher as a possible predictor of teacher self-efficacy, but also exploring the inherent cultural influence on this variable (Goker, 2006).

**Hypothesis Seven: Longevity as an English Teacher**

Hypothesis seven is quite similar to hypothesis six, so one may expect the variable “longevity as an English teacher” to also yield statistically significant results, as this variable also points to mastery experience. However, longevity as an English teacher was not found to have the same statistically significant predictive properties as longevity as a teacher. These findings were in contrast with Eslami and Fatah’s (2008) Iranian-based study, which focused on an early career NNEST population (from one to five years experience) and found longevity as an English teacher to be significantly associated with teacher self-efficacy. These contrasting results may have been influenced by the fact that this Thai-based study did not limit the sample to early career teachers; thus, a vast range of longevity as an English teacher was present in this sample (ranging from less than a year to more than 40 years).

Reasons why the variable “longevity as an English teacher” was not found to have the same significant association with teacher self-efficacy as the variable “longevity as a teacher” is more difficult to understand. Perhaps these results reflect the reality that being a Thai NNEST of EFL may only play a small part in the teachers’ overall identity. In rural contexts in Thailand, teachers are frequently tasked with teaching multiple subjects at school, as well as are called upon to tutor students across a wide range of subjects. Thus, the role of “English teacher” may not be exclusive. So, the participants’ longevity as a teacher may positively influence their teacher self-efficacy, while longevity specifically as an English teacher would not.
Another reason why the variable “longevity as an English teacher” was not found to have the same significant association with teacher self-efficacy as the variable “longevity as a teacher” may be related to the impact of changing technology on means and approaches to teaching English. As the demand for English language skills soars, the expectations placed on NNESTs also increase; granted, while no subject remains unaffected by the prevalent technological advances, language acquisition teachers are significantly impacted by these changes (Darasawang & Reinders, 2015). Students have greater access to native English-speakers via Skype, Facetime, Youtube, etc.; as a result, these Thai NNESTs of EFL may feel overwhelmed and intimidated by the rapid advances in technological avenues for English language teaching and learning. If so, longevity as an English teacher may reflect a growing gap in the teachers’ levels of confidence to teach given the rapid evolution of this field. As Lee (2009) pointed out, willingness to teach English (or the lack there of) may also influence teacher self-efficacy; perhaps as time spent in the role of NNEST of EFL increases, the teachers’ willingness to remain in the role may be negatively impacted by the increasingly use of computer assisted language learning (CALL) techniques, which may cause their teacher self-efficacy to decrease. As the links between either technology and teacher self-efficacy or longevity as an English teacher and willingness to persist in that role have not be explored in this context, it is impossible to draw absolute conclusions regarding these results. However, clearly this study’s findings provide fertile evidence to inform subsequent investigations.

**Hypotheses Nine and Ten: Present Grade Taught and Instructional Purpose**

Hypotheses nine and ten relate to present grade level taught and instructional purpose. In this present study, no statistically significant predictive association was found between grade level taught and teacher self-efficacy. Likewise, no statistically significant, predictive
association was found between instructional purpose and teacher self-efficacy. However, it is interesting that among the participants in this study, the elementary level teachers reported the lowest cumulative score for perceived teacher self-efficacy ($M = 83.44, SD = 10.91$). These findings are in contrast to Fives and Buehl’s (2010) findings, which found that U.S. elementary teachers reported higher assessments of teacher self-efficacy. Other studies (Klassen & Chiu, 2010; Midgley, Anderman, & Hicks, 1995; Wolters & Daugherty, 2007) also found elementary teachers’ perceived self-efficacy to be higher than their middle or high school counterparts.

While Wolters and Daugherty (2007) suggested that one reason for these differences among academic levels is based upon “developmental changes among students” (p. 183), the contrasting findings in this present study may again be a function of Thai culture. According to Hallinger and Lee’s (2013) conclusions, “In Asia, however, secondary schools often attract higher quality candidates” (p. 313). This present study’s findings seemed to confirm Hallinger and Lee’s (2013) assertion that in Thailand more qualified candidates are often found in secondary schools. In this study, both perceived teacher self-efficacy and perceived English proficiency was different across the various grade levels taught. First to third grade teachers reported the lowest perceived English proficiency ($M = 50.75, SD = 16.54$) compared to fourth through sixth grade teachers ($M = 54.99, SD = 13.65$), seventh through ninth grade teachers ($M = 60.7, SD = 11.17$), and $10^{th}$ through $12^{th}$ grade teachers ($M = 61.96, SD = 13.52$). Perceived teacher self-efficacy scores in this study also confirmed a gap between teachers who teach lower grade levels compared with those teaching at higher grade levels. In fact, teaching grades one to three revealed a negative association with perceived teacher self-efficacy ($r = -11, p = .07$), while teaching grades 10 to 12 revealed a significant positive association with teacher self efficacy ($r = .14, p = .03$). Conceivably, as Hallinger and Lee (2013) explained, this gap in quality may be
influenced by cultural perceptions of prestige, added resources, or even differences in salary for those at the secondary level of education.

Instructional purpose is closely related to grade level taught in Thailand as simple vocabulary development, pronunciation, and listening comprehension skills are stressed in lower grades while grammatical correctness, test preparation, and communication are emphasized at the higher grade-levels (Ngowananchai, 2013). However, there was no statistically significant association between instructional purpose and perceived teacher self-efficacy. Granted, various instructional purposes were found to be more prominent at different grade levels, such as first through third grade and fourth through sixth grade teachers indicated spending the second most time teaching pronunciation ($Mdn. = 3$) while NNESTs of the grades 7-12 indicated that they spent the second least amount of time teaching pronunciation ($Mdn. = 1$). However, even though elementary level NNESTs of EFL are tasked with “lower stakes” instructional purposes (vocabulary acquisition and pronunciation), they did not feel more efficacious. In fact, they reported the lowest levels of perceived teacher self-efficacy than any of the other academic level. While definitive conclusions cannot be drawn, perhaps these elementary-level teachers already had a lower sense of self-efficacy as an effect of Thai cultural perceptions.

As this study reflects, much is still unknown regarding what factors predict Thai NNESTs’ sense of teacher self-efficacy. However, this does not mean that the findings are not meaningful, especially given that little research has explored the perceived teacher self-efficacy of NNESTs of EFL in Thailand and no other studies have endeavored to propose a predictive model explaining factors to predict this construct. Based upon this sample of NNESTs of EFL in the rural Thai setting, the linear combination of the individual characteristics (perceived proficiency in English, college major, time spent abroad, time spent in an English-speaking
country, longevity as a teacher, longevity as an English teacher, highest degree attained, present grade level taught, and instructional purpose) could statistically significantly predict teacher self-efficacy. Likewise, both perceived English proficiency and longevity as a teacher were found to individually have a statistically significant, predictive association with teacher self-efficacy.

These modest findings suggest an opportunity to begin implementing specific strategies to improve teacher self-efficacy among NNESTs in Thailand—especially in the realm of increasing perceived English proficiency. Since this present study has established that a positive statistically significant association exists between the teachers’ perceived English proficiency and their sense of teacher self-efficacy in a Thai context, by implementing strategies to improve the teachers’ English proficiency their perceived teacher self-efficacy should also improve.

Teacher workshops, online English classes, as well as increased training in English proficiency are all tangible strategies for improving the teachers’ English proficiency. Thus, this study provides empirical evidence of the link between perceived English proficiency and teacher self-efficacy in this Thai context. This study also provides a model that can be replicated in other provinces within Thailand. Further, this study provides a baseline of teacher self-efficacy scores among NNESTs of EFL in the rural Thai context, which can now be used to make comparisons with other contexts. In short, this study is significant as it contributed to the body of literature in an area in which little research had previously been completed. Based upon these findings, implications, limitations, and suggestions for further research follow.

**Implications**

It is also important to analyze how these findings are relevant and contribute to the existing body of literature surrounding teacher self-efficacy among NNESTs in Thailand. As discussed above, the findings of this study support Bandura’s (1977, 1997) sources of self-
efficacy and more specifically highlight the triadic nature of reciprocal determinism in the Thai context. Based upon these findings, teacher preparation programs should include seminars that overtly showcase the importance of teacher self-efficacy, as well as this construct’s theoretical roots. If teachers were more fully aware of the importance of and the influence on teacher self-efficacy, they may be more inclined to actively improve their own perceptions of teacher self-efficacy.

Another important implication is in regards to perceived English proficiency. As a result of this present study, it is now known that perceived English proficiency is a significant individual contributor to Thai NNESTs’ teacher self-efficacy. Based upon this finding, teacher training programs should endeavor to include efficient and effective ways to support English language acquisition at high levels before Thai NNESTs start their teaching career. A similar implication is that both tools and processes are necessary for assessing teachers’ perceived English proficiency. If graduating teachers’ English proficiency is still lacking, it may be useful for these pre-service teachers to take extension English language courses to help improve their proficiency. Teacher development and professional development workshops should also focus on not only providing opportunities to use existing English language skills but also to acquire new skills. These training workshops and seminars should ideally be led by native English speakers with a deep understanding of the significant role that perceived English proficiency has on teacher self-efficacy.

Longevity as a teacher was also found to statistically, significantly contribute to the overall model. Based upon these findings, one practical implication could be in regards to mentor programs. If more experienced teachers were paired with colleagues who had less
experience, perhaps through the modeling or even one-on-one sharing that takes place, the younger teachers’ teacher self-efficacy may increase.

Another practical implication from this study’s findings is in regards to the fact that neither the Teacher Self-efficacy Survey—Short Form (TSES-SF) (Tschannen-Moran and Woolfolk Hoy, 2001), nor the Perceived Proficiency in English Survey (Chacon, 2005), the two main instruments used in this study, had ever been translated to Thai for use in this Thai context (to the best of this researcher’s knowledge after a thorough review of the literature); as such, this study provided reliable evidence that both instruments are appropriate for the targeted context. Given that these instruments have been translated and expert validated, they can now be used as a catalyst for further research among Thai language populations. Also, these measures may also be used to measure the effectiveness or growth of both pre-service and in-service teachers after various activities. For example, the perceived English proficiency scale could be administered to a group of NNESTs of EFL at the beginning of the school year and end of the school year to assess the effectiveness of an academic program. Specific teacher development workshops could be examined and the results of the survey used to improve instruction. Before this present study, the appropriateness of using these instruments was not fully known for the Thai context. However, given these reliable measures both Thai and foreign researchers can gather data and compare means across various subsets of Thai NNESTs of EFL, as well as can replicate this or similar studies in other provinces.

**Limitations**

While this study offers numerous empirical findings and various practical implications, these results should be applied with caution and recognition of the study’s limitations. One possible limitation of this study is the use of self-report. In spite of the researcher’s effort to
inform the participants that the surveys were completely anonymous, there may have been “self-response bias” (Kosevic & Loh, 2015, p. 6). Thus, the participants may have reported a higher or lower perceived English proficiency or sense of teacher self-efficacy than they actually felt. Similarly, as Chesnut and Burley (2015) pointed out, instruments using a Likert-type scale with minimal variability may lead to biased outcomes: “A 5-point Likert-type scale does not offer as much variability as a scale based upon a 0-100 scale because respondents tend to avoid extreme positions” (p. 5). Given that both instruments in this present study followed the original scales (six-point and nine-point), the variability may have been restricted. Better variability may have provided more detailed information that may have highlighted other subtle trends in the data. Non-ignorable, non-responses to survey items is also a limitation of this study (Wood et al., 2005); either the findings may not apply to those who did not participate in the study or those in this group of non-participants may have had unique data that could have affected different results. Both scenarios can be viewed as a limitation.

Another key limitation of this study and other studies using the TSES instrument to measure teacher self-efficacy was also raised by Klassen et al. (2009). Tschannen-Moran and Woolfolk Hoy’s (2001) instrument tried to capture three aspects of teacher self-efficacy: efficacy for instructional strategies, classroom management, and student engagement. These three sub-areas were taken as the overall basis for their teacher self-efficacy measurement. Simply stated, the possibility exists that the instrument used to measure teacher self-efficacy in this study was incomplete. Klassen et al. (2009) explained that these three aspects may not fully capture the complexity of this construct: “Future research may explore and uncover additional factors contributing to teachers’ sense of efficacy” (p. 75). The limitation inherent in the instrumentation may be especially pertinent in the future as teacher self-efficacy is more
extensively explored through the lens of how culture impacts the development and maintenance of these efficacy beliefs.

Also, as is true for many studies that propose prediction models, the threat of omitted variable bias to internal validity is present (Warner, 2013). It is possible that one or several missing predictor variables have yet to be identified; thus, these potentially missing variables may have helped to explain the presently unexplained 76.8% of the variance. As such, it is important to acknowledge this limitation and for future research to develop Thai-language instruments to assess a variety of other potential predictor variables so that models predicting teacher self-efficacy can be even more robust in future studies. Other future recommendations follow.

**Recommendations for Research**

While this present study is in response to calls for further research in non-Western contexts (Pajares, 2007; Klassen et al., 2009; Woolfolk Hoy & Burke Spero, 2005) this gap in the empirical literature has not yet fully been addressed. For example, further studies need to investigate ways to help “nurture and protect” teachers’ sense of teacher self-efficacy by engaging mastery and vicarious experiences (Jie-ying, 2011, p. 39). As quantitative research may be limited in its ability to identify and/or foster mastery and vicarious experiences, future studies should be qualitative in nature and should employ case studies or phenomenological designs so that the NNESTs of EFL have a stronger voice in this research process. For example, such input from the NNESTs in the research development and assessment phase, helps to clarify other issues related to teacher self-efficacy such as teachers’ willingness to implement reform, the association between burnout and job satisfaction, as well as how teacher self-efficacy can be utilized as an internal coping mechanism (Kosevic & Loh, 2015).
Subsequent studies should also include specific questions regarding which subjects teachers teach, what other roles teachers play, as well as the exact grades that each teacher teaches. These types of questions would allow the participants a chance to explain various impressions from their own unique Thai cultural lens. Such qualitative studies may be helpful in understanding questions raised by this study, such as why longevity as a teacher was significant, while longevity as an English teacher was not.

Given the lower English proficiency among many elementary NNESTS of EFL and this study’s findings that perceived English proficiency is a statistically significant predictor of teacher self-efficacy, it is important to further investigate how teachers are selected to teach at specific grade levels, as well as ways to increase English proficiency among this group of NNESTs of EFL.

The fact that one-fifth of the participants didn’t select English as a spoken language skill that they possessed also raised many questions: (1) How does this 20% of teachers who reported a lack of ability to speak English differ from the 80% that indicated that English was one of their spoke languages? (2) What standards are used to assess adequate English language proficiency prior to beginning a career as a NNEST of EFL in Thailand? (3) If, after all the required training and study, NNESTs of EFL find themselves teaching EFL without the ability to function in English, what options do they have for further training and personal development? Clearly, the results of this study in the Thai context raised numerous intriguing areas of future inquiry.

Further and more robust modeling (such as structural equation modeling or factor analysis) may help identify and analyze these associations among the variables, as well as how the variables in the current explanatory model interact.
Perhaps the most intriguing area that deserves further research is in the areas of cultural influence, as well as the notion of *gender* as it relates to the Thai context. Goker (2006) highlighted that teacher self-efficacy is “more differentiated in some countries and is strongly influenced by unique features of the inherent cultures” (p. 243). This observation is not new, yet teacher self-efficacy research has not extensively explored the relationship between culture and perceptions of teacher self-efficacy. Many of the findings in this present study can be explained and analyzed through the lens of Thai cultural norms and practices. Certainly, other cultural contexts exert similar influence on the development and perceptions of teacher self-efficacy. As such, perhaps the next wave of teacher self-efficacy research should endeavor to better recognize individual teacher’s own understanding of teacher self-efficacy and what cultural and social forces they think may uniquely influence this construct in a particular context. Given the prevalence of unique gender identities in Thailand (even among this sample of rural Thai NNESTs of EFL), further research is warranted among transgendered teachers in the Thai setting.

Another key area of research is needed in the area of teacher training as clear understanding regarding what teacher self-efficacy is, how it increases or declines based upon sources of self-efficacy, and its importance in effecting countless benefits within the realm of teaching and learning is still elusive (Mateo-Gaxiola, 2014; Jie-Ying, 2011). Future studies should also investigate collective teacher self-efficacy in other regions within Thailand, as well as in other Asian contexts (Chong & Kong, 2012; Viel-Ruma et al., 2010; Wang & Pape, 2007).

Supplemental instruments to measure variables such as job satisfaction, willingness to teach, desired English proficiency, and collective self-efficacy should be developed using the Thai language so these variables can be included in subsequent models to predict teacher self-
efficacy. As Ghasemboland and Hashim (2013a) pointed out, longitudinal studies that could highlight changes in teacher self-efficacy over a teacher’s career could also be beneficial, as identifying variables that instill change could help pinpoint means for improving teacher self-efficacy.

**Conclusion**

In summary, this study validated Bandura’s (1977, 1997) sources of teacher self-efficacy in the Thai context and provides an initial understanding of specific variables (proficiency in English, college major, time spent abroad, time spent in an English-speaking country, longevity as a teacher, longevity as an English teacher, highest degree attained, grade level taught, and instructional purpose) that predict Thai NNESTs’ of EFL teacher self-efficacy. Because strong teacher self-efficacy has numerous benefits, it is critical to better understand factors that improve this construct. As a result of this study, it is now not only evident that longevity as a teacher and perceived English proficiency have an individually significant positive association with teacher self-efficacy, but it is also apparent which additional areas need further exploration.
References


Chong, W. H., Klassen, R. M., Huan, V. S., Wong, I., & Kates, A. D. (2010). The relationships among school types, teacher efficacy beliefs, and academic climate: Perspective from


Tavakol, M., & Dennick, R. Making sense of Cronbach’s alpha. *International Journal of Medical Education, 2*, 53-55. doi: 10.5116/ijme.4dfb.8dfd


http://web.hku.hk/~sjwinter/TransgenderASIA/paper_thai_focus_2.doc


April 14, 2016

Cheri,

You have my permission to publish the Teacher Sense of Efficacy Scale (formerly called the Ohio State Teacher Sense of Efficacy Scale), which I developed with Anita Woolfolk Hoy, in the Liberty University open-access institutional repository, the Digital Commons, and in the Proquest thesis and dissertation subscription research database. You can find a copy of the measure and scoring directions on my web site at http://wmpeople.wm.edu/site/page/mxtsch.

Please use the following as the proper citation:


I will also attach directions you can follow to access my password protected web site, where you can find the supporting references for this measure as well as other articles I have written on this and related topics.

I would love to receive a brief summary of your results.

All the best,

Megan Tschannen-Moran
The College of William and Mary
School of Education
Appendix B

Anita Woolfolk Hoy, Ph.D. Professor  
Psychological Studies in Education  

Dear Cheri Crook:

You have my permission to use the *Teachers’ Sense of Efficacy Scale* in your research. A copy of both the long and short forms of the instrument as well as scoring instructions can be found at:  
http://www.coe.ohio-state.edu/ahoy/researchinstruments.htm

Best wishes in your work,

Anita Woolfolk Hoy, Ph.D. Professor  

College of Education  
29 West Woodruff Avenue Columbus, Ohio 43210-1177  
www.coe.ohio-state.edu/ahoy  
Phone 614-292-3774 FAX 614-292-7900 Hoy.17@osu.edu
Appendix C

Dear Dr. Tschannen-Moran,

I am a doctoral student at Liberty University and am interested in using your TSES Short form (Tschannen-Moran & Woolfolk Hoy, 2001) in a Thai context. I am an American teacher who has lived in Thailand for 14 years. I see that it has been translated to Chinese, Turkish, and other languages and wanted to ask a few questions:

1) May I use this instrument in my study?
2) Can I translate it to Thai?
3) How does the validity and the reliability of the instrument hold once it has been translated?
4) Do you have a specific TSES for ESL/ESL teachers?

My research consultant is concerned that if I translate the TSES to Thai, that I can no longer refer to the reliability and validity information used for the original TSES. How have those translating this instrument to other languages handled this issue?

Thanks in advance for any input you can provide.

Best regards,
Cheri C. Crook

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Cheri,

I have attached a letter of permission from Dr. Tschannen-Moran, as well as directions for accessing the password-protected materials on her research site. There is a separate survey for self-efficacy in literacy instruction, but it was developed from teachers of English to native English speakers. Your translation of the scale into Thai would be a welcome addition to our research community, and we would be happy to post it along with the others, with accompanying notes on its validity and reliability. The validity and reliability information for most of the other translations is available in the scoring directions for those surveys. Please let me know if you have any further questions.

Best regards,

Davis Clement, M.Ed.
Graduate Assistant, School of Education
The College of William & Mary
104 Flannick Rd.
Williamsburg, VA 23185
Appendix D

Teachers’ Sense of Efficacy Short Form (Tschannen-Moran & Woolfolk Hoy, 2001)

Developers: Megan Tschannen-Moran, College of William and Mary and Mary Anita Woolfolk Hoy, the Ohio State University.

Construct Validity

Factor Analysis
It is important to conduct a factor analysis to determine how your participants respond to the questions. We have consistently found three moderately correlated factors: Efficacy in Student
Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management, but at times the make up of the scales varies slightly. With preservice teachers we recommend that the full 24-item scale (or 12-item short form) be used, because the factor structure often is less distinct for these respondents.

**Subscale Scores**

To determine the Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management subscale scores, we compute unweighted means of the items that load on each factor. Generally these groupings are:

**Short Form**

*Efficacy in Student Engagement:* Items 2, 3, 4, 11

*Efficacy in Instructional Strategies:* Items 5, 9, 10, 12

*Efficacy in Classroom Management:* Items 1, 6, 7, 8

**Reliabilities**

In Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing and elusive construct. *Teaching and Teacher Education, 17*, 783-805, the following were found:

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<td>1.1</td>
<td>.90</td>
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</table>

1 Because this instrument was developed at the Ohio State University, it is sometimes referred to as the Ohio State Teacher Efficacy Scale. We prefer the name, Teachers’ Sense of Efficacy Scale.
Appendix E

Cheri Crook

Permission to use your "Self-reported English proficiency" scale

November 30, 2014 10:25 AM

Dear Dr. Chacón,

I am re-sending my request to use your "Self-reported English proficiency" scale for my study of the teacher self-efficacy beliefs of non-native English speaking teachers of EFL in Thailand. Could you kindly grant me permission to use this scale in my study? Do you have specific validity and reliability scores for the scale?

I would greatly appreciate your response.

Thanks so much.

Best regards,

Cheri Canode Crook

Cheri Crook

Permission to use your "Self-reported English proficiency" scale

July 22, 2014 11:14 PM

Greetings Dr. Chacón,

I am an American doctoral student doing research regarding teachers' perceived self-efficacy in the Thai context. (I have lived and worked for the past 14 years in Thailand).

I would like to use your "Self-reported English proficiency" scale as included in the below study:


Could you kindly grant me permission to use this scale in my study? Do you have specific validity and reliability scores for the scale?

Thanks in advance for any assistance you can provide me.

Best regards,

Cheri Canode Crook
Appendix F

*Self-reported English Proficiency Scale* Chacón (2005)

http://www.saber.ula.ve/bitstream/123456789/16701/1/teacher_perceived.pdf
Appendix G

Thai Teacher Sense of Self-efficacy Short Form

Thai Teacher Sense of Efficacy Scale

คำชี้แจง

แบบสอบถามฉบับนี้ได้ออกแบบเพื่อช่วยให้เข้าใจสิ่งที่สะท้อนความมั่นใจของข้าราชการไทยในจีดีจีบริการของโรงเรียน โปรดแสดงความเห็นของคุณตามคามาที่ปรากฏด้านล่างต่อไปนี้

แบบสอบถามฉบับนี้ใช้สำหรับการศึกษาวิจัยที่นักเรียน

ดังนั้นการตอบแบบสอบถามนี้ไม่มีผลต่อการกระทำแต่ละชั้น

และขอขอบคุณที่คุณได้ตอบแบบสอบถามนี้ แบ่งออกเป็น 3 ส่วน

ช่วงที่ 1, แบบสอบถามเกี่ยวกับข้อมูลทั่วไปของผู้ตอบแบบสอบถาม

คำชี้แจง โปรดตีเครื่องหมาย ✓ ลงไปช่อง □ และเต็มคำาในช่องร่วม ที่ตรงกับสถานะความเป็นจริงของท่าน

1. ชาย.............ผู้

2. เทศ _ ชาย _ หญิง _ อื่นๆ โปรดระบุ ......................

3. สถานภาพ _สมรส _ โสด

4. นันท์เรือนกานา _ พยาบาล _ ครู _ นักศึกษา _ อื่นๆ โปรดระบุ ......................

5. อุปมัธุนา อาทิเช่นคุณชื่อ _ เหนือ _ ใต้ _ กลาง _ ซ้ายส่วน _ อื่นๆ โปรดระบุ ......................

6. ท่านสามารถมหาชนกระทำได้บ้าง? (✓ ลงในช่อง) _ ภาษาไทยสังคม _ ภาษาสังคม _ ภาษาอื่น _ ภาษาใช้ _ ภาษาอื่น _ ภาษาอั้งกุด _ ภาษาข้าราชการ (ระบุภาษา) ......................

7. รายได้ประจำปี (✓ ลงในช่อง)

__ น้อยกว่า 40,000 __ 40,000 -- 50,000 __ 50,001 -- 60,000 __ 60,001 -- 70,000

__ 70,001 -- 80,000 __ 80,001 -- 90,000 __ 90,001 to 100,000 __ มากกว่า 100,000

8. วุฒิการศึกษาสูงสุดที่ได้รับ

__ ต่ำกว่าปริญญาตรี __ ปริญญาตรี __ ปริญญาโท __ ปริญญาเอก

9. วิชาเอกที่สำคัญในการศึกษา

__ วิชาเอกภาษาอังกฤษ __ อื่นๆ โปรดระบุ ........................................

10. ระยะเวลาที่เคยทำอาชีพอิสระเป็นปี __________ 

11. ระยะเวลาที่เคยทำอาชีพอิสระในอาชีพอิสระเป็นปี __________
12. ระยะเวลาที่เป็นปฏิบัติหน้าที่ครูจนถึงปัจจุบัน รวมเวลา _____ ปี _____ เดือน
13. ระยะเวลาที่ปฏิบัติหน้าที่เป็นครูสอนภาษาอังกฤษจนถึงปัจจุบัน รวมเวลา _____ ปี _____ เดือน
14. ระดับชั้นที่สอนในปัจจุบัน (โปรดทำเครื่องหมาย ✓)
   - ป. 1 ปี 3 ป. 4 ปี 6 ม. 1 ปี ม. 3 ม. 4 ปี ม. 6
15. จุดมุ่งหมายหลักในการสอนนักเรียน (โปรดสังเขปคัดเลือกเฉพาะที่ 1-4 เพื่อแสดงระยะเวลาการสอน)
   ในห้องเรียนที่ทำให้นักเรียนได้รับประโยชน์ (จำนวน 1 เป็นจำนวนเวลาที่สุดและจำนวน 4 เป็นจำนวนเวลาที่สุด)
   - เพื่อการสอนที่มีความลึกซึ้ง
   - เพื่อการเรียนรู้ที่มีความลึกซึ้ง
   - เพื่อการทดสอบภาษาอังกฤษ
   - เพื่อการสร้างสถานะทางวัฒนธรรม
16. ร้อยละของเวลาสอนที่ทำให้นักเรียนได้รับประโยชน์เป็นสัดส่วนของเวลาสอน (ถ้ามีรายรายการอยู่ 0% ไม่ได้ใช้ ถ้า 100%
   (ใช้แทน) ______

ส่วนที่ 2 แบบสอบถามความคิดเห็นด้านความสามารถของผู้สอนที่เกี่ยวกับการสอน

คัชชู เชื้อ โปรดทำเครื่องหมาย ✓ ลงช่องระดับความสามารถที่ตรงกับความเป็นจริงของท่านมากที่สุด
เพื่อช่วยให้ aşağıได้และชำนู้เป็น 9 ระดับดังนี้
ระดับ 1 น้อยที่สุด หมายถึง ความสามารถน้อยมากหรือเกือบไม่มีเลย
ระดับ 2 น้อยมาก หมายถึง ความสามารถน้อยมากหรือมีนิดหน่อย
ระดับ 3 น้อย หมายถึง ความสามารถน้อย
ระดับ 4 ปานกลางค่อนข้างน้อย หมายถึง ความสามารถปานกลางค่อนข้างน้อย
ระดับ 5 ปานกลาง หมายถึง ความสามารถปานกลาง
ระดับ 6 ปานกลางค่อนข้างมาก หมายถึง ความสามารถปานกลางค่อนข้างมาก
ระดับ 7 ค่อนข้างมาก หมายถึง ความสามารถค่อนข้างมาก
ระดับ 8 มาก หมายถึง ความสามารถมาก
ระดับ 9 มากที่สุด หมายถึง ความสามารถมากที่สุด
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<tr>
<td>1. สามารถควบคุมเหตุการณ์ของนักเรียนในชั้นเรียนได้</td>
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<td>2. สามารถสร้างแรงจูงใจให้นักเรียนที่มีแนวโน้มเรียนได้</td>
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<td>3. สามารถสร้างความมั่นใจด้านการเรียนที่ดีขึ้นให้นักเรียนได้</td>
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<td>4. สามารถสร้างความระมัดระวังในการเรียนรู้ให้กับนักเรียน</td>
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<td>5. สามารถดึงจุดความที่ตรงประเด็นบวกหรือให้กับนักเรียนได้</td>
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<td>6. สามารถทำให้นักเรียนปฏิบัติตามข้อกำหนดในห้องเรียนได้</td>
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<td>7. สามารถควบคุมนักเรียนในห้องเรียนได้</td>
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<td>8. สามารถจัดกลุ่มนักเรียนแยกตามความสามารถต่าง ๆ หรือความสนใจในห้องเรียนได้</td>
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<td>9. สามารถใช้เทคนิคการวัดและประเมินผลการเรียนของนักเรียนได้</td>
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<td>10. สามารถยืนยันและยกตัวอย่างให้นักเรียนเข้าใจได้</td>
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<td>11. สามารถแนะนำผู้ปกครองให้ช่วยให้เด็กมีความต้องการเรียนของนักเรียนให้ดีขึ้น</td>
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<td>12. สามารถจัดกิจกรรมการเรียนรู้ที่หลากหลาย</td>
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ที่ 1 แบบสอบถามความคิดเห็นด้านความสามารถในการใช้ภาษาอังกฤษของครูผู้สอนภาษาอังกฤษ

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รายการประเมิน

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<td>สามารถอ่านนิคคลาสหน้าต่างฝั่งและรวมใจภาษาอังกฤษทั้ง ๆ ไถ่ได้เข้าใจ</td>
<td>6 5 4 3 2 1</td>
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<td>สามารถสรุปเนื้ oath การอ่านหน้าต่างฝั่งภาษาอังกฤษได้</td>
<td>มากน้อยมากค่อนข้างมากมากที่สุด</td>
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<td>3</td>
<td>สามารถตีความหมายของคำศัพท์ในเนื้อหาภาษาอังกฤษที่ อ่านได้</td>
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<td>4</td>
<td>สามารถเข้าใจความหมายต่างๆที่เข้าใจในภาษาอังกฤษได้เป็นอย่างดี</td>
<td>มาค่อนข้างมากมากที่สุด</td>
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<td>5</td>
<td>สามารถเข้าใจภาษาอังกฤษส่วนๆได้</td>
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<td>สามารถออกแบบค่อยแบบต่างๆเป็นภาษาอังกฤษได้</td>
<td>มาค่อนข้างมากมากที่สุด</td>
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<td>7</td>
<td>สามารถเข้าใจการสนพบภาษาอังกฤษของเข้าของภาษาที่พูดเรียบปกติ</td>
<td>มาค่อนข้างมากมากที่สุด</td>
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<td>8</td>
<td>สามารถเข้าใจภาษาอังกฤษได้โดยไม่มีพายุภาษาไทยทำได้</td>
<td>มาค่อนข้างมากมากที่สุด</td>
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<td>สามารถเข้าใจความหมายภาษาอังกฤษจากข้อความทางโทรศัพท์ที่มีวิธีได้</td>
<td>มาค่อนข้างมากมากที่สุด</td>
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<td>10</td>
<td>สามารถสนทนากับเข้าของภาษาได้โดยใช้ความเร้าปกติ</td>
<td>มาค่อนข้างมากมากที่สุด</td>
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<td>11</td>
<td>สามารถแสดงความคิดเห็นและสนทนากับภาษาอังกฤษในหัวข้อที่ว่าได้</td>
<td>มาค่อนข้างมากมากที่สุด</td>
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<td>12. สามารถเข้าใจความหมายของส่วนรวมต่างๆในภาษาอังกฤษที่เราต่างอาศัยใช้ได้</td>
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<td>13. สามารถใช้เทคนิคในการทำความเข้าใจภาษาอังกฤษที่เข้าใจภาษาได้อย่างเหมาะสม</td>
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<td>14. สามารถลงตัวเรื่องราวที่เกี่ยวกับสังคมและวัฒนธรรมในสังคมยอมรับเป็นภาษาอังกฤษได้</td>
<td></td>
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<td>15. สามารถปฏิบัติตนตามสถานการณ์ต่างๆในสังคมโดยอาศัยภาษาอังกฤษได้</td>
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<td>16. สามารถใช้ภาษาอังกฤษได้ตอบสนองกับคำถามในห้องเรียนได้</td>
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</table>
Appendix H

No. 0002/ขณ

March B.E. 2558 (2015)

Dear Mrs. Crook,

We are pleased to inform you that the National Research Council of Thailand (NRCT) has approved of your request for conducting research in a project entitled "The Predictive Relationship Between Perceived English Proficiency, College Major, Time Spent Abroad, Time Spent in an English Speaking Country, Longevity as a Teacher, Longevity as an English Teacher, Highest Degree Attained, Current Grade Level Taught and Non-Native English Speaking Teachers’ Sense of Teacher Self-Efficacy in Thailand" in collaboration with Mrs. Pikul Wadikham, Primary Education English Resource Center: PEEP Center, Fuallung School from April 30, 2015 to October 30, 2015 in Nan province.

According to our regulations, you would be requested to report to the Division of International Affairs, NRCT within seven days after the receipt of this letter in order to obtain concerned documents and pay a deposit of 10,000 Baht for guaranteeing the submission of your complete report to NRCT. A map of NRCT with its office hours is attached herewith for your information.

Should you have any queries or concerns, please do not hesitate to contact us at webmaster@nrct-foreignresearcher.org or Tel. +66-2-940 6369.

We look forward to welcoming you.

Yours sincerely,

(Mr. Kritsawat Nopnakkeepongse)
Deputy Secretary-General
For Secretary-General

Cheri Crook
P.O. Box 1
Amphur Muang Chiang Klang,
Nan 55160

Encl.
Appendix I

การอธิบายและบรรยากาศการวิจัยครั้งนี้

ในด้านวิทยาศาสตร์กีฬา ทั่วไปจะมีความรู้เรื่องภัณฑ์ที่เป็นสิ่งเร่งของในการวิจัย ที่สำคัญจะเกิดขึ้นในกระดาษที่มีความสัมพันธ์กับความรู้ในพื้นฐานการวิจัย ที่มีผู้ที่สนใจรู้เรื่องในการวิจัย

ข้อสำคัญที่ต้องระลึกในการวิจัยครั้งนี้ คือ การสังเคราะห์ผลลัพธ์ที่เกิดขึ้นจากพื้นฐานการวิจัยของพื้นฐานการวิจัย

โดยเฉพาะวิจัยที่จะส่งผลต่อการพัฒนาการบริการเชิงสังคม การวิจัยถึงวัยศรีสุนทร (Sociocognitive) และการทดสอบการใช้ Teacher Sense of Efficacy Scale (Tschanz-Morr & Woelfel Hoy, 2001) ที่เป็นประโยชน์

ดังกล่าวที่ทำเป็นเรื่องของพื้นฐานการวิจัยครั้งนี้ ที่สำคัญจะเกิดขึ้นในกระดาษที่มีความสำคัญ ที่ต้องระลึกในการวิจัยกีฬา

ในการสังเคราะห์ผลลัพธ์ที่เกิดขึ้นจากการวิจัยครั้งนี้ ตัวอย่างเช่น ความสำคัญของการวิจัย ข้อสำคัญที่ต้องระลึกในการวิจัยครั้งนี้ ที่สำคัญจะเกิดขึ้นในกระดาษที่มีความสำคัญ

ในการสังเคราะห์ผลลัพธ์ที่เกิดขึ้นจากการวิจัยครั้งนี้ ที่สำคัญจะเกิดขึ้นในกระดาษที่มีความสำคัญ ที่ต้องระลึกในการวิจัยกีฬา

ข้อสำคัญที่ต้องระลึกในการวิจัยครั้งนี้ คือ การสังเคราะห์ผลลัพธ์ที่เกิดขึ้นจากพื้นฐานการวิจัยที่มีความสำคัญ ที่ต้องระลึกในการวิจัยกีฬา

โดยเฉพาะวิจัยที่จะส่งผลต่อการพัฒนาการบริการเชิงสังคม การวิจัยถึงวัยศรีสุนทร (Sociocognitive) และการทดสอบการใช้ Teacher Sense of Efficacy Scale (Tschanz-Morr & Woelfel Hoy, 2001) ที่เป็นประโยชน์
ท่านสามารถติดต่อ Cheri C. Creek โดยโทร 089.006.4573 หรืออีเมล lovelylife@icloud.com

เวลาหนึ่งที่ได้รับการรับรองจากนักวิจัยที่นี้ ซึ่งผู้บริหารโดย Dr. Amanda Rockison-Stapkiw และท่ามกลางการติดต่อกับคุณ

ท่านสามารถติดต่อหรือหัวข้อการสังเกตการณ์ Institutional Review Board, 1071 University Blvd, Suite 1837, Lynchburg, VA 24515

หรืออีเมล irb@liberty.edu.

การคัดลอกวิจัยที่ไม่ได้รับความยินยอมหรือไม่ได้รับอนุญาตให้ผู้มีสิทธิ์หรือผู้มีอำนาจในการตัดสินใจเป็นผู้จัด

หรือในอนาคตของคุณกับ Liberty University ผู้มีสิทธิ์ในการตัดสินใจที่จะตัดสินใจคุณมีสิทธิ์ที่จะ

ไม่ยินยอมและความถึงหรือไม่ได้รับอนุญาตในการตัดสินใจของคุณโดยไม่ได้รับการทำความเข้าใจด้าน

เพื่อให้แสดงข้อมูลเกี่ยวกับการมีส่วนร่วมของท่าน ท่านอาจจะให้รายละเอียดส่วน

ดังนี้ผู้ที่มีสิทธิในการตัดสินใจ โดยใช้ข้อตกลงเกี่ยวกับกฎหมายข้อมูลและสิทธิการเข้าถึงการส่วนของท่าน

ขอบคุณล่วงหน้า

ค่าความนับถือ

Cheri Canode Creek
To Nan Province English Teachers:

You are being asked to participate in a doctoral research study. Before you agree, I would like to give you some basic information, as well as tell you about (i) the purposes, procedures, and duration of the research; (ii) any reasonably foreseeable risks, discomforts, and benefits of the research; (iii) and how confidentiality will be maintained.

The title of my project is The Predictive Relationship between Specific Teacher Characteristics and the Perceived Sense of Teacher Self-Efficacy of Non-Native English Speaking Teachers of English as a Foreign Language in Rural Thailand.

My name is Cheri Canode Crook, and I am the principle researcher. I am an American English teacher, and I have lived in Thailand for 15 years. This study is a requirement for my doctorate degree from Liberty University in the Department of Education.

The purpose of this study is to explore variables that may help to predict EFL teachers’ sense of self-efficacy, to better understand sociocognitive theory’s sources of self-efficacy, as well as to apply the Teacher Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) in the Thai context.

Because you are a Thai non-native English-speaking teacher of English as a Foreign Language, you have been selected to participate in this study. As such, accompanying this letter is a data packet that contains information for you to read and then a brief survey for you to complete. The total time expended to read this letter, the data packet contents, and to answer the survey should be around 30 to 45 minutes. As you already know, you have received this letter and the data packet in one of the following ways: in person, via the Thai post, or from one of the Nan P.E.E.R. Center teachers. A brief follow-up meeting with me may take place in person, via the phone, email, or message.

You can choose the time and place to complete the survey and either hand it directly to me or send it back by Thai post in the postage paid envelope provided. While there are no anticipated risks to you as a participant, except the expenditure of your time, this research may help to explain means for improving teacher self-efficacy. All of your responses will be kept confidential, as your name will be removed never to be connected again; all data will be stored in a locked filing cabinet and a password protect computer.

You may contact Cheri C. Crook at 089.006.4575 or lovinglife3@icloud.com any time if you have questions about the research. The researcher’s faculty mentor is Dr. Amanda Rockinson-Szapkiw, and you may contact her via email at aszapkiw@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you can contact the Institutional Review Board, 1971 University Blvd, Carter 134 Lynchburg, VA 24515 or email at irb@liberty.edu.

Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.
In order to express my appreciation for your participation, I will hold a drawing of four baskets of common household goods. Please complete the raffle information enclosed and return it with your survey.

Thank you in advance for your help.

Respectfully,

Cheri Canode Crook
August 10, 2015

Cheri Canode Crook
IRB Exemption 2265.081015: The Predicted Relationship between Specific Teacher Characteristics and the Perceived Sense of Teacher Self-Efficacy of Non-Native English Speaking Teachers of English as a Foreign Language in Rural Thailand

Dear Cheri,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects’ responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects’ financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,

Fernando Garzon, Psy.D.
Professor, IRB Chair
Counseling

(434) 592-4054

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Kind regards, Ayako

Ayako KAGAWA (MSc)
Chief Cartographic Unit
Geospatial Information Section (formerly Cartographic Section)
Division for Informatie and Telecommunications Technologies (CITD)
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