THE PREDICTORS OF ENGLISH LANGUAGE PREPARATORY SCHOOL INSTRUCTORS' SELF-EFFICACY BELIEFS

A THESIS SUBMITTED TO
THE GRADUTE SCHOOL OF SOCIAL SCIENCES
OF
MIDDLE EAST TECHNICAL UNIVERSITY

BY

HATİCE ASLI ÜLKÜMEN

IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS
FOR
THE DEGREE OF MASTER OF SCIENCE
IN
THE DEPARTMENT OF CURRICULUM AND INSTRUCTION

FEBRUARY 2013

Approval of Graduate School of Social Sciences

_____

Prof. Dr. Meliha Altunışık

Director

I certify that this thesis satisfies all the requirements as a thesis for the degree of Master of Science.

_____

Prof. Dr. Ayhan Demir

Head of Department

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Science.

_____

Assist. Prof. Dr. Yeşim Çapa Aydın

Supervisor

Examining Committee Members

Prof. Dr. Ayşegül Daloğlu (METU FLE) _____

Assist. Prof. Dr. Yeşim Çapa Aydın (METU EDS) _____

Assoc. Prof. Dr. Oya Yerin Güneri (METU EDS) _____

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Last Name: H. Aslı Ülkümen

Signature:

ABSTRACT

THE PREDICTORS OF ENGLISH LANGUAGE PREPARATORY SCHOOL INSTRUCTORS' SELF-EFFICACY BELIEFS

Ülkümen, H. Aslı
M.Sc., Department of Curriculum and Instruction
Supervisor: Assist. Prof. Dr. Yeşim Çapa Aydın

February 2013, 84 pages

The purpose of this study was to investigate whether university type, years of teaching experience, mastery experience, undergraduate major, colleague support, and administration support would predict EFL instructors' self-efficacy beliefs for classroom management, instructional strategies, and student engagement. A total of 285 English language instructors from nine universities in Ankara constituted the participants of the study. The data were collected through a five-section scale, consisting of the Turkish version of Teachers' Sense of Efficacy Scale, Mastery Experience Scale, Colleague Support Scale, Administration Support Scale, and a demographic information section. So as to provide evidence for validity and reliability of the data collection instrument, exploratory and confirmatory factor analyses were carried out. Three separate hierarchical regression analyses were conducted by the help of SPSS 20 to address the research questions.

The results of the study displayed that mastery experience, years of teaching experience, administration support, and university type were the statistically

significant predictors of teacher efficacy of EFL instructors. In other words, the instructors' efficacy for instructional strategies was predicted by all of the four predictors herein mentioned. The predictors of their efficacy for student engagement were found to be mastery experience, administration support, and university type. Teacher efficacy for classroom management, on the other hand, was predicted by mastery experience and years of teaching experience. Mastery experience of the instructors was, by far, the most significant indicator of their self-efficacy levels, while their undergraduate majors and the support of their colleagues were not significantly correlated with their sense of efficacy.

Keywords: Teacher Self-Efficacy, EFL Instructors, Mastery Experience, Colleague Support, Administration Support

ÖZ

İNGİLİZCE HAZIRLIK OKULU OKUTMANLARININ ÖZYETERLİK İNANÇLARININ YORDAYICILARI

Ülkümen, H. Aslı
Yüksek Lisans, Eğitim Programları ve Öğretim Bölümü
Tez Yöneticisi: Yrd. Doç. Dr. Yeşim Çapa Aydın

Şubat 2013, 84 sayfa

Bu çalışmanın amacı, çalışılan üniversite türü (devlet ya da özel), öğretmenlik deneyim süresi, doğrudan deneyimler, mezun olunan lisans programı (Eğitim Fakültesi mezunu ya da diğer fakültelerin mezunu olmak), meslektaş desteği ve yönetici desteği değişkenlerinin üniversitelerin hazırlık okullarında çalışan İngilizce okutmanlarının özyeterlik seviyelerini yordama gücünü belirlemektir. Çalışmada, okutmanların özyeterlik inançları, sınıf yönetimi, ders anlatım stratejileri ve öğrencilerin derse katılımını sağlama alanlarındaki özyeterlikleri bakımından ele alınmaktadır. Çalışmaya Ankara'daki dokuz üniversitede çalışan 285 İngilizce okutmanı katılmıştır. Veriler, Türkçe Öğretmenlik Özyeterlik Ölçeği, Doğrudan Deneyimler Ölçeği, Meslektaş Desteği Ölçeği, Yönetici Desteği Ölçeği ve Kişisel Bilgiler olmak üzere beş bölümden oluşan bir ölçek aracılığıyla toplanmıştır. Ölçeğin geçerlik ve güvenirliğine dair kanıt sağlamak amacıyla açıklayıcı ve doğrulayıcı faktör analiz yöntemleri uygulanmıştır. Çalışmanın bulguları, SPSS 20 istatistik programı yardımıyla üç farklı çoklu hiyerarşik regresyon analizi yapılarak elde edilmiştir.

Çalışmanın bulgularına göre, doğrudan deneyimler, öğretmenlik deneyim süresi, yönetici desteği ve çalışılan üniversite türü, İngilizce okutmanlarının özyeterlik inançlarını yordamada istatistiksel açıdan önemli değişkenlerdir. Başka bir deyişle, bahsedilen bu dört değişken, İngilizce okutmanlarının öğretim stratejilerine yönelik özyeterliklerini önemli ölçüde yordamaktadır. Ayrıca, doğrudan deneyimler, yönetici desteği ve çalışılan üniversite türü, okutmanların öğrenci katılımına yönelik öz yeterliklerini istatistiksel olarak anlamlı yordarken; sınıf yönetimine yönelik özyeterliklerini doğrudan deneyimler ve öğretmenlik deneyim süresi değişkenleri yordamaktadır. Çalışmada, okutmanların doğrudan deneyimleri özyeterliklerini yordamada en önemli değişken olarak bulunmuştur. Ancak, mezun olunan lisans programı ve meslektaş desteği değişkenleriyle okutmanların özyeterlikleri arasında anlamlı bir ilişki bulunamamıştır.

Anahtar Sözcükler: Öğretmen Özyeterliği, İngilizce Okutmanları, Doğrudan Deneyimler, Meslektaş Desteği, Yönetici Desteği

To my beloved family,

ACKNOWLEDGEMENTS

I would like to express my deepest gratitude to my supervisor Assist. Prof. Dr. Yeşim Çapa-Aydın for her invaluable help, guidance, and support throughout the present research study. If it was not for her continuous motivation, endless patience, immense knowledge and expertise, and most of all, her gracious attitude, the completion of this thesis would be impossible. I feel highly privileged to be able to complete my study with her as I could not have imagined a better advisor for this process.

I also would like to sincerely thank examining committee members, Prof. Dr. Ayşegül Daloğlu and Assoc. Prof. Dr. Oya Yerin Güneri for their constructive feedback, insightful comments, and noteworthy contribution to my thesis.

I feel very much indebted to my valuable friends and/or colleagues, Ayşegül Solar-Şekerci, Merih Açıkel-Ergüner, Özge Yakut-Tütüncüoğlu, Kadriye Yakut, Özlem Öz, and many more others I cannot mention here for their treasured help, especially during the data collection process. In addition, I extend particular thanks to my dearest co-workers, Merve Oktar, Nuriye Diren, and Deniz Tanaydın for their genuine assistance during the times I was pyhsically and/or mentally absent.

Additionally, I very much sincerely thank to my dearest friend, Dilay Durak for her everlasting friendship, and her tirelessly being there for me in every step of my life. Thanks to her, I have learnt a true friend is always close to heart despite the distance.

Last but not the least, I owe countless special thanks to my precious family – my father Ahmet Avnullah, my mother Ayşe, my brother Alper, and my sister Aydan – for their unconditional love, never-ending support, valuable inspiration and encouragement, and everything that has helped me become who I am right now. I am so proud to have them as my family.

TABLE OF CONTENTS

LIST OF TABLES

TABLES

LIST OF FIGURES

FIGURES

LIST OF ABBREVIATIONS

EFL: English as a Foreign Language

TSES: Teachers' Sense of Efficacy Scale

TTSES: Turkish Teachers' Sense of Efficacy Scale

SOSI: Sources of Self-Efficacy Inventory

CELTA: Certificate in Teaching English to Adults

DELTA: Diploma in English Language Teaching to Adults

TESOL: Teaching English to Speakers of Other Languages

CHAPTER I

INTRODUCTION

This initial chapter of the study presents background information on the basis of the subject of the research by introducing teacher self-efficacy belief and its impact on the educational field. Furthermore, it provides information on the purpose of the study by stating the research questions, and it explains the significance of the research. Finally, the chapter ends with the operational definitions of the key terms utilized throughout the study.

1.1 Background of the Study

One of the most significant indicators of both student and teacher performance, self-efficacy takes its origins from Social Cognitive Theory developed by Albert Bandura (1977). According to Bandura (1986), self-efficacy refers to the belief that individuals are able to organize their actions in such a way that they can control the situations they are in. In parallel with this definition of self-efficacy, Tschannen-Moran, Woolfolk-Hoy, and Hoy (1998) define teacher efficacy, also referred as "teachers' sense of efficacy" or "teacher self-efficacy beliefs," as "the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p.22). Thus, teacher self-efficacy beliefs can be considered as their own perception of their own capacities about whether or not they can handle certain teaching tasks in certain teaching contexts. These efficacy beliefs of teachers, like self-efficacy itself, can be constructed by four sources of information: mastery experiences, vicarious learning experiences, social persuasion, and physiological and affective states. As Bandura (1997) explains in detail, the first source, mastery experience, refers to the idea that efficacy beliefs are formed as a result of personal success and failures when performing a specific task. The second source,

vicarious learning experiences, on the other hand, is related to observing others perform a specific task and identifying himself/herself with this model. Social persuasion, also named as verbal persuasion, is an individual's being encouraged by others so that they can improve the way they carry out a task. To be more specific, in his/her teaching context, a teacher may highly benefit from this source because the feedback s/he gets from other teachers, a supervisor or a principal can be considered as verbal persuasion (Tschannen-Moran et al., 1998). Lastly, affective state may also influence an individual's level of efficacy since a person's level of anxiety, negative feelings, and attitudes may have a significant impact on his/her efficacy beliefs (Bandura, 1997). Although all of these sources of information contribute greatly to the self-efficacy beliefs of an individual, mastery experience is considered as the most effective one (Tschannen-Moran et al., 1998).

Based on these four sources of information, teachers' sense of efficacy has three significant domains as mentioned by Tschannen-Moran and Woolfolk-Hoy (2001) in their studies conducted to come up with "Teachers' Sense of Efficacy Scale." These domains are efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies. Over the last two decades, teacher efficacy in terms of these three domains as well as its sources is a highly researched topic in educational sciences. Research studies put forward that teachers with high self-efficacy beliefs influence both their students and themselves.

Recently, self-efficacy has taken its place in the literature as one of the most efficient indicators of student motivation and willingness to learn (Zimmerman, 2000). Moreover, various studies demonstrate that teachers' sense of efficacy has a considerable impact on student achievement (Muijs & Rejnolds, 2001), increase in their self-esteem (Borton, 1991) as well as their participation in class activities (Ross, Hogaboam-Gray, & Hannay, 2001). In addition to its positive influence on student involvement, motivation, and success, teacher self-efficacy also greatly affects teachers' own motivation and performances (Woolfolk-Hoy, Davis, & Pape, 2006). To illustrate, a teacher's level of self-efficacy influences the way s/he creates a learning environment as an efficacious

teacher commits more to his/her profession and more often cooperates with his/her co-workers and the students' parents (Imants & Van Zoelen, 1995). A research study conducted by Caprara, Barbaranelli, Steca, and Malone (2006) also illustrates that efficacious teachers are more committed to the institutions they work for and more satisfied with their own performances.

In short, the studies mentioned above and many others in the literature on this issue clearly illustrate the promoting effects of high teaching efficacy beliefs of teachers; however, the studies on the predictors of high self-efficacy are rather limited, and it is even more so in the English language teaching context. Therefore, it is apparent that there is a need to concentrate on the self-efficacy levels of English language instructors in relation to the predictors of it. Hence, by investigating such predictors as the type of university these instructors work for, their undergraduate majors, their teaching experience levels and the mastery experiences they have as well as the administration and colleague support they get in their teaching environment, the present study aimed to fulfill this need.

1.2 Purpose of the Study

The purpose of this study was to examine the potential predictors of self-efficacy levels of the English language instructors working at university preparatory schools in Ankara. The instructors' efficacy beliefs about classroom management, student engagement, and instructional strategies were investigated in light of variables such as university type (public or private universities), undergraduate major (being a Faculty of Education graduate or not), years of teaching experience, mastery experience, colleague support, and administration support.

In the aforementioned theoretical background, this study aimed to answer the following research questions:

1. To what extent do university type, undergraduate major, years of teaching experience, mastery experience, colleague support, and administration support predict EFL instructors' self-efficacy for classroom management?

2. To what extent do university type, undergraduate major, years of teaching experience, mastery experience, colleague support, and administration support predict EFL instructors' self-efficacy for student engagement?

3. To what extent do university type, undergraduate major, years of teaching experience, mastery experience, colleague support, and administration support predict EFL instructors' self-efficacy for instructional strategies?

1.3. Significance of the Study

This study aimed to investigate the potential predictors of teacher self-efficacy in EFL context. Examining the predictors promoting teachers' sense of efficacy is of crucial importance since it has impact on not only student achievement and motivation (Tschannen-Moran et al., 1998), but also teachers' own instructional behaviors and attitudes in the classroom (Pajares, 1992). To make it more clear, teachers with a higher level of self-efficacy are more likely to make better instructional decisions, carry out better classroom practices, and use better management techniques (Ross, 1994). On the other hand, teachers with low self-efficacy beliefs are inclined to underestimate both their own capabilities and those of their coworkers and students (Pajares & Schunnk, 2001). As can be seen from the studies in the literature, teacher self-efficacy is still a significant construct to be further studied owing to its considerable impact on both student and teacher achievement.

Additionally, the present study makes use of both Bandura's (1997) sources of information from which self-efficacy is constructed and the integrated model of teacher efficacy (Tschannen-Moran et al., 1998). In the study, teaching context was also included as an essential component of teacher efficacy. However, in the literature, there is not an adequate number of studies focusing on teaching context (Tschannen-Moran & Woolfolk-Hoy, 2007). It is evident that although much research has been carried out on teacher self-efficacy beliefs, little has been conducted on its relationship with teaching context. Different from the others, teaching context including support from colleagues and administration was also included in the present study as a vital element constructing teacher efficacy.

Moreover, the present study includes university type as one of the predictors of teacher self-efficacy. Although the predictors of teacher self-efficacy is quite commonly investigated in the literature, there is almost no research focusing on the difference between instructors working at public universities and the ones working at private universities in terms of their self-efficacy. Thus, this study is significant in providing a different perspective on the issue.

Furthermore, reviewing the literature, it has been realized that although teacher self-efficacy studies gradually increase in Turkey, there are still a limited number of research studies focusing on the self-efficacy beliefs of English language instructors (Göker, 2006). Hence, as EFL instructors at universities constitute the participants of this study, it may shed light on the EFL context in that sense. All in all, this study may be beneficial for future researchers to comprehend the English instructors' efficacy beliefs and the relationship between these beliefs and their teaching contexts.

1.4. Definition of Important Terms

Self-Efficacy: Bandura (1989) defines self-efficacy as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 395).

Teacher Self-Efficacy: In this study, teacher self-efficacy refers to "a teacher's judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (Tschannen-Moran & Woolfolk-Hoy, 2001, p. 783).

EFL Instructors: EFL instructors are the instructors who are currently working at schools of foreign languages at universities to teach English as a foreign language. In the present study, this term is used as "EFL instructors," "English instructors," "instructors of English," or solely "instructors".

Mastery Experience: In this present study, mastery experiences refer to the instructors satisfaction with their performances; i.e. their conceptions of their own achievement and failures.

Administration Support: Administration support can be defined as "teachers' perception of his or her principal as supportive in establishing and sustaining a setting in which s/he can grow professionally and contribute to the improvement of student learning" (Çapa, 2005, p. 46).

Colleague Support: Colleague support can be explained as "teachers' perceived support from their colleagues both professionally and personally" (Çapa, 2005, p. 46).

CHAPTER II

REVIEW OF THE LITERATURE

The present chapter covers the following bodies of literature: Firstly, social cognitive theory and the concept of self-efficacy are explained. Secondly, teacher self-efficacy is discussed through its definition, integrated model, and measurement. In the next section are stated the existing research studies in relation to the impacts and predictors of teacher self-efficacy from various academic disciplines. Finally, research studies conducted on teacher sense of efficacy in English language teaching field are asserted.

2.1. Social Cognitive Theory and Self-Efficacy

Since control is at the center of people's lives, there have been numerous theories suggested over the years. Among these theories, one of the most highly recognized ones is undoubtedly Social Cognitive Theory, which is a theory related to human functioning that focuses on the role of human agency (Bandura, 1997). That is to say, as Pajares (2003) puts forward, human beings are regarded as "proactive and self-regulating" instead of just "reactive and controlled by biological and environmental forces" (p. 139) in Social Cognitive Theory. To make it more clear, the theory proposes that people are not the production of the social environment they live in; instead, they are active actors who can manage their own thoughts, emotions, and behaviors (Bandura, 2006).

Social Cognitive Theory suggests that individuals have the capability to impact their own affective states, motivation levels, and actions through mechanisms of personal agency (Cervone & Shoda, 1999); however, as Bandura (2006) puts forward this personal agency is not inmate; on the contrary, it is socially rooted and functions in a socio-cultural environment. In other words, human agency is developed as an

individual interacts with his/her environment and performs through a changing interplay between behavioral, personal, and social factors, which is defined as "triadic reciprocal determinism" (Bandura, 1986).

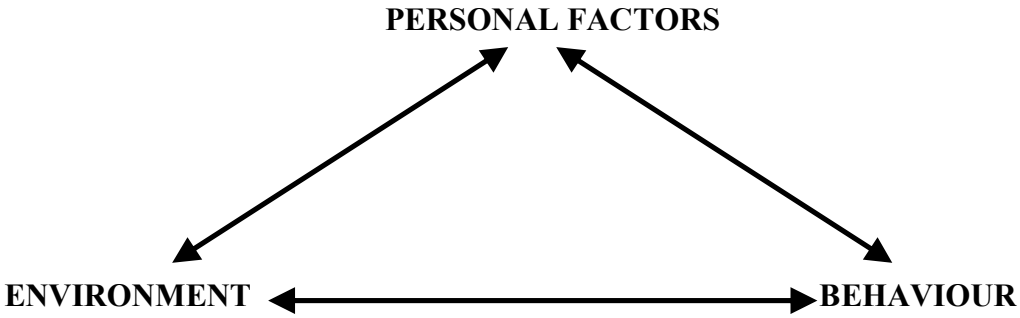


Figure 2.1. Bandura's Triadic Reciprocal Determinism Model
Note. Adapted from Bandura, 1997, p. 6.

As can be seen from Figure 2.1, there exists an intercorrelated relationship among an individual's behaviors (actions and decisions), his/her environment, and his/her personal attributes influenced by cognitive, affective, and biological factors (Bandura, 1997). All these three factors correlate with one another in such a way that permits individuals to become "the producers of their own environment and their social systems" (Bandura, 1997, p.6). That is to say, personal agency is of crucial importance in determining individuals' certain thoughts, beliefs, expectancies, and motivation, which, in turn, shape their actions and reactions.

Of the many functioning of personal agency, self-efficacy is the most foremost and thorough one (Bandura, 2006). Bandura (1989) defines self-efficacy as "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 395). It can be understood from this definition that self-efficacy refers to specific activities; in other words, it deals with the interaction between a person and a task rather than dealing with a personal trait like self-esteem. This puts forth that high self-efficacy has a positive influence on personal achievement since it helps individuals see a task as a challenge, not as a threat (Bandura, 1997).

Studies show that the beliefs people have of themselves highly affect their accomplishment in certain tasks (Pajares & Schunk, 2001), and since two of these concepts concerning individuals' beliefs about themselves, self-efficacy and self-concept, are commonly studied in the educational sciences, they may be mistakenly used for one another. However, these theories of self are different from each other not only in conceptual orientation, but in comprehensiveness, as well (Bandura, 1997). Self-efficacy can be explained as "a judgment of the confidence that one has in one's ability," whereas self-concept refers to "a description of one's own perceived self-accompanied by an evaluated judgment of self-worth" (Pajares & Schunk, 2001, p. 243). That is to say, self-efficacy beliefs deal with questions of 'can' (such as Can I learn this language? Can I win this race?); therefore, the answers to these types of questions reveal whether an individual's confidence is low or high in order that s/he can achieve a certain attainment. On the other hand, self-concept beliefs revolve around questions that are related to one's existence and feelings (like Who am I? Do I feel successful as a musician?); hence, the answers to these questions illustrate how positively or negatively individuals consider themselves about specific areas (Pajares & Schunk, 2001).

As understood, self-efficacy refers to the idea that "people's level of motivation, affective states, and actions are more based on what they believe than what is objectively true" (Bandura, 1997, p. 2). That is why, it plays a highly predictive role in determining people's expectations of the outcomes of their actions. Likewise, Pajares (2002) underscores that the way individuals act can be better anticipated by their opinions of themselves in terms of their abilities than their actual accomplishments since these self-efficacy beliefs are considerably influential in deciding how individuals use the knowledge and abilities they possess. In brief, the core of the theory promoting self-efficacy is that "people's beliefs about their personal efficacy constitute a major aspect of their self-knowledge" (Bandura, 1997, p. 79).

Considering how individuals construct their senses of self-efficacy, Bandura (1997) states that there exist four principal information sources, which are termed as enactive mastery experiences, vicarious learning experiences, verbal persuasion, and physiological arousal.

Enactive Mastery Experiences refer to the tasks which people perform on their own. In other words, self-efficacy beliefs are mainly constituted from the successes and failures an individual experiences while carrying out a task (Bandura, 1997). To make it more clear, these experiences are indicators of one's capabilities since success strengthens his/her self-efficacy beliefs, while failures undermine them, especially when these failures take place earlier than the individual's sense of efficacy is solidly formed (Bandura, 1994). However, Bandura (1997) success and failures do not always have an impact on individuals' sense of efficacy. Studies consistent with this assertion prove that repeated task-achievement or task-failure experiences are required to construct self-efficacy (Kim, 2005).

Vicarious Learning Experiences are the ones constructed by observing others perform a task. That is to say, according to Bandura (1997), observing others carry out a specific task facilitates individuals' evaluating themselves in achieving the same task, which may cause them change their behavior after comparing themselves with others. By this way, seeing others' accomplishments, individuals may conclude that they can attain similar tasks in similar ways. Likewise, observing others' failures may lead to the idea that they will probably fail, as well. In the teaching context, the self-efficacy beliefs of the observer increase when a reliable model is observed that s/he teaches well. On the other hand, expectations about one's own capabilities demolish when the model teaches poorly (Woolfolk-Hoy, 2004).

Verbal Persuasion refers to being encouraged by a credible professional. Individuals, when encouraged by getting appraisals, which can also be defined as 'evaluative feedback', from others showing them their capabilities to achieve a task, seem to enhance their self-efficacy levels (Bandura, 1997). Like the others, this source of efficacy is of crucial importance in constructing one's sense of efficacy. When verbal persuasion is in the form of praise, encouragement or constructive feedback, it results in a supportive environment. On the contrary, when verbal persuasion is in the form of criticism or it does not exist at all, it leads to an unwelcoming social environment (Milner & Hoy, 2003).

Physiological Arousal is the last source of self-efficacy. In other words, physiological and affective states also influence individuals' senses of efficacy by helping them judge their capability as well as vulnerability to physiological stressors. In order to foster self-efficacy beliefs of individuals, it is essential to diminish their stress reactions and change their negative emotions and attitudes towards their physical situations (Bandura, 1994). Pajares (2002) also confirm that such stress causing factors as fears and negative opinions may decrease the sense of efficacy, which, in turn, results in failure or a lower level of performance.

In brief, Bandura's theory explains four sources by which one's self-efficacy beliefs are formed: one's own past experiences, observing a model perform a task, evaluative feedback from others, and physiological and emotional factors. Once constructed, self-efficacy has a greatly positive impact on human functioning.

In light of research studies conducted on self-efficacy, it is apparent that it improves performance. For instance, the study conducted by Locke and Latham (1990) revealed that people with high senses of efficacy have the tendency of maintaining challenging tasks, try to do their best, and be determined to seek new solutions when faced with adversities. On the contrary, individuals having low self-efficacy have lower levels of achievement as they are inclined to have uncertainties during their performances and give up more easily under difficult circumstances, which influences the success of the individuals to a great extent (Tuckman & Sexton, 1992). Furthermore, in their study, Taylor et al. (1984) illustrated that perceived efficacy levels make remarkable contribution to the scientific effectiveness of the academic personnel. In parallel with these studies and many others in the literature, it can be concluded that teaching field is no exception in terms of the benefits of higher self-efficacy levels; therefore, teacher sense of efficacy is a concept that needs closer scrutiny.

2.2. Teacher Self-Efficacy

Correspondent with the widespread description of self-efficacy, Tschannen-Moran and Woolfolk-Hoy (2001) define teacher efficacy as "a teacher's judgment of his or

her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated" (p. 783) as well as "to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998, p.233).

Regarding its roots and development, it can be said that teacher efficacy is a concept originated in light of two theories: Rotter's (1966) locus of control and Bandura's (1986) Social Cognitive Theory. Although these two propositions are, to some extent, associated with one another in efficacy, neither possess the essential clarity to explain the true disposition of teacher self-efficacy (Tschannen-Moran et al., 1998).

Correspondingly, the same lack of clarity exists in the measurements of perceived teacher efficacy. Henson (2001) suggests that researchers' interpretations of self-efficacy theories have created confusion in terms of "the theoretical formulation of teacher efficacy and the psychometric attempts to measure the construct" (p.4). To illustrate, review of related literature revealed that for some researchers, there exist two primary dimensions of measurement regarding teacher efficacy, which are Personal Teaching Efficacy and General Teaching Efficacy (Gibson & Dembo, 1984; Woolfolk & Hoy, 1990). In this assertion, General Teaching Efficacy (GTE) is related to teacher self-efficacy beliefs in relation to general thoughts about and attitudes towards education, whereas Personal Teaching Efficacy (PTE) refers to teacher self-efficacy beliefs that they can serve as influential agents on student learning based on their personal efficacy beliefs (Poulou, 2007).

As understood teacher efficacy is a crucially significant construct which has led to complications in terms of its nature and measurement. In an effort to unclutter the aforementioned confusion in teacher efficacy scales, Tschannen-Moran et al. (1998) came up with an integrated teacher efficacy model.

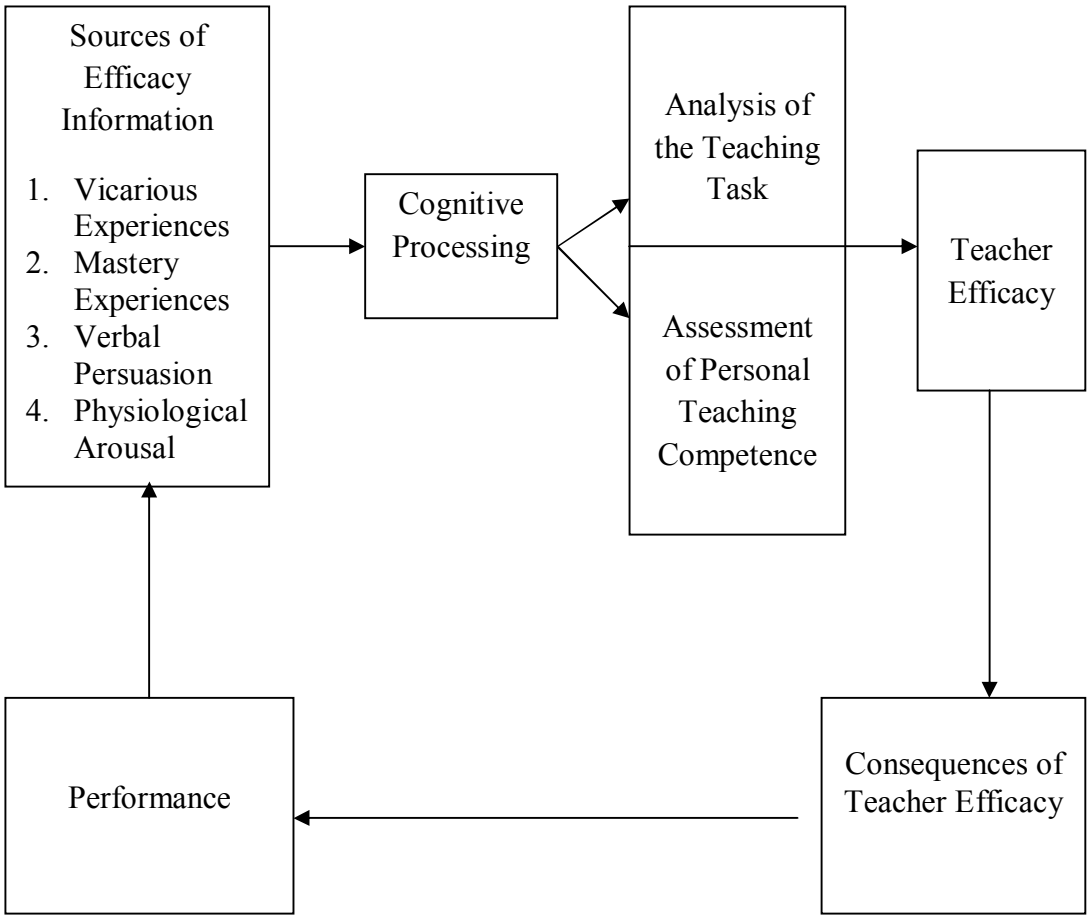


Figure 2.2. Integrated model of teacher efficacy

Note. Taken from Tschannen-Moran, Woolfolk-Hoy & Hoy, 1998, p. 228.

As shown in Figure 2.2, the integrated, which is of a cyclical nature, is As shown in Figure 2.2, the integrated, which is of a cyclical nature, is mainly based on Bandura's (1997) four sources of information, namely enactive mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. Even though these sources of information highly influence teacher self-efficacy beliefs, one's own cognitive processing determines the effects of these sources. In the integrated model mentioned herein, cognitive processing is shaped by analyzing the teaching task and assessing one's own teaching competence, which, in turn, influences teachers' sense of efficacy. As can be understood from the model, teacher self-efficacy is considerably related to teaching context. In other words, teacher self-efficacy is

situation-specific. To illustrate, an English language instructor teacher may have a high level of efficacy in teaching reading, whereas s/he may consider himself/herself less efficacious in teaching writing. The model puts forward that teachers' personal efficacy beliefs based on the four sources of information explained previously influence their performances, which in turn, fosters or prohibits the level of teaching self-efficacy they possess.

In addition to their performances, teacher efficacy is found to have potential impacts on several aspects of teaching and learning environment. Related literature puts forward the effects of teacher self-efficacy beliefs as well as the existence of various factors affecting it. These studies are discussed in the following section.

2.3. Research Studies on Teacher Self-Efficacy

The concept of teacher self-efficacy has attracted great attention in the literature in the current era (Pajares, 1992). Reviewing the literature on teacher efficacy, it can be inferred that the sense of teacher efficacy has been found to impact various constructs such as student performance and ability to deal with difficulties (Ashton & Webb, 1986; Caprara et al., 2006), student motivation (Gibson & Dembo, 1984; Midgley, Feldlaufer, & Eccles, 1989), teachers' instructional practices and use of innovative techniques (Mulholland & Wallace, 2001; Tschannen-Moran & Woolfolk-Hoy, 2002), their more humanistic classroom management styles (Woolfolk & Hoy, 1990), more positive attitudes towards teaching and commitment to their professions (Ashton, 1984; Evans & Tribble, 1986; Gordon, 2001).

In terms of student achievement, a study conducted to find out the influence of teacher self-efficacy on student achievement proved that teacher efficacy accounted for 48 % of the variance in student success (Caprara et al., 2006). Similarly, Schumacher's (2009) study carried out to examine the relationship between collective teacher efficacy and student achievement with third, fourth, and fifth grade students from fifty-six elementary schools in Eastern Iowa yielded the strong correlation between collective teacher efficacy and student accomplishment in reading and math.

Tschannen-Moran and Woolfolk-Hoy (2001) also put forth that the levels of teachers' efficacy depend not only on consequences about students such as success, motivation and students' self-efficacy beliefs, but also their efforts and behaviors in the classroom. Likewise, Bandura (1997) asserts that teachers' self-efficacy affects both the kind of atmosphere they create in the classroom and the numerous instructional practices they adopt.

Studies illustrate that teacher self-efficacy beliefs influence the way teachers manage their classes. A study carried out in Turkish context by Savran-Gencer and Çakıroğlu (2005) yielded results confirming this assertion by finding out that pre-service elementary teachers' self-efficacy beliefs considerably affected their classroom management styles. In other words, efficacious teachers possess the capability to handle even the most unmotivated and struggling students and criticize less when they answer incorrectly, whereas teachers having a low sense of efficacy are inclined to feel desperate while managing students that conduct misbehavior in the class (Gibson & Dembo, 1984). In the same way, another research put forward that teachers having higher levels of perceived self-efficacy have the tendency to treat students in a more humanistic manner and create a less controlled environment in their classrooms than teachers with low self-efficacy levels (Woolfolk & Hoy, 1990).

Tournaki and Podell (2005) investigated the impact of teacher efficacy on such student characteristics as misbehavior and academic difficulties as well as teachers' predictions of student success. The results of the study illustrated that teachers having high self-efficacy levels made more positive predictions about their students' academic achievements no matter how the students behaved in the classroom.
In addition, Ghaith and Yaghi (1997), in their study, pointed out that teacher self-efficacy levels have an impact on their perspectives about practicing innovative instructional methods and techniques in their classes. Likewise, another research study demonstrated that teachers with high self-efficacy levels have the tendency to give room to various methods of instruction and materials (Allinder, 1994). In other words, it was concluded that teachers with higher levels of efficacy tend to more willingly adopt different instructional methods and materials, whereas teachers with low self-efficacy levels are not as open to innovative possibilities as their colleagues.

Literature review in the field propounds that there exist various factors leading to teachers' self-efficacy levels. Among the potential predictors of teacher self-efficacy, studies regarding several factors such as student self-efficacy beliefs, their success, and motivation (Tschannen-Moran et al., 1998), gender, race, and teaching field (Murshidi et al., 2006), contextual factors like teaching resources, colleague and principal support (Çapa, 2005; Gür, 2008; Tschannen-Moran & Woolfolk-Hoy, 2007) have been widely documented.

To begin with, the study carried out by Murshidi et al. (2006) to find out the relationship between novice teachers' efficacy levels and such predictors as gender, race, and undergraduate major yielded that the teachers' race and the type of teacher education program they attended was significant contributors. However, gender did not play an important role on predicting their self-efficacy beliefs. Cheung (2006), on the contrary, put forward the difference gender caused in the self-efficacy levels of teachers by reporting that female teachers considered themselves more efficacious than male ones.

Poulou (2007) investigated the correlation between the sources of teaching efficacy and the self-efficacy levels of pre-service teachers working at primary schools in relation to classroom management, instructional strategies, and student engagement. Findings of the study indicated that teacher characteristics like motivation, personality traits, and university education as well as mastery experiences together with verbal persuasion were the significant sources of teacher self-efficacy. Likewise, in Mulholland and Wallace's study (2001), mastery experience was found to be the most important predictor of the efficacy levels of elementary science teachers.

Tschannen-Moran and Woolfolk-Hoy (2007) examined the impacts of factors related to the teaching context like support from colleagues and resources to be used in teaching on novice and experienced teachers' senses of self-efficacy. They found that contextual factors and support from colleagues were among the important predictors of self-efficacy for experienced teachers. For inexperienced teachers, on the other hand, support from colleagues, satisfaction with performance and resource support significantly predicted the sense of teacher self-efficacy.

In a study conducted by Çapa (2005) with first-year teachers in the state of Ohio to investigate the sources of their senses of efficacy, the predictors like teacher preparation program quality, principal support, colleague support, mentor support, and characteristics of teaching assignments were included. Among these variables, teacher preparation program quality, principal support, and characteristics of teaching assignments were found to be significant predictors of teacher self-efficacy, explaining overall 24 % of the variance.

Gür (2008) also carried out a similar study in her master thesis. Her research aimed to find out the influence of colleague support, parental support, and administrative support as well as teaching field, gender, satisfaction with performance, and years of experience on the self-efficacy beliefs of science, mathematics and classroom teachers. The results of the study demonstrated that performance satisfaction greatly contributed to the sense of teacher efficacy, whereas teaching resources and support from parents had an influence solely on efficacy for the student engagement domain.

Teaching experience has been one of the most highly investigated predictors of teacher self-efficacy. The findings of a study conducted by Soodak and Poodell (1997) to investigate how experiences in teaching affected the efficacy of pre-service and practicing teachers yielded that teachers at elementary level had high efficacy levels during their pre-service teaching; interestingly however, their efficacy levels dramatically decreased in their first year. Nonetheless, as their teaching experience increased within the years, their sense of efficacy gradually increased again. Unlike elementary level teachers, secondary level teachers had a more stable sense of efficacy throughout their professional lives. Likewise, Henson (2001) proposed that self-efficacy levels of teachers increase as a result of experience gained over time.

2.4 Research Studies on Teacher Self-Efficacy in English Language Teaching Field

Although an important amount of research has focused on teacher efficacy in diverse academic subjects, literature review indicates that a limited number of studies have been conducted to investigate the self-efficacy beliefs of teachers in foreign language

education field. The existing studies, however, are correspondent with the studies in the other disciplines in that they focus on the sources or impacts of teacher self-efficacy.

In relation to the effects of teacher self-efficacy, Ghanizadeh and Moafian (2011) examined the relationship between the self-efficacy beliefs of EFL teachers and their achievement in their workplaces. For this purpose, the study was carried out with 89 EFL teachers working at different language institutes in Mashhad, Iran and their students through two scales. One of the scales, Teachers' Sense of Efficacy Scale (TSES) was completed by the teachers while the other one, Characteristics of Successful EFL Teachers was filled in by their students. The findings displayed the strong correlation between teacher self-efficacy and their success. In other words, when a teacher had a higher level of efficacy to achieve a certain teaching task, s/he was more likely to be considered as accomplished from the students' viewpoints. The same study also examined the years of teaching experience the teachers had and their ages in relation to their self-efficacy beliefs. The results of the study yielded that teacher self-efficacy significantly correlated with the EFL teachers' ages and experience levels.

Akbari and Moradkhani (2010) investigated the relationship between teacher self-efficacy and experience in addition to academic degree. The study was conducted with 447 EFL teachers. The results of the study confirmed the predictive nature of teaching experience by illustrating that novice teachers were found to be less efficacious in terms of self-efficacy as well as efficacy for instructional strategies, efficacy for classroom management, and efficacy for student engagement than their experienced colleagues. On the other hand, their academic degree, i.e., their undergraduate majors, did not yield a statistically significant efficacy level.

Similarly, Solar-Şekerci (2011) also included teaching experience and undergraduate major together with English competency and self-reported proficiency in her study which scrutinized whether the aforementioned variables would predict the EFL instructors overall self-efficacy, efficacy for classroom management, efficacy for instructional strategies, and efficacy for student engagement. The study was conducted with 257 EFL instructors working at university preparatory schools by the

help of three scales, which were namely Teacher Sense of Efficacy Scale, Self-Reported English Proficiency Scale, and Language Teaching Methods Scale. Hierarchical regression analysis put forth that university-level EFL instructors had high efficacy levels, especially in classroom management. Correspondent with the previously explained study, years of teaching experience significantly predicted the overall self-efficacy beliefs of the instructors, yet undergraduate major was not significant. Besides, English competency and self-reported proficiency were also significant predictors of teacher efficacy. Finally, the study revealed a positive correlation between the instructors' self-efficacy beliefs and their use of communicative method in teaching instead of the traditional one.

Er (2009) explored the predictors of pre-service teachers' efficacy beliefs concentrating on whether attitude towards teaching, subject matter competency, the relationship with mentor teachers, and being a graduate of Anatolian Teacher High School predicted their efficacy for classroom management, student engagement, and instructional strategies. In order to achieve its aim, the study covered 179 fourth-grade pre-service teachers from Foreign Language Departments of three universities in Ankara. Er (2009) utilized three scales, which were "Teachers' Sense of Efficacy Scale," "Relationship with Your Mentor Scale," and "Scale for Students' Attitudes towards the Teaching Profession Scale." The results of the study indicated that pre-service teachers considered themselves most efficacious in instructional strategies, and least efficacious in classroom management contrary to the findings of Solar-Şekerci's (2011) study with EFL instructors. Moreover, positive attitudes towards teaching, being competent in subject area, and being a graduate of Anatolian Teacher High School were significant predictors of self-efficacy, while mentor teacher-student teacher relationship was significant only in the student engagement domain of teacher efficacy.

2.5 Summary of the Literature Review

The literature review in the present study focused on social cognitive theory, self-efficacy beliefs, and its sources; teacher efficacy and research studies conducted on

the effects and predictors of teacher self-efficacy; and research studies carried out in English language teaching field.

To start with, Bandura's Social Cognitive Theory which proposed that human beings had the capability to manage their own thoughts, feelings, and behaviors was explained by concentrating on the concept of human agency. It was pointed out in the previous sections that human agency was developed through triadic reciprocal determinism, i.e. the interplay among behavioral, personal, and social factors. Then, the foundation of human agency, self-efficacy, was described in detail followed by the explanation of its four sources, which were enactive mastery experience, vicarious learning experiences, verbal persuasion, and physiological arousal.
Secondly, teacher self-efficacy was expounded through a brief description of its origin, development, and measurement. Next, the integrated model proposed by Tschannen-Moran et al. (1998) was illustrated. This model was found to be significant in enlightening the theoretical complication by focusing on the cyclical nature of teacher self-efficacy.

The research studies conducted on teacher self-efficacy was roughly divided into two sections in the review of the literature herein: the impacts of teacher self-efficacy and the predictors of it. To begin with, the literature review revealed that self-efficacy had a great influence on student achievement (Caprara et al., 2006; Schumacher, 2009), student motivation (Gibson & Dembo, 1984; Midgley, Feldlaufer, & Eccles, 1989), teachers' attitudes and classroom environment (Tschannen-Moran & Woolfolk-Hoy, 2001), their classroom management styles (Savran-Gencer & Çakıroglu, 2005; Woolfolk & Hoy, 1990) their use of innovative instructional methods and techniques (Ghaith & Yaghi, 1997; Mulholland & Wallace, 2001), and their commitment to the teaching profession (Evans & Tribble, 1986; Gordon, 2001).

In addition the these studies, other research studies put forward that among the predictors of teacher self-efficacy were gender (Cheung, 2006), teachers' undergraduate majors and the quality of the teaching program they attended (Çapa, 2005; Murshidi et al., 2006), their experience in teaching and mastery experience (Mulholland & Wallace, 2001; Poulou, 2007), contextual factors like teaching

resources, and principal support (Çapa, 2005; Gür, 2008; Tschannen-Moran & Woolfolk-Hoy, 2007).

Lastly, relevant literature on the English language teaching context was explained in the present literature review, which illustrated that the studies in ELT context, although limited in number, were consistent with the ones in other disciplines. The studies in the English language teaching context demonstrated that teacher self-efficacy was predicted by age and teaching experience (Akbari & Moradkhani, 2010; Ghanizadeh & Moafian, 2011), English competency and self-reported proficiency (Er, 2009; Solar-Şekerci, 2010), and having positive attitudes towards teaching (Er, 2009).

In light of the findings of the research studies, it was concluded that there was a gap in the literature with regard to the predictors of EFL instructors' self-efficacy beliefs in terms of Bandura's (1997) sources of efficacy. Therefore, the present study, which aimed to explore whether verbal persuasion and vicarious learning experience through administration support and colleague support as well as mastery experience would predict EFL instructors' teacher self-efficacy, would contribute to the related literature. Furthermore, by providing information on teacher self-efficacy in relation to teaching experience, undergraduate major, and university type, it would provide information for future research.

CHAPTER III

METHOD

Chapter three presents seven subsections about the methodological structure of the study. In the first part, the overall design of the study is introduced. In the second part, research questions are stated. In the third part, the participants of the study are depicted. Next, the data collection instruments are explained. The data collection procedure is described in the fifth part. The data analysis procedure is provided in the following part. Lastly, the chapter ends with the discussion about the limitations of the study.

3.1 Overall Design of the Study

The main purpose of the present study was to find out to the extent to which the university type, undergraduate major, years of experience, mastery experience, administration support, and colleague support would predict the EFL instructors' self-efficacy beliefs for student engagement, classroom management, and instructional strategies. To reach this aim, correlational research design was adopted. As Fraenkel, Wallen, and Hyun (2011) states, the aim of a correlational research is to seek the relationship between two or more naturally existing variables, i.e. variables that require no manipulation. Moreover, this kind of research is conducted either to explain important human behavior or to predict likely outcomes (Fraenkel et al., 2011). That is why, the most appropriate design for the current study was correlation as the aim was to inquire the relationship between the self-efficacy beliefs of the English instructors and the variables mentioned above. With this purpose, the correlation analyses were carried out upon collecting the data by a questionnaire administered to English language instructors working at the preparatory schools of the universities in Ankara.

The criterion variables were three dimensions of self-efficacy beliefs of the English language instructors: efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies. There existed six predictors, which were (1) university type (public or private universities) they work for; (2) undergraduate major (being a Faculty of Education graduate or not); (3) mastery experiences; (4) years of teaching experience; (5) colleague support; and (6) administration support. Other than university type and undergraduate major, all variables were on a continuous scale of measurement.

3.2 Research Questions

The following research questions were addressed in this study:

1. To what extent do university type, undergraduate major, years of teaching experience, mastery experience, colleague support, and administration support predict the EFL instructors' teacher self-efficacy for classroom management?

2. To what extent do university type, undergraduate major, years of teaching experience, mastery experience, colleague support, and administration support predict the EFL instructors' teacher self-efficacy for student engagement?

3. To what extent do university type, undergraduate major, years of teaching experience, mastery experience, colleague support, and administration support predict the EFL instructors' teacher self-efficacy for instructional strategies?

3.3 Participants

The target population of this study was all EFL instructors working at the preparatory schools in both public and private universities in Ankara in 2012-2013 academic year. Review of the websites of the universities as well as personal communication with the administration of some of these universities indicated that the approximate total number of the instructors at the preparatory schools in Ankara is 890; nearly 83 at Ankara University, 80 at Atılım University, 100 at Başkent University, 180 at Bilkent University, 35 at Çankaya University, 86 at Gazi University, 90 at Hacettepe University, 130 at Middle East Technical University, 58 at TOBB University of Economics and Technology, 18 at Ufuk University, and 30 at Yıldırım Beyazıt University. In other words, the review demonstrated that 471 of these instructors (53%) work in private universities, whereas 419 of them (47%) work in public universities.

Though it was the researcher's aim to reach all the instructors in these universities, the accessible population of the study was approximately 700 instructors working at nine of the universities, five private universities, Atılım University, Bilkent University, Çankaya University, TOBB University of Economics and Technology, and Ufuk University as well as four public universities, Gazi University, Hacettepe University, Middle East Technical University, and Yıldırım Beyazıt University, owing to some official problems regarding the permission of certain universities and time limitation issues. Among these instructors, a total number of 285 instructors voluntarily participated in this study, with a 40.7% return rate. Table 3.1 displays the participants' demographic characteristics in terms of gender, undergraduate major, the degree they have completed, and university type.

Table 3.1

Frequency Table of the Participants for Gender, Undergraduate Major, Degree Completed and University Type

Characteristics	*N*	*%*
Gender		
Female	248	87
Male	37	13
Undergraduate Major		
English Language Teaching	167	58.6
English Language and Literature	68	23.9
American Culture and Literature	21	7.4
English Linguistics	19	6.7
Translation and Interpretation	8	2.8
Other	2	.7
Degree Completed		
Bachelor	162	56.8
Master of Arts / Master of Science	112	39.3
Philosophy of Doctorate	8	2.8
Other	3	1.1
University Type		
Public University	173	60.7
Private University	112	39.3

Note: n = 285

As can be seen from the table, the number of female instructors highly outnumbers the number of male ones, with 87% (*n*= 248) of the participants in this study being female and 13% (*n*= 37) of them being male, which was a predictable result since this is a common situation with English language teachers in Turkey. In terms of the undergraduate majors the participants graduated from, the data revealed that 58.6% (*n*= 167) of them were the graduates of the Department of English Language Teaching, whereas the 41.4% (*n*= 118) of them graduated from an undergraduate major other than English Language Teaching. That is to say, 23.9% (*n*= 68) of the participants graduated from the Department of English Language and Literature, 7.4% (*n*= 21) of them graduated from the Department of American Culture and Literature, 6.7% (*n*= 19) of them graduated from the Department of English Linguistics, 2.8% (*n*= 8) of them graduated from the Department of Translation and Interpretation and 0.7% (*n*= 2) of them graduated from other departments, namely Architecture and Business Administration.

When the graduate degrees of the participants are examined in detail, it can be seen that 39.3% (*n*= 112) of them hold a master degree, while 2.8% (*n*= 8) of them have a doctorate degree. However, of the participants of this study, 56.8% (*n*= 162) of them have not continued with their graduate studies after completing their undergraduate studies. Moreover, 1.1% (*n*= 3) of them are the graduates of a teaching-related certificate program like CELTA, DELTA or TESOL.

In addition, the number of the instructors working at a public university was reported to be noticeably higher with 60.7% (*n*= 173) of the participants employed in a public university than that of the ones working at a private university with 39.3% (*n*= 112) of them employed in a private university. As can be seen, in the present study, the instructors working at public universities outnumber the ones working at private universities. However, as mentioned earlier, the approximate estimate of the number of the instructors working at the universities in Ankara revealed a small difference with 47% of them working at public universities, yet 53% of them working at private universities.

Apart from these, the participants' age, their years of teaching experience, the experience they have in their current institutions, and their weekly teaching hours were also inquired. The participants' ages range from 22 to 62 (*M* = 31.35; *SD* = 7.91). In parallel to that, their teaching experience ranges from 1 year to 38 years (*M* = 8.61; *SD* = 7.20). Concurrent with these results, their experience in their current workplaces ranges from 1 year to 38 years (*M* = 5.62; *SD* = 6.52), as well. The class hours that the instructors teach per week differ from one another according to the university they work for, their additional duties at school and / or personal reasons. The results of the research demonstrate that their weekly class hours range from 3 to 33 (*M* = 20.60; *SD* = 5.53).

3. 4 Data Collection Instrument

This section of the study gives information on the data collection instrument by presenting a detailed description of each scale and explaining the translation and adaptation process of the instrument.

3.4.1 Description of the instrument.

The questionnaire used to gather data for the present study embodied five main sections. These main parts of the questionnaire were: Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk-Hoy, 2001), mastery experience, colleague support, administration support and the demographic information of the instructors. The demographic information section of the instrument was included in the instrument to collect information on general characteristics of the participants such as their gender, age, undergraduate major, the highest degree of education completed, years of experience in teaching, years of teaching experience in their current institutions, university type, and total hours of teaching per week.

3.4.1.1 Teachers' sense of efficacy scale (TSES).

Teachers' Sense of Efficacy Scale (TSES) was developed by Tschannen-Moran and Woolfolk-Hoy (2001) to investigate the self-efficacy levels of teachers. The scale was based on the integrated model of teacher efficacy introduced by Tschannen-Moran et al. (1998). Tschannen-Moran and Woolfolk-Hoy proposed two different forms of this scale: the long form with 24 items and the short form with 12 items. For items, there is a 9-point scale ranging from "Nothing (1)" to "A Great Deal (9). The long form was preferred in this study due to its comprehensiveness. Thus, this part of the data collection instrument consisted of 24 items with a 9-point rating scale.

The factor analyses conducted by Tschannen-Moran and Woolfolk-Hoy yielded three moderately correlated domains all of which are made up of 8 items: Efficacy for Student Engagement, Efficacy for Instructional Strategies, and Efficacy for

Classroom Management. As reported by Tschannen-Moran and Woolfolk-Hoy (2001), the reliability coefficient values of this instrument are .90 for classroom management, .87 for student engagement, .91 for instructional strategies, and .94 for the whole scale. Sample items from this section of the scale are as below:

- How much can you do to control disruptive behavior in the classroom? (Item 3 from the classroom management domain)

- How much can you do to motivate students who show low interest in school work? (Item 4 from the student engagement domain)

- To what extent can you provide an alternative explanation or example when students are confused? (Item 20, from the instructional strategies domain)

Since the present study was conducted with Turkish instructors, the adapted version of the scale, Turkish Teachers' Sense of Efficacy Scale (TTSES) by Çapa, Çakıroğlu, and Sarıkaya (2005) was utilized. The confirmatory factor analysis carried out by Çapa et al. (2005) produced parallel results with the original scale having three domains. The overall reliability of the scale was reported as .93, with high coefficient alpha values for each domain: .84 efficacy for classroom management, .82 efficacy for student engagement and .86 efficacy for instructional strategies.

3.4.1.2 Mastery experience scale.

For this subsection of the data collection instrument, the related part of the Sources of Self-Efficacy Inventory (SOSI) developed by Kieffer and Henson (2000) was used. The original SOSI was constructed according to Bandura's (1997) four efficacy sources: Mastery Experience, Vicarious Experience, Social Persuasion, and Emotional Arousal (Henson, 1999). The original scale is made up of 35 items, and the mastery experience section of the scale includes 9 items. For each item, a 7-point rating scale ranging from "Definitely Not True (1)" to "Definitely True (7)" is used. The coefficient alpha value of this section of the scale was reported as .70 (Kieffer & Henson, 2000). The scale was adapted to Turkish by Çapa-Aydın, Uzuntiryaki-

Kondakçı, Temli, and Tarkın (in press). In the adapted version, Mastery Experience section consists of 8 items. Sample items from this part of the scale are given as follows:

- Teaching well gives me a positive sense of personal success (Item 7).
- There have been opportunities for me to teach well (Item 1).

3.4.1.3 Colleague support scale.

This section of the scale was adapted from the related part of the First-Year Teacher Survey developed by Çapa (2005). The original "colleague support" subsection of this survey was developed to investigate the relationship between the first-year teachers and their co-workers through 13 Likert-type items on a 5-point scale ranging from "Definitely Disagree (1)" to "Definitely Agree (5)". The alpha reliability of this section was reported to be .94 in the original study (Çapa, 2005). Sample items from this section are as follows:

- My colleagues help me expand my repertoire of teaching strategies (Item 3).
- My colleagues help me in planning and accomplishing effective teaching tasks (Item 1).

For the present study, this section of the survey was translated into Turkish and adapted to the EFL context. The adaptation procedure is explained in detail in the Adaptation section.

3.4.1.4 Administration support scale.

Similar to the previous section, the related part of the First-Year Teacher Survey developed by Çapa (2005) was utilized in this part of the scale. The original

"principal support" section of this First-Year Teacher Survey was constructed to examine the relationship between the first-year teachers and their principals through 15 Likert-type items on a 5-point scale ranging from "Definitely Disagree (1)" to "Definitely Agree (5)". The alpha reliability of this section was indicated to be .95 in the original study (Çapa, 2005). Sample items from this section are disclosed below:

- My principal boosts my morale during times of professional stress (Item 3).
- My principal creates an environment that is supportive and helpful (Item 6).

In the current study, this section of the survey was also translated into Turkish and adapted to the EFL context, which is detailedly presented in the Adaptation section.

3.4.2 Adaptation of colleague support and administration support.

Before the data collection process, the subsections of the data collection instruments, except for the Teachers' Sense of Efficacy Scale and Mastery Experience part, were translated into Turkish and adapted to the EFL context with the purpose of ensuring the understanding of the participants and the compatibility of the scale to the conditions of the English instructors working at universities. The adaptation procedure of these two subsections was as follows: First of all, three English instructors working at a university were asked to translate the items into Turkish. These translated items were examined by the researcher, and it was concluded that they were quite similar to one another in grammatical structure and wording. The ones that were the most explicit and easiest-to-understand were chosen with the help of the supervisor of the study. At the end of the adaptation procedure, there existed 14 items for colleague support and 13 items for administration support. So as to check the validity of the translation, the Turkish items were translated back into English by three different English instructors, and they showed satisfying similarities to the original items.

3.4.3 Pilot study.

The data collection instrument was pilot tested in order to ensure the validity and reliability of the instrument. The pilot study was performed with 80 English language instructors working at the preparatory school at TOBB ETU (*n*=49), Gazi University (*n*=21) and METU (*n*=10). The exploratory factor analysis and the reliability analysis were conducted using SPSS 20.

First of all, the reliability of *the Turkish version of Teachers' Sense of Efficacy Scale* was generated using the pilot data. The results yielded satisfactory Cronbach's alpha values for all sub-scales: .90 for efficacy for classroom management, .75 for efficacy for student engagement and, .84 for efficacy for instructional strategies.

Secondly, the reliability of the *Mastery Experience Scale* was established using Cronbach's alpha coefficient. The findings indicated that the reliability coefficient was .82. However, when the results were examined thoroughly, it was concluded that one of the items had considerably low item-total correlation value with .11 because of the negative wording of the statement. In other words, as Field (2010) suggests, it was a threat to the reliability of the scale because the item's correlation with the whole instrument was below .30. Furthermore, it was seen that the Cronbach's alpha value of the scale would increase to .90 if the item were deleted. Therefore, the wording of the item was decided to be altered. Moreover, the personal communication with the researchers conducting the adaptation study confirmed a change in the same item in the adapted version, as well. Hence, the fourth item "I have never made mistakes when trying to teach students." (Öğrencilere bir şeyler öğretmeye çalışırken hiç hata yapmadım.) was altered into a positive statement as "I have had success when trying to teach students." (Öğrencilere bir şeyler öğretmeye çalışırken başarılı oldum.)

As for the *colleague support* section of the instrument, exploratory factor analysis was carried out using maximum likelihood analysis with direct oblimin rotation. The results of the analysis suggested a four-factor structure with Eigenvalues greater than one, which explained 70.50 % of the total variance. However, these factors were not appropriate for interpretation as the items in certain factors did not have common

characteristics. Therefore, the factor analysis was limited to one factor in order to abide by the original one-factor structure of the scale proposed by the scale developers. The factor loadings of this one-factor structure are illustrated on Table 3.2.

Table 3.2

Factor Loadings of Colleague Support Scale

Item	Factor Loading	Cronbach's Alpha if Item Deleted
Item 9	.87	.85
Item 10	.78	.86
Item 8	.73	.86
Item 11	.71	.86
Item 14	.70	.86
Item 7	.65	.86
Item 2	.63	.86
Item 3	.58	.87
Item 4	.58	.86
Item 13	.47	.87
Item 5	.44	.87
Item 12	.34	.87
Item 1	.30	.87
Item 6	.16	.88

Note. n = 80, *Cronbach's Alpha for Entire Measure* = .87

In terms of the reliability of the scale, the results of the analysis revealed a high reliability value with a Cronbach's alpha efficient of .87. When the factor loadings were analyzed, it was figured out that Item 1 and Item 6 had low factor loadings. That is why, it was decided to make alterations in these items for the main study. The first item "My colleagues assure me that my experiences as a (novice) teacher are normal." (Meslektaşlarım okutman olarak deneyimlerimin normal olduğu konusunda beni temin ederler.) was eliminated from the scale as it was deemed as applicable for studies about novice teachers. Therefore, it did not fit into the present study due to the presence of experienced teachers in the EFL context. Additionally, the sixth item "My colleagues observe my classes and provide constructive feedback." (Meslektaşlarım sınıflarımı gözlemlerler ve yapıcı dönüt verirler.) was reworded as

"My colleagues provide constructive feedback by observing my classes." (Meslektaşlarım sınıflarımı gözlemleyip yapıcı dönüt verirler.) because it was concluded that it measured two separate behaviors of colleagues in the previous version of the statement, which led to ambiguity and misinterpretation of the participants.

Apart from these alterations, some minor changes were also made as a result of the oral feedback received during the data collection process for the pilot study. To begin with, in the third item "My colleagues provide advice to help reduce the inevitable stress." (Meslektaşlarım kaçınılmaz mesleki stresi azaltmaya yardımcı önerilerde bulunurlar.), the phrase "the inevitable stress" was changed as "the stress I experience" in the final version of the item "My colleagues provide advice to help reduce the stress I experience." (Meslektaşlarım yaşadığım stresi azaltmaya yardımcı önerilerde bulunurlar.) so that it sounded more natural. Besides, the tenth item "My colleagues are eager to help me locate instructional materials." (Meslektaşlarım öğretimimle ilgili materyalleri bulmama yardımcı olma konusunda isteklidirler.) was simplified as "My colleagues help me locate instructional materials."(Meslektaşlarım öğretimimle ilgili materyalleri bulmama yardımcı olurlar.) Lastly, in the adaptation process, the thirteenth item "My colleagues permit me to discuss their instructional strategies." (Meslektaşlarım kullandıkları öğretim stratejilerini tartışmama izin verirler.) was translated word-for-word. Since the Turkish equivalent of the word "discuss" had negative connotation, it resulted in misunderstanding and confusion during the pilot study. As a result, the item was altered as "My colleagues permit me to exchange ideas about their instructional strategies." (Meslektaşlarım kullandıkları öğretim stratejileri hakkında fikir alışverişinde bulunmama izin verirler.)

Similar to the previous section of the instrument, exploratory factor analysis was implemented in relation to the administration *support* part of the scale. Like the former part, the factor analysis was performed using maximum likelihood analysis with direct oblimin rotation. The results of the analysis put forward one factor with eigenvalues greater than one explaining 66.58 % of the total variance. The results were consistent with the factorial structure of the original scale. Table 3.3 displays the factor loadings of this one-factor structure.

Table 3.3

Factor Loadings of Administration Support Scale

Item	Factor Loading	Cronbach's Alpha if Item Deleted
Item 5	.88	.96
Item 6	.86	.95
Item 3	.86	.95
Item 4	.83	.95
Item 9	.82	.95
Item 7	.82	.95
Item 2	.81	.95
Item 11	.78	.96
Item 8	.77	.96
Item 1	.76	.95
Item 13	.75	.96
Item 12	.72	.96
Item 10	.71	.96

Note. *N* = 80, *Cronbach's Alpha for Entire Measure* = .96

As for the reliability of the scale, the results of the analysis yielded a Cronbach's alpha coefficient of .96. As all the values were high, no changes were required in this part of the scale based on the pilot study.

3.5 Data Collection Procedure

Before collecting the data by implementing the instrument, the permission was taken from METU Applied Ethics Research Center (AERC) to ensure the harmlessness of the study to the participants and its conformity to the principles of the ethical committee. Moreover, the universities at which the study would be implemented were officially informed about the study and the permission of AERC by METU Graduate School of Social Sciences. Once the permission was granted and reported to the universities, the administrators of English Preparatory Schools were contacted by the researcher to get the necessary permission personally or via e-mail.

The data collection took place in two different ways: For more than half of the universities, namely Gazi University, Hacettepe University, Middle East Technical University, Yıldırım Beyazıt University, and TOBB University of Economics and

Technology, the researcher visited the schools and collected the data in person. In this case, the scale was directly administered to the participants, and they were given 15-20 minutes to complete the scale. However, nearly half of the universities, which were Atılım University, Bilkent University, Çankaya University, and Ufuk University, had their own data collection system. Therefore, the questionnaires were delivered to these universities by the researcher and taken back in a two or three week time frame.

In order to assure the confidentiality of the study, the questionnaires were collected anonymously. All the subjects of the study were informed about the purpose and the content of the study through a consent form. Furthermore, they were guaranteed that their responses would be kept confidential and used only for this research study.

3.6 Data Analysis

Before conducting statistical analyses for answering research questions, the psychometric characteristics, namely validity and reliability, were examined through use of Confirmatory Factor Analysis, Exploratory Factor Analysis, and Cronbach's alpha coefficients. Confirmatory Factor Analysis was conducted to test the three-factor structure of Teachers' Sense of Efficacy Scale. Analysis Moments of Structures (AMOS) 4.0 was used for this purpose. Exploratory Factor Analyses and Cronbach's alpha were generated using SPSS 20.

In order to respond to the research questions of this study, three separate multiple regression analyses were carried out. Fraenkel et al. (2011) propose that multiple regression analysis is conducted to assess a correlation between a criterion/dependent variable and two or more predictor/independent variables. Since the present study used a correlational research design with six predictor variables, multiple regression analysis was considered as the best one to perform.

Firstly, the sample size suitable for multiple regression was determined. The appropriate sample size in multiple regression is reported to be $N > 50 + 8m$, m being the numbers of predictor variables (Tabachnick & Fidell, 2012). As a result,

data gathered from 285 samples were regarded as sufficient for six predictor variables.

Before conducting the analysis, the assumptions of multiple regression analysis, which are normality, homoscedasticity, linearity, independence of errors and multicollinearity, were checked. After that, necessary descriptive and inferential statistics were performed using SPSS 20.

Of the three methods of multiple regression analysis, hierarchical regression was preferred since this method enables the researcher to determine in which order to enter the predictor variables into the model (Field, 2010). This research study employed a three-step method to enter the six predictors. In the first step, university type (public or private university) was entered. The undergraduate major (being a Faculty of Education graduate or not), years of teaching experience and mastery experience were entered in the second step. Finally, colleague and administration support were entered in the third step. Three hierarchical analyses were conducted with the same predictors in the same order. The outcome variables were three dimensions of Turkish Teachers' Sense of Efficacy Scale, namely efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies.

3.7 Limitations of the Study

This research study had certain limitations. To begin with, although it aimed at examining the predictors of self-efficacy beliefs of EFL instructors, it is apparent that the results were only limited to the participants in this study, i.e. the EFL instructors working at nine universities in Ankara. Therefore, further research should be conducted to obtain more generalizable results.

Besides that, this study was based on a self-reported questionnaire; therefore, the validity and reliability of the study were determined by the sincerity of the responses given by the participants.

Furthermore, as mentioned earlier, the researcher was not able to collect some of the data by herself due to the data collection policies of certain universities. That is why, this situation might have caused data collector bias as the same researcher did not collect all the data, but instead, the administration of these universities had the participants complete the data collection instrument.

Lastly, the data collection procedure was a limitation since taking permission from the administrations of each university one by one and collecting the data from instructors took too much time due to the unavailability of a person in charge of such research in some universities, the administrations' and instructors' busy schedules, and/or the instructors' additional teaching-related tasks and duties. Therefore, the number of the data collected was rather limited compared to the overall number of instructors working at the universities in Ankara.

CHAPTER IV

RESULTS

This chapter presents the findings of the research study in relation to the predictors of the self-efficacy levels of EFL instructors working at university preparatory schools. The chapter begins with describing the validity and reliability analyses of the data collection instrument. Secondly, the descriptive statistics are explained. Lastly, the findings of the hierarchical multiple regression analyses are presented.

4.1 Validity and Reliability Analyses

Validity and reliability analyses of each subscale in the data collection instrument utilized in this study were conducted based on 285 voluntary responses from the participants.

4.1.1 Validity and reliability analyses of the Turkish teachers' sense of efficacy scale (TTSES).

Similar to the original scale generated by Tschannen-Moran and Woolfolk-Hoy (2001), Çapa et al. (2005) also proposed a three-factor structure for the Turkish version of the Teachers' Sense of Efficacy Scale (TTSES), which were namely efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies. In order to check this three-factor structure of the scale, confirmatory factor analysis (CFA) was performed through AMOS 4.0 (Analysis Moments of Structures) software using the data gathered from 285 participants. To evaluate the goodness-of-fit, chi-square value, comparative fit index (CFI), non-normed fit index (NNFI), and root mean square error of approximation (RMSEA) were examined. The results of the analysis

revealed significant values with a chi-square value of 698.02, CFI value of .98, and NNFI value of .98. As Hu and Bentler (1999) asserted both CFI and NNFI values must be higher than .95 to indicate a good fit. Therefore, these values provided evidence for good fit to the model. Apart from these values, RMSEA was also considered. It was reported in previous studies that a RMSEA value lower than .05 suggests a good fit while a value between .05 and .08 indicate a moderate fit and a value greater than .10 shows a bad fit to the model (Browne & Cudeck, 1993). Hence, a RMSEA of .08 demonstrated a mediocre fit to the three-factor model.

The standardized regression weights of the analysis illustrated that all of the parameters but one were considered as statistically significant. The only item which had a value below .40 with a value of .38 was item 22 “How much can you assist families in helping their children do well in school?” However, this was an expected result as this study was conducted with university-level instructors of English; and therefore, the great majority of the instructors are known to never interact with the families of their students unlike other teachers in different-level schools. Other than that item 22, the standardized factor loadings ranged from .49 to .86. In addition, the factor correlations ranged from .70 to .89. The findings of the confirmatory factor analysis confirmed the factorial validation of the scale. Figure 4.1 demonstrates the standardized parameter estimates of the analysis.

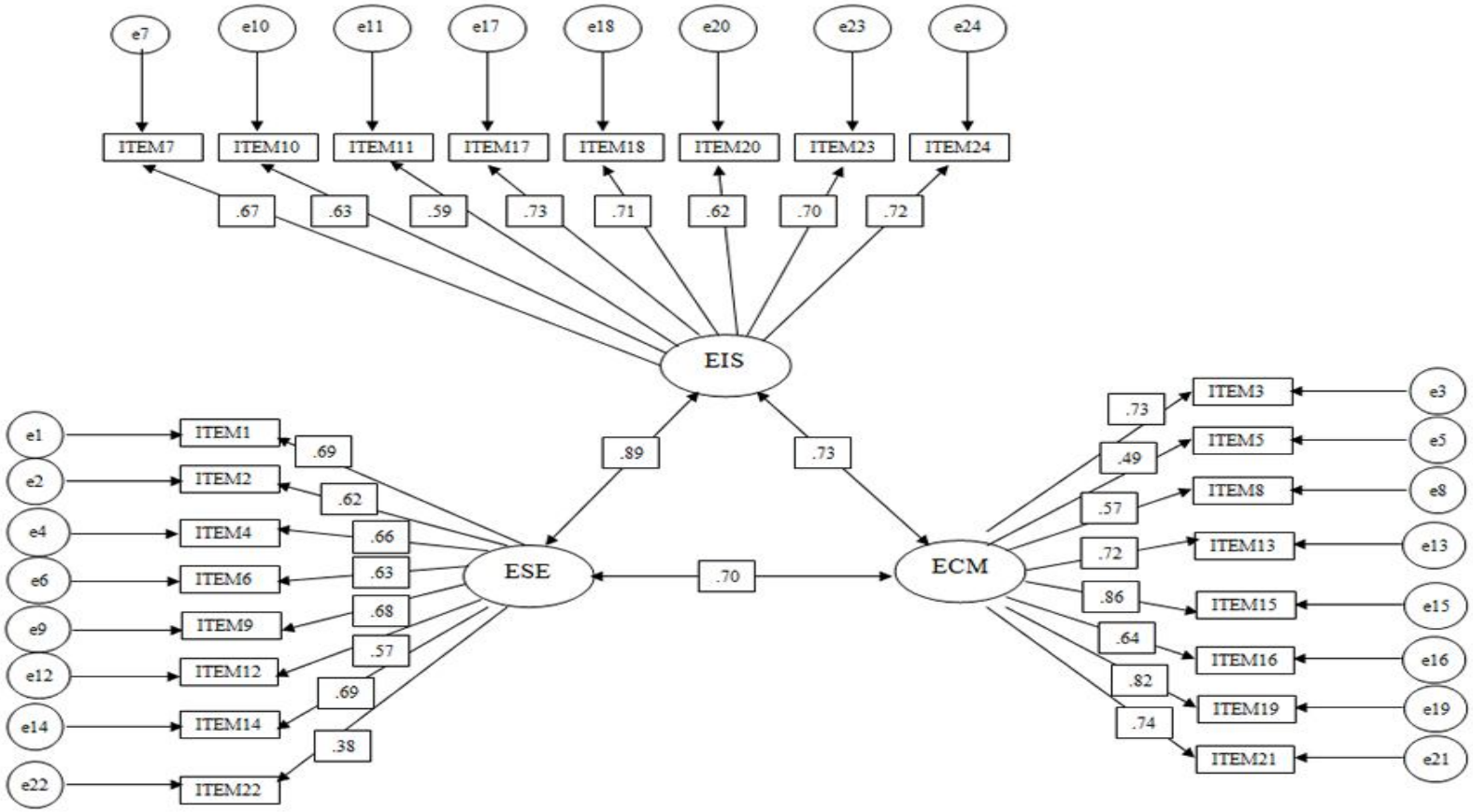


Figure 4.1. Confirmatory Factor Analysis of Turkish Teachers' Sense of Efficacy Scale

Note. item1-24: Teachers' Sense of Efficacy items; ECM: Efficacy for Classroom Management; EIS: Efficacy for Instructional Strategies; ESE: Efficacy for Student Engagement. All coefficients are significant at $p < .05$. $X^2 = 698.02$; $df = 249$. Root mean square error of approximation (RMSEA) = 0.08 (90% CI = 0.07- 0.09); the comparative fit index (CFI) = 0.98; the non-normed fit index (NNFI) = 0.98.

In addition, the reliability analysis was conducted by calculating the Cronbach's alpha values so as to check the internal consistency of the scale. The Cronbach's alpha coefficients were computed as .89, .80, and .87 for efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies, respectively.

4.1.2 Validity and reliability analyses of mastery experience scale.

In order to provide validity evidence for Mastery Experience Scale, explatory factor analysis was carried out with 285 participants using maximum likelihood analysis with direct oblimin rotation. The results of the analysis displayed one factor with eigenvalues (4.28) greater than one, which accounted for 53.45% of the total variance. The one-factor structure was parallel with the factorial structure of the original scale and the results of the pilot study. The factor loadings of the one-factor structure are given in Table 4.1. As for the internal consistency of the Mastery Experience scale, the Cronbach's alpha coefficient of the scale was computed as .86.

Table 4.1

Factor Loadings of Mastery Experience Scale

Item	Factor Loading	Cronbach's Alpha if Item Deleted
Item 3	.81	.83
Item 5	.79	.83
Item 4	.77	.83
Item 6	.75	.83
Item 2	.71	.83
Item 1	.68	.84
Item 8	.45	.86
Item 7	.44	.87

Note. n = 285, *Cronbach's Alpha for Entire Measure* = .86

4.1.3 Validity and reliability analyses of colleague support scale.

Explatory factor analysis was conducted based on the responses of 285 participants by using maximum likelihood analysis with direct oblimin rotation for the validity of the Colleague Support Scale. The findings suggested a one-factor structure with eigenvalues (7.28) greater than one explaining 55.68 % of the total variance. These findings were concurrent with those of the original scale and the pilot study. Table 4.2 illustrates the factor loadings of the one-factor structure with Cronbach's alpha values if item deleted. In order to assess the reliability of the Colleague Support Scale, Cronbach's alpha coefficient of the scale was calculated as .92.

Table 4.2

Factor Loadings of Colleague Support Scale

Item	Factor Loading	Cronbach's Alpha if Item Deleted
Item 7	.80	.92
Item 8	.80	.92
Item 10	.78	.92
Item 3	.78	.92
Item 9	.77	.92
Item 2	.77	.92
Item 6	.75	.92
Item 12	.73	.92
Item 1	.73	.92
Item 4	.73	.92
Item 13	.72	.92
Item 5	.47	.93
Item 11	.46	.93

Note. n = 285, *Cronbach's Alpha for Entire Measure* = .92

4.1.4 Validity and reliability analyses of the administration support scale.

Explatory factor analysis was carried out by using maximum likelihood analysis with direct oblimin rotation for score validation of the Administration Support Scale. In parallel with the original scale as well as the findings of the pilot study, the results of the analysis put forth one factor with eigenvalues (8.57) greater than one, explaining 65.96% of the total variance. Table 4.3 displays the factor loadings of this one-factor structure with Cronbach's alpha values if item deleted. With regard to the internal consistency of the Administration Support Scale, the reliability analysis provided a satisfactory Cronbach's alpha value of .96.

Table 4.3

Factor Loadings of Administration Support Scale

Item	Factor Loading	Cronbach's Alpha if Item Deleted
Item 6	.91	.95
Item 4	.87	.95
Item 5	.86	.95
Item 3	.84	.95
Item 2	.79	.95
Item 9	.79	.95
Item 1	.78	.95
Item 13	.78	.95
Item 8	.76	.95
Item 7	.76	.95
Item 11	.75	.95
Item 12	.75	.95
Item 10	.65	.96

Note. $n = 285$, *Cronbach's Alpha for Entire Measure* = .96

4.2 Results of Descriptive Statistics

In this part of the chapter, the descriptive statistics of the participants are described in relation to the outcome variable – self-efficacy levels of EFL instructors for classroom management, student engagement, and instructional strategies – and the continuous predictor variables – years of teaching experience, mastery experience, colleague support, and administration support. Table 4.4 presents means and standard deviations.

Table 4.4

Descriptive Statistics of the Research Variables

Variable	*M*	*SD*	*Min.*	*Max.*
Efficacy for Classroom Management	7.30	.88	3.38	9
Efficacy for Student Engagement	6.62	.91	3.25	8.75
Efficacy for Instructional Strategies	7.23	.86	4.38	9
Years of Teaching Experience	8.61	7.21	1	38
Mastery Experience	6.19	.67	1	7
Colleague Support	3.92	.66	1.70	5
Administration Support	3.80	.81	1.23	5

Note. $n = 285$

When the mean scores are examined, it can be observed that the participants have a slightly higher level of efficacy for classroom management ($M = 7.30$, $SD = .88$) than for instructional strategies ($M = 7.23$, $SD = .86$), and they consider themselves as the least efficacious in the area of student engagement ($M = 6.62$, $SD = .91$). Moreover, the mean score of the teaching experience illustrated that the participants had approximately 8 years of experience on average ($M = 8.61$, $SD = 7.21$). As for mastery experience, the mean score was computed as 6.19 ($SD = .67$) on a 7-point rating scale, which illustrates that the participants think rather highly of themselves in terms of learning from their personal experiences as teachers. Regarding colleague and administration support, the participants noted rather high scores of support from both; however, the mean scores

demonstrated that the support of their colleagues (M = 3.92, SD = .66) was somewhat more than that of their administrators (M = 3.80, SD = .81).

4.3 Results of Multiple Regression Analyses

In the present study, three hierarchical multiple regression analyses were conducted to investigate the extent to which university type, years of teaching experience, mastery experience, undergraduate major, colleague support, and administration support would predict the self-efficacy beliefs of English instructors for classroom management, instructional strategies, and student engagement. In order to examine each aspect of the dependent variable, a separate analysis was performed, and for each analysis, the predictor variables were entered in three blocks. The order of these steps was as follows: (1) university type, (2) undergraduate major, years of teaching experience and mastery experience, and (3) colleague support and administration support.

4.3.1 Assumptions of multiple regression analysis.

Prior to conducting the analyses, the assumptions of the multiple regression analysis which are stated as normality, independence of errors, linearity, multicollinearity and homoscedasticity (Field, 2010) were checked. To begin with, histograms and normal quantile-quantile plots (q-q plots) were examined in order to check the normality of the residuals. According to this assumption, the residuals in the model must be normally distributed. In other words, the skewness and kurtosis of residuals must be zero or very close to zero (Tabachnick & Fidell, 2012). When the histograms of efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies were examined (Appendix B), it was observed that the normality assumption was not violated as all the values were very close to zero. Moreover, the points on the q-q plots of all three dimensions of efficacy were lined from lower left to upper right in a diagonal way, which also proved the satisfaction of the assumption. Additionally, linearity, the assumption requiring the predictors to form a straight-line relation not to

violate the generalizability of the results, was checked. The examination of the scatter plots put forward that this assumption was satisfied, as well.

As for the independence of errors assumption, the Durbin-Watson coefficients were examined. The Durbin-Watson value must not be less than 1 and greater than 3 to ensure the uncorrelatedness of the residuals (Field, 2010). The Durbin-Watson test values were computed as 1.95, 2.05, and 1.97 for each regression analysis of efficacy for classroom management, efficacy for instructional strategies, and efficacy for student engagement respectively. Therefore, this assumption was deemed to be satisfied.

Another assumption to be checked before the regression analysis was the homoscedasticity assumption. This assumption is met when all the residuals have the same variance at each level of the predictor variables (Field, 2010). By reviewing the scatter plots of efficacy for classroom management, efficacy for student engagement, and efficacy for instructional strategies (Appendix B), it was concluded that there was no violation of this assumption.

With regard to checking the assumption of multicollinearity, which occurs as a result of two or more highly correlating predictors, two different methods were applied. First, the correlation matrix was examined to check whether the bivarite correlations among predictors were above .80 as suggested by Stevens (2002). The correlation matrix displayed that all the correlations were below .80 as required (Table 4.5). In addition to that, variance inflation factor (VIF) and tolerance statistics were probed so as to find out if the VIF values were above 10 and tolerance values were below 0.1 (Myers, 1990). The examination of the values demonstrated that the multicollinearity assumption was not violated with all the VIF values being less than 10 and the tolerance values being above 0.1.

4.3.2 Intercorrelations among the predictors and their relation to the dependent variables.

In this section of the chapter, the intercorrelations among the predictor variables and their correlation to each aspect of the dependent variable were inquired. Table 4.5 provides information about the correlation between each predictor variable and the efficacy for classroom management, efficacy for instructional strategies, and efficacy for student engagement as well as the correlation of each predictor with one another.

Table 4.5

Intercorrelations of the Variables

Variable	1	2	3	4	5	6
Efficacy for Classroom Management	.11*	.15*	.50*	-.04	.15*	.25*
Efficacy for Student Engagement	.23*	.06	.51*	-.05	.20*	.35*
Efficacy for Instructional Strategies	.19*	.15*	.50*	-.03	.22*	.37*
Predictor variables						
1. University Type	--					
2. Years of Teaching Experience	-.06	--				
3. Mastery Experience	.09	-.05	--			
4. Undergraduate Major	-.14*	-.26*	.03	--		
5. Colleague Support	.08	-.07	.24*	.06	--	
6. Administration Support	.27*	-.04	.28*	-.07	.47*	--

In this section of the chapter, a brief explanation regarding statistically significant relationship among the variables of the study is presented. To begin with, a significantly positive correlation was observed between the classroom management domain of self-efficacy beliefs of the instructors and their mastery experience, the administration support they got, the support they got from their colleagues, years of teaching experience, and university type. In other words, the results demonstrated that instructors considered themselves more efficacious in terms of managing the classroom when they had more satisfaction with their own performances as teachers, and when they were more experienced in teaching. Similarly, they reported higher level of self-efficacy when they received more support from their administrators and co-workers. Additionally, the results indicated higher self-efficacy levels for classroom management for the instructors working at private universities rather than public universities.

Secondly, instructors' mastery experience, the support they got from their administrators and colleagues, and the type of the university they worked for resulted in a significant and positive correlation with the student engagement domain of their self-efficacy beliefs. That is to say, English instructors were more likely to engage their students in the activities they carried out in the classroom when they had a higher perception of themselves as teachers. Likewise, they regarded themselves as more efficacious when their administrators and colleagues supported them more. In addition to that, the instructors working at private universities were found to have higher levels of self-efficacy in terms of student engagement when compared to the ones working at public universities.

Thirdly, instructors' mastery experience, the support they got from their administrators and colleagues, the type of the university they worked for and their teaching experience led to a positive and statistically significant relationship with the instructional strategies domain of their self-efficacy beliefs. To state it more clearly, the instructors were found to be more efficacious in terms of instructional strategies when they had a higher level of mastery experience, and when they had more experience in teaching. In the same way, they asserted that they had higher self-efficacy beliefs when they received more support from their administrators and co-workers. Similar to the other two domains, in terms of

instructional strategies, the instructors working at private universities reported to be more efficacious than the ones working at public universities.

Examining the intercorrelations among the independent variables, the most significant correlation was observed between administration support and colleague support with a positive correlation of .57. Administration support was, moreover, significantly and positively correlated with mastery experience and university type. Besides, the colleague support which the instructors received from their colleagues led to a significantly positive relationship with their mastery experience. In addition to these, the type of undergraduate majors having been studied by the instructors was found to be significantly and negatively associated with their experience levels in teaching and the type of university they worked for.

4.3.3 Findings of regression analysis of efficacy for classroom management.

In the present study, three separate hierarchical regression analyses were conducted for each domain of teacher self-efficacy, which are classroom management, student engagement and instructional strategies. Table 4.6 represents the unstandardized regression coefficients (b) and standard error of b (SE of b), the standardized regression coefficients (β), the squared semi-partial correlations (sr^2), R^2 values, and ΔR^2 values of efficacy for classroom management.

Table 4.6

Hierarchical Regression Analysis Summary of Efficacy for Classroom Management Scores

Variables	*b*	*SE of b*	*β*	sr^2	*R*	R^2	ΔR^2
Step 1					.11	.01	.01
University Type (Public vs. Private)	.20	.11	.11	.01			
Step II					.54	.29	.27
Teaching Experience	.02	.01	.18*	.03			
Mastery Experience	.65	.07	.50*	.25			
Undergraduate Major (being a Faculty of Education graduate or not)	.00	.09	.00	.00			
Step III					.55	.30	.01
Colleague Support	-.01	.08	-.01	.00			
Administration Support	.13	.07	.12	.01			

Note. $n = 285$, $*p < .05$

According to Table 4.6, Step 1 did not significantly predict the self-efficacy beliefs of English instructors for classroom management, R^2 =.01, F (3, 285) = 3.58, *n.s*. In other words, university type (public vs. private), β =.11, did not make a statistically significant contribution to the self-efficacy levels of the EFL instructors in terms of classroom management.

In the second step, after controlling for the influence of the university type, the analysis yielded statistically significant results with a considerable increase in R^2, R^2 =.29, F (3, 285) = 28.03, $p < .05$. That is to say, Step 2, which included years of teaching experience, mastery experience and undergraduate major (being a Faculty of Education graduate or not), accounted for 28.6 % of the variance. Mastery experience of the instructors (β =.50, $p < .05$) uniquely made the greatest contribution to their self-efficacy beliefs for classroom management. Additionally, the EFL instructors' experience in teaching (β =.18, $p < .05$) also significantly contributed to the efficacy for classroom management, whereas undergraduate major (β =.00, $p > .05$) made no contribution to it.

After controlling the effect of the aforementioned variables in the third step, administration and colleague support did not significantly predict the efficacy for classroom management, R^2 =.30, F (3, 285) = 19.53, $p > .05$, explaining only an additional 1.1% of the variance. While administration support made a relatively higher contribution to the efficacy levels of the instructors for classroom management (β =.12, $p > .05$), colleague support did not make any (β = -.01, $p > .05$).

After the inclusion of all the predictor variables into the model, the R^2 = 29.7 illustrated that 29.7% of the variance in the instructors' self-efficacy levels for classroom management was predicted by the independent variables in the study. When squared semi-partial correlations were scrutinized, it was concluded that among the six predictor variables, the largest contribution to the efficacy for classroom management was by mastery experience (sr^2 = .25), while teaching experience (sr^2 = .03) made the second largest contribution.

4.3.4 Findings of regression analysis of efficacy for student engagement.

The hierarchical regression analysis was conducted to examine the predictors of the instructors' self-efficacy beliefs for student engagement. The unstandardized regression coefficients (b) and standard error of b (SE of b), the standardized regression coefficients (β), the squared semi-partial correlations (sr^2), R^2 values and ΔR^2 values of efficacy for student engagement are presented on Table 4.7.

Table 4.7

Hierarchical Regression Analysis Summary of Efficacy for Student Engagement Scores

Variables	*b*	*SE of b*	*β*	sr^2	*R*	R^2	ΔR^2
Step 1					.23	.05	.05
University Type (Public vs. Private)	.43	.11	.23*	.05			
Step II					.55	.30	.25
Teaching Experience	.01	.01	.09	.01			
Mastery Experience	.68	.07	.50*	.25			
Undergraduate Major (Being a Faculty of Education graduate or not)	-.04	.10	-.02	.00			
Step III					.58	.34	.03
Colleague Support	.00	.08	.00	.00			
Administration Support	.22	.07	.19*	.02			

Note. $n = 285$, $*p < .05$

The results shown on Table 4.7 revealed that Step 1 made a relatively significant contribution to the self-efficacy levels of the EFL instructors in terms of student engagement, R^2 =.05, F (3, 285) = 15.84 , p < .05. Explaining the 5 % of the variance, university type (public vs. private), β =.23, played a significant role in English instructors self-efficacy levels for student engagement. That is to say, the instructors working at private universities were significantly more efficacious than those working at public universities.

After years of teaching experience, mastery experience, and undergraduate major was added to the model in the second step, the analysis resulted in a statistically significant increase in R^2, R^2 =.30, F (3, 285) = 30.53 , p < .05. In other words, the predictors in the second step accounted for 30 % of the variance. Similar to the analysis of the classroom management dimension, mastery experience of English instructors (β =.50, p < .05) provided the greatest contribution to their self-efficacy level for student engagement, while teaching experience (β =.09, p < .05) and undergraduate major (β =-.02, p > .05) did not play a role in predicting it.

The third step, which consisted of administration and colleague support, had a relatively lower contribution, R^2 =.34, F (3, 285) = 23.35, p < .05, by accounting for an additional 4 % of the variance. Unlike the classroom management dimension, however, administration support made a significant contribution to the self-efficacy beliefs of the instructors in terms of student engagement (β =.19, p < .05). Nonetheless, colleague support (β =.00, p > .05) did not improve the levels of self-efficacy for student engagement, either.

With the addition of all the predictor variables into the model, the explained variance was 33.5% for the efficacy for student engagement. Examining squared semi-partial correlations, it was deduced that among the six predictor variables, mastery experience (sr^2 = .25) contributed most to the efficacy for student engagement. Other predictors made relatively lower contributions with university type (sr^2 = .05) having the second largest impact and administration support (sr^2 = .02) having the third largest one.

4.3.5 Findings of regression analysis of efficacy for instructional strategies.

The last hierarchical regression analysis was performed to investigate the extent to which the predictor variables predicted the instructors' self-efficacy beliefs for instructional strategies. Table 4.8 presents the unstandardized regression coefficients (b) and standard error of b (SE of b), the standardized regression coefficients (β), the squared semi-partial correlations (sr^2), R^2 values and ΔR^2 values of efficacy for instructional strategies.

Table 4.8

Hierarchical Regression Analysis Summary of Efficacy for Instructional Strategies Scores

Variables	*b*	*SE of b*	*β*	sr^2	*R*	R^2	ΔR^2
Step 1					.19	.04	.04
University Type (Public vs. Private)	.33	.10	.19*	.04			
Step II					.56	.31	.27
Teaching Experience	.02	.01	.19*	.03			
Mastery Experience	.64	.06	.50*	.24			
Undergraduate Major (being a Faculty of Education graduate or not)	.05	.09	.03	.00			
Step III					.60	.35	.05
Colleague Support	.02	.07	.02	.00			
Administration Support	.24	.06	.22*	.03			

Note. $N = 285$, $*p < .05$

The hierarchical regression analysis summarized on Table 4.8 put forth that Step 1 contributed to the instructors' self-efficacy beliefs for instructional strategies relatively significantly, R^2 =.04, F (3, 285) = 10.56, p < .05. That is to say, university type (β =.19) explained the 3.6 % of the variance in efficacy for instructional strategies. The instructors working at private universities reported higher level of efficacy for instructional strategies than those working at public universities.

After controlling for university type, the analysis yielded a significant increase in R^2, R^2 =.31, F (3, 285) = 31.22, p < .05, which indicated that years of teaching experience, mastery experience, and undergraduate major accounted for 30.8 % of the variance. The instructors' mastery experience (β =.50, p < .05) made the most significant contribution to their efficacy for instructional strategies. In addition, teaching experience (β =.19, p < .05) also contributed to the efficacy for instructional strategies, yet undergraduate major (β =.03, p > .05) made no significant contribution to it.

After including administration and colleague support in the third step, there was a relatively lower change in R, R^2 =.35, F (3, 285) = 25.38, p < .05, which explained an additional 4 % of the variance. Whereas administration support (β =.22, p < .05) significantly predicted the self-efficacy beliefs of the instructors for instructional strategies, colleague support (β =.02, p > .05) made no significant contribution to it.

Overall, the total R^2 value accounted for 35.4% of the variance of the efficacy for instructional strategies. When the squared semi-partial correlations were examined, it was seen that the findings had similar results to the other dimensions. In other words, among the six predictor variables, mastery experience (sr^2 = .24) made the greatest contribution to the efficacy for instructional strategies. Another predictor with a large impact on the teacher self-efficacy for instructional strategies was university type (sr^2 = .04). After university type came administration support (sr^2 = .03) and teaching experience (sr^2 = .03) with similar effects on the prediction of the EFL instructors self-efficacy beliefs for instructional strategies.

4.4 Summary of the Results

All in all, it can be concluded from the results of the study that EFL instructors' mastery experience, their teaching experience, the type of university they are working at, and the support they get from their administration were significant predictors of the English language instructors' self-efficacy beliefs for classroom management, instructional strategies, and student engagement domains. To make it clear, all four of the aforementioned predictors were significant in contributing to the instructors' self-efficacy for instructional strategies. In other words, it was found out that the higher the mastery experience and the teaching experience of the instructors' was, the more efficacious they considered themselves in terms of instructional strategies. Similarly, the instructors who were supported by their administration more reported to have higher levels of efficacy. Moreover, the instructors working at private universities had higher self-efficacy beliefs for this domain compared to the ones working at public universities.

As for student engagement, mastery experience, administration support, and university type were the significant predictors of this domain. That is to say, higher levels of mastery experience resulted in higher levels of self-efficacy beliefs of the instructors in terms of engaging the students in classroom activities and practices. Additionally, the support of the administration contributed to the efficacy beliefs of the instructors for student engagement. Likewise, the instructors working at private universities were found to be more efficacious in terms of student engagement than their colleagues in public universities.

Finally, mastery experience and years of teaching experience contributed to the instructors' self-efficacy for classroom management. In other words, the instructors were found to be more efficacious about the way they managed their classrooms when they had higher levels of mastery experience. In the same way, the more experience they got in teaching, the higher levels of self-efficacy they developed in terms of managing their classrooms.

CHAPTER V

DISCUSSION

The last chapter begins with the summary and discussion of the findings of the study. Following the discussion in relation with the findings of previous studies, implications of the study for practice are presented. Lastly, some recommendations for further researcher are provided.

5.1 Discussion of the Results

The major purpose of the present study was to investigate whether EFL instructors' self-efficacy levels for classroom management, instructional strategies and student engagement could be predicted by university type, years of teaching experience, mastery experience, undergraduate major, administration support, and colleague support. For this purpose, the data were collected through a total 58-item questionnaire from 285 participants who work as English instructors in preparatory schools of the universities in Ankara. The data collection instrument consisted of four subscales followed by a demographic information section: Teachers' Sense of Efficacy Scale, Mastery Experience Scale, Colleague Support Scale, and Administration Support Scale. Three separate hierarchical regression analyses were conducted to find answers to the research questions. Results of the study indicated that mastery experience, years of teaching experience, administration support, and university type were found to be significant predictors of the instructional strategies domain of teacher self-efficacy. Similarly, efficacy for student engagement was predicted by mastery experience, administration support, and university type; whereas mastery experience and years of teaching experience were positively correlated with classroom management. However, colleague support and undergraduate major did not predict the self-efficacy beliefs of the instructors for any of all three domains.

To begin with, among the significant factors, mastery experience was, by far, the most notable predictor, which was consistent not only with Bandura's theory but also with the previous studies in the field. Bandura (1997) stated that mastery experience, which refers to beliefs that are constructed by one's own success and failures, is the most effective source of self-efficacy since it is related to an individual's personal experiences. Therefore, the present study yielded a parallel finding to this proposition with a considerably high predicative value for all three domains. Moreover, a study carried out by Saw (2007) suggested that there was a strong correlation between mastery experience and the self-efficacy beliefs of novice teachers in Malaysia. In the same way, another study conducted with pre-service elementary science teachers also proved mastery experience as the most efficient source of teacher-self efficacy (Aydın & Boz, 2010).

Parallel with mastery experience, years of teaching experience was also a significant predictor in the current study. There have been several studies in the literature that investigate the relationship between self-efficacy and teaching experience. Most of these studies confirmed the finding of the present study, and pointed out the difference between novice and experienced teachers in terms of their self-efficacy beliefs. In other words, experienced teachers were found to be more efficacious – especially in managing their classrooms – than their inexperienced co-workers (Campbell, 1996; Ghanizadeh & Moafian, 2011; Siebert, 2006, Solar-Şekerci, 2011). On the other hand, some research studies proposed that teacher self-efficacy was not associated with experience in teaching (Gür, 2008; Tschannen-Moran & Woolfolk-Hoy, 2002). In her study, Gür (2008) found that years of experience science and mathematics teachers had did not play a role in their self-efficacy, whereas their satisfaction with their own performances did. As mentioned earlier, Bandura (1997) regarded mastery experience as the most significant source of self-efficacy; yet he also asserted that the way individuals interpret their performances is as crucial as the presence of their mastery experiences. That is to say, people's having experience does not always ensure that these experiences are positive mastery experiences, and therefore, will lead to an increase in their self-efficacy over years. In the present study, years of teaching experience was found to be significant in classroom management and instructional strategies, while it was not significant in the

student engagement domain. On the other hand, mastery experience was significant in all three domains. This can be explained by the assertion that teaching experience is more meaningful in explaining teacher self-efficacy when combined with satisfactory mastery experiences, and EFL instructors consider themselves more efficacious under those circumstances.

Another significant predictor of teacher self-efficacy in the study was administration support. This result also confirmed Bandura's 'verbal persuasion' as another source of self-efficacy. In other words, administration support was a significant factor as according to Bandura (1997), people's beliefs about their capabilities are strengthened by the 'evaluative feedback' they get from the people they regard important.

Furthermore, literature review proved that the findings of the current study were consistent with those of previous ones. Focusing on the self-efficacy beliefs of first-year teachers, Çapa (2005) found out that principal support predicted teacher self-efficacy, whereas colleague support and mentor support did not. Similarly, although colleague support was also a form of verbal persuasion, it did not have a significant value in the current study, while administration support did. The underlying reason for this may be revealed by Bandura's argument that the effect of the verbal persuasion greatly ascends when it is uttered by a more influential and reliable source (Bandura, 1997). To illustrate, Er (2009) obtained a similar result with fourth-year prospective EFL teachers, who valued their mentors' support as a source of their efficacy. Therefore, it can be concluded that teachers construct better efficacy beliefs when they are encouraged by people they consider as authority figures. Besides that, even though administration support had a significant value for student engagement and instructional strategies, it did not predict the instructors' efficacy for classroom management. This can be explained by the fact that the students of the EFL instructors participated in the present study are young adults who are 18 years old or older. Therefore, those instructors generally do not need the contribution or intervention of their administrators in managing their classes as much as they may need in secondary or high school.

The last factor to be found significant was university type for efficacy for student engagement and instructional strategies. That is to say, the instructors working at private universities possessed higher levels of efficacy in those domains than the ones working at public universities. The reason why this factor was not significant for classroom management may be the diverse classroom management practices in private and public universities. To make it more clear, it is evident that those two types of universities have different student profiles. Therefore, the instructors working at these universities have different concepts of 'classroom management' in their minds; and thus, they have gained diverse experiences in classroom management.

All in all, mastery experience, teaching experience, administration support, and university type produced statistically significant correlations with the self-efficacy beliefs of EFL instructors for classroom management, student engagement, and instructional strategies. The most effective factor for all three domains was mastery experience. Following it came administration support, and then university type with the same significance as teaching experience for the instructional strategies domain. For student engagement, university type followed by administration support proved to be significant after mastery experience. Finally, teaching experience followed master experience for the classroom management domain.

5.2 Implications for Practice

Based on the findings of the current study, the following implications for practice were suggested:

First of all, mastery experience was confirmed to be the most powerful source of self-efficacy beliefs, and it was proved to be directly linked with satisfactory experiences. Similarly, teaching experience was also a significant predictor of teacher self-efficacy. Therefore, more opportunities should be created for instructors, particularly prospective pre-service teachers by schools, universities, and non-profit voluntary organizations to provide them with the chance to gain experience.

Besides, verbal persuasion was also found to be highly significant in increasing teacher self-efficacy. Considering verbal persuasion, the role of the administration in this is of the greatest importance. Hence, administrators in universities as well as other principals in primary schools and high schools should create a more encouraging and supportive environment in their educational institutions. Furthermore, they should contribute more to the instructors' efforts to be more successful at teaching by taking their decisions into consideration and providing constructive feedback.

Lastly, university type was also one of the predictors of EFL instructors' self-efficacy beliefs. That is to say, the instructors working in private universities were found to be more efficacious than the ones working in public universities. In order to improve the efficacy beliefs of the instructors working in public universities, the policies, regulations, and practices of private universities may be taken as an example to be followed in public universities. In other words, more opportunities should be created for universities to interact professionally so that all universities could keep up with the latest regulations, practices, methods, techniques, and/or technologies.

5.3 Recommendations for Further Research

In light of the findings of the present study, the following recommendations can be made for future research:

1. In the present study, undergraduate major did not yield a significant result in predicting the instructors' self-efficacy beliefs. In other words, there was no significant difference between the self-efficacy of the instructors graduated from Faculty of Education and the instructors graduated from other departments. However, the results indicated that 43% of the participants in this study have master or doctorate degrees, or have a teaching-related certificate. Therefore, further research can be conducted to find out whether the graduate degrees the EFL instructors hold make a difference in their self-efficacy levels regardless of their undergraduate majors.

2. The participants of this study were limited to the EFL instructors working at universities only in Ankara. However, it can be replicated with the EFL instructors from other universities nation-wide since the universities in Ankara might have different policies from other universities, especially the ones in smaller cities in terms of administration and colleague support including observations, peer feedback, and/or orientation programs. Because of the same reason, the study may be conducted with teachers from other disciplines such as science, mathematics, history, etc. to obtain more generalizable results regarding the predictors of teacher self-efficacy in Turkey. In other words, the study may be replicated with teachers from other disciplines as they might adopt different policies from the English language teaching field in terms of the nature, duration, or frequency of peer observation, peer feedback, material sharing, instructional decisions, and so on.

3. This study was carried out by the help of the data collected through self-reported instruments. In order to demolish the validity threats of self-reported instruments, other data collection methods such as observation and interviewing can be utilized in future studies. In other words, qualitative research designs can be preferred in addition to quantitative ones so as to ensure in-depth answers to the questions investigated.

4. The current study investigated the sources of teacher efficacy in relation to such predictors as university type, mastery experience, years of teaching experience, undergraduate major, colleague support, and administration support. However, the predictors of teacher self-efficacy are not restricted to those. Hence, future studies can include alternative predictor variables like teaching context, school climate, teaching strategies, the availability of in-service training programs.

5. In the present study, two scales, administration support and colleague support, were adapted to Turkish context. In order to check the reliability and validity of these instruments, future studies can be carried out utilizing these scales.

6. This study was conducted at a single point in time. In the future research studies, longitudinal design can be adopted to ensure a better understanding of the predictors of teacher self-efficacy. For those studies, the data can be collected from fourth-grade students at teaching programs, the teachers at the end of their first year, and experienced teachers a few years later.

REFERENCES

Akbari, R., & Moradkhani, S. (2010). Iranian English teachers' selfefficacy: Do academic degree and experience make a difference? *Pazhuhesh-e Zabanha-ye Khareji, 56,* 25–47.

Allinder, R. (1994). The relationship between efficacy and the instructional practices of special education teachers and consultants, *Teacher Education and Special Education, 17*(2), 86–95.

Ashton, P. (1984). Teacher efficacy: A motivational paradigm for effective teacher education. *Journal of Teacher Education, 35*, 28-32.

Ashton, P., & Webb, R. (1986). *Making a difference: Teachers' sense of efficacy and student achievement.* New York: Longman.

Aydın, S., & Boz, Y. (2010). Pre-service elementary science teachers' science teaching efficacy beliefs and their sources. *Elementary Education Online, 9*(2), 694–704.

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Bulletin*, *84*, 191–215.

Bandura, A. (1986). *Social foundations of thought and action*. New Jersey: Prentice-Hall.

Bandura, A. (1989). *Goal concepts in personality and social psychology: Self-regulation of motivation and action through internal standards and goal systems*. New Jersey: Lawrence Erlbaum Associates.

Bandura, A. (1994). Self-efficacy. In Ramachaudren (Ed.), *Encyclopedia of Human Behavior*. New York: Academic Press.

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

Bandura, A. (2006). Social cognitive theory. In S. Rogelberg (Ed.). *Encyclopedia of Industrial/Organizational Psychology*. Beverly Hills: Sage Publications.

Borton, W. M. (1991). *Empowering teachers and students in a restructuring school: A teacher efficacy interaction model and the effect on reading outcomes*. Paper presented at the annual meeting of the American Educational Research Association, Chicago (ERIC Document Reproduction Service No. ED 335 341).

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, CA: Sage.

Campbell, J. (1996). A comparison of teacher efficacy for pre and in-service teachers in Scotland and America. *Education, 117*(1), 2-11.

Caprara, G. V., Barbaranelli, C., Steca, P., & Malone, P. S. (2006). Teachers' self-efficacy beliefs as determinants of job satisfaction and students' academic achievement: A study at the school level. *Journal of School Psychology, 44*(6), 473-490.

Cervone, D., & Shoda, Y. (1999). *The coherence of personality: Social cognitive bases of consistency, variability, and organization.* New York: Guilford Press.

Cheung, H. Y. (2006). The measurement of teacher efficacy: Hong Kong primary in-service teachers. *Journal of Education for Teaching, 32*(4), 435-451.

Çapa, Y. (2005). *Factors influencing first-year teachers' sense of efficacy*. [Unpublished PhD dissertation], The Ohio State University, Ohio.

Çapa, Y., Çakıroglu, J., & Sarıkaya, H. (2005). The validity and reliability study of the Turkish version of teacher sense of efficacy scale. *Egitim ve Bilim*, *30*, 74–81.

Er, E. (2009). *Self efficacy levels of pre-service teachers and its predictors*. [Unpublished MSc. thesis], Middle East Technical University, Ankara.

Evans, E. D., & Tribble, M. (1986). Perceived teaching problems, self-efficacy, and commitment to teaching among pre-service teachers. *Journal of Educational Research. 80*(2), 81-85.

Field A. (2010). *Discovering Statistics Using SPSS* (3rd ed.). Newbury Park. CA: Sage.

Fraenkel, J. R., Wallen, N. E., & Hyun, H. (2011). *How to design and evaluate research in education* (8th ed.). New York: McGraw Hill.

Ghaith, G., & Yaghi, H. (1997). Relationship among experience, teacher efficacy, and attitudes toward implementation of instructional innovation. *Teaching and Teacher Education, 13*(4), 451 458.

Ghanizadeh, A., & Moafian, F. (2011). The relationship between Iranian EFL teachers' sense of self-efficacy and their pedagogical success in language institutes. *Asian EFL Journal, 13*(2), 249-272.

Gibson, S., & Dembo, M. H. (1984). Teacher efficacy: A construct validation. *Journal of Educational Psychology, 76*(4), 569–582.

Gordon, L. M. (2001). *High teacher efficacy as a marker of teacher effectiveness in the domain of classroom management*. Paper presented at the annual meeting at the California Council on teacher education, San Diego, CA.

Gür, G. (2008). *A study on the predictors of teachers' sense of efficacy beliefs*. [Unpublished MSc. thesis], Middle East Technical University, Ankara.

Henson, R. K. (1999). *The sources of self-efficacy inventory*. Unpublished instrument, University of Southern Mississippi.

Henson, R. K. (2001). *Teacher self-efficacy: substantive implications and measurement dilemmas*. Paper presented at the annual meeting of the Mid-South Educational Research Exchange, Gatlinburg, TN.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indices incovariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*, 1–55.

Imants, J., & Van Zoelen, A. (1995). Teachers' sickness absence in primary schools, school climate and teachers' sense of efficacy. *School Organization*, *15*(1), 77–86.

Kieffer, K. M., & Henson, R. K. (2000). *Development and validation of the sources of self-efficacy inventory (SOSI): Exploring a new measure of teacher efficacy*. Paper presented at the annual meeting of the National Council on measurement in education, New Orleans.

Kim, S.(2005*). The Relationship between enactive mastery experiences and online-course self efficacy (OCSE)*. Online Submission, Paper presented at the Academy of Human Resource Development International Conference (AHRD) (Estes Park, CO, Feb 24-27, 2005). 1102-1109 (Symp. 48-1).

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. New Jersey: Prentice Hall.

Midgley, C., Feldlaufer, H., & Eccles, J., (1989). Change in teacher efficacy and student self- and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology, 81,* 247-258.

Milner, H., & Hoy, A. (2003). A case study of an African American teacher's self-efficacy, stereotype threat and persistence. *Teaching and Teacher Education, 19*, 263–276.

Muijs, R.D., & Reynolds, D. (2001). *Effective teaching: Evidence and practice*. London: Paul Chapman.

Mulholland, J., & Wallace, J. (2001). Teacher induction and elementary science teaching: Enhancing self-efficacy. *Teaching and Teacher Education, 17*(2), 243-261.

Murshidi, R., Konting, M. M., Elas, H., & Fooi, F. S. (2006). Sense of efficacy among beginning teachers in Sarawak. *Teacher Education, 17,* 265-275.

Myers, R. H. (1990). *Classical and Modern Regression with Applications*. Boston: PWS-Kent Publishing Company

Pajares, F. (1992). Teachers' beliefs and educational research: cleaning up a messy construct. *Review of Educational Research, 62*(3), 307–332.

Pajares, F., & Schunk, D. (2001). Self-beliefs and school success: self-efficacy, self-concept and school achievement. In R. Riding & S. Rayner (Eds.). *Perception*. London: Ablex Publishing.

Pajares (2002). *Overview of social cognitive theory and of self-efficacy*. Retreived January 13, 2013, from http://www.emory.edu/EDUCATION/mfp/eff.html.

Poulou, M. (2007). Personal teaching efficacy and its sources: Student teachers' perceptions. *Educational Psychology, 27*(2), 191-218.

Ross, J. A. (1994). *Beliefs that make a difference: The origins and impacts of teacher efficacy.* Paper presented at the annual meeting of the Canadian Association for Curriculum Studies, Ontario.

Ross, J. A., Hogaboam-Gray, A., & Hannay, L. (2001). Effects of teacher efficacy on computer skills and computer cognitions of Canadian students in K-3. *The Elementary School Journal*, *102*(2), 141-156.

Rotter, J. B. (1966). Generalized expectancies for internalversus external control of reinforcement. *Psychological Monographs, 80,* 1-28.

Savran Gencer, A., & Çakıroglu, J. (2005). Turkish preservice science teachers' efficacy beliefs regaerding science teaching and their beliefs about classroom management. *Teaching and Teacher Education, 23*, 664-675.

Saw, H. C. (2007). *Relationship between sources and teachers' sense of efficacy among novice teachers in Selangor, Malaysia*. [Unpublished MSc. thesis], Universiti Putra Malaysia, Peninsular Malaysia.

Schumacher, D. F. (2009). *Collective teacher efficacy and student achievement.* [Unpublished EdD Dissertation], Western Illinois University, Illinois.

Siebert, M. C. (2006). *An examination of students' perceptions of goal orientation in the classroom and teachers' beliefs about intelligence and teacher efficacy*. Unpublished *PhD Dissertation, Kansas State University*. UMI Number: 3244639.

Solar-Şekerci, A. (2011). *Self-efficacy levels of prep-school instructors and its predictors*. [Unpublished MSc. thesis], Middle East Technical University, Ankara.

Soodak, L. C., & Podell, D. M. (1997). Efficacy and experience: Perceptions of efficacy among preservice and practicing teachers. *Journal of Research and Development in Education, 30*(4), 214-221.

Stevens, J. P. (2002). *Applied Multivarite Statistics for the Social Sciences*. New Jersey: Lawrance Erlbaum Associates.

Tabachnick, B.G., & Fidell, L.S. (2012). *Using Multivariate Statistics* (6th ed.). Boston: Pearson.

Taylor, M. S., Locke, E. A., Lee, C., & Gist, M. E. (1984). Type A behavior and faculty research productivity: what are the mechanisms?. *Organizational Behavior and Human Performance, 34(*3), 402-418.

Tournaki, N., & Podell, D. M. (2005). The impact of student characteristics and teacher efficacy of teachers' predictions of student success. *Teaching and Teacher Education, 21*(3), 299-314.

Tschannen-Moran, M., Woolfolk-Hoy, A., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of Educational Research*, *68*(2), 202-248.

Tschannen-Moran, M., & Woolfolk-Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education, 17*(7), 783-805.

Tschannen-Moran, M., & Woolfolk-Hoy, A. (2002). *Respect, social support, and teacher efficacy: A case study.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Tschannen-Moran, M., & Woolfolk-Hoy, A. (2002). *The influence of resources and support on teachers' efficacy beliefs.* Paper Presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Tschannen-Moran, M., & Woolfolk-Hoy, A. (2007). The differential antecedents of self-efficacy of novice and experienced teachers. *Teaching and Teacher Education, 23(6),* 944-956.

Tuckman, B., & Sexton, T. (1992). The effects of information feedback and self-beliefs on the motivation to perform a self-regulated task. *Journal of Research in Personality, 26*(2), 121- 127.

Woolfolk, A., & Hoy, W. K. (1990). Prospective teachers' sense of efficacy and beliefs about control. *Journal of Educational Psychology, 82,* 81-91.

Woolfolk-Hoy, A. (2004). *What teachers need to know about selfefficacy?*. Paper presented at the annual meeting of the American Educational Research, San Diego, SA.

Woolfolk-Hoy, A., Davis, H., & Pape, S. (2006). Teachers' knowledge, beliefs, and thinking. In P. A. Alexander & P. H, Winne (Eds.), *Handbook of educational psychology* (2nd ed., pp. 715-737). New Jersey: Lawrence Erlbaum.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich, & M. Zeidner (Eds.), *Handbook of self-regulation* (pp. 13-39). San Diego: Academic Press.

APPENDICES

APPENDIX A

SAMPLE ITEMS FROM DATA COLLECTION INSTRUMENT (TURKISH)

BÖLÜM I
Öğretmen İnançları

YÖNERGE: *Lütfen, görüşünüzü en iyi tanımlayan seçeneği, ilgili rakamı işaretleyerek belirtiniz.*

		Yetersiz		**Çok Az Yeterli**		**Biraz Yeterli**		**Oldukça**		**Çok Yeterli**
1.	Çalışması zor öğrencilere ulaşmayı ne kadar başarabilirsiniz?	1	2	3	4	5	6	7	8	9
3.	Sınıfta dersi olumsuz yönde etkileyen davranışları kontrol etmeyi ne kadar sağlayabilirsiniz?	1	2	3	4	5	6	7	8	9
6.	Öğrencileri okulda başarılı olabileceklerine inandırmayı ne kadar sağlayabilirsiniz?	1	2	3	4	5	6	7	8	9
9.	Öğrencilerin öğrenmeye değer vermelerini ne kadar sağlayabilirsiniz?	1	2	3	4	5	6	7	8	9
12.	Öğrencilerin yaratıcılığının gelişmesine ne kadar yardımcı olabilirsiniz?	1	2	3	4	5	6	7	8	9
15.	Dersi olumsuz yönde etkileyen ya da derste gürültü yapan öğrencileri ne kadar yatıştırabilirsiniz?	1	2	3	4	5	6	7	8	9
18.	Farklı değerlendirme yöntemlerini ne kadar kullanabilirsiniz?	1	2	3	4	5	6	7	8	9
23.	Sınıfta farklı öğretim yöntemlerini ne kadar iyi uygulayabilirsiniz?	1	2	3	4	5	6	7	8	9

BÖLÜM II
Deneyimleriniz

YÖNERGE: *Aşağıda kendi deneyimlerinizle ilgili 8 madde yer almaktadır. Lütfen cevaplarınızı "Kesinlikle Doğru Değil (1)" den "Her Zaman Doğru (7)" ya kadar uzanan yedili değerlendirme ölçeği üzerinde size en uygun rakamı işaretleyerek belirtiniz.*

	Kesinlikle doğru değil	**Genellikle doğru değil**	**Bazen doğru**	**Ara sıra doğru**	**Çoğunlukla doğru**	**Genellikle doğru**	**Her zaman doğru**
1. Öğretme konusunda birçok olumlu fırsatım oldu.	1	2	3	4	5	6	7
3. Sınıf içindeki öğretme deneyimlerimden çok şey öğrendim.	1	2	3	4	5	6	7
5. Öğretimle ilgili hatalarımdan ders çıkarabilirim.	1	2	3	4	5	6	7
8. Öğretmenlik becerilerimin çoğunu gerçek ortamda öğretmenlik yaparak geliştirdim.	1	2	3	4	5	6	7

BÖLÜM III
Meslektaşlarınız

YÖNERGE: *Aşağıda, beraber çalıştığınız meslektaşlarınızla ilişkilerinizle ilgili 13 madde yer almaktadır. Lütfen cevaplarınızı "Kesinlikle Katılmıyorum (1)" dan "Kesinlikle Katılıyorum (5)" a kadar uzanan beşli değerlendirme ölçeği üzerinde size en uygun rakamı işaretleyerek belirtiniz.*

Okulumdaki meslektaşlarım...	**Kesinlikle Katılmıyorum**	**Katılmıyorum**	**Ne Katılıyorum Ne Katılmıyorum**	**Katılıyorum**	**Kesinlikle Katılıyorum**
1. etkili öğretme görevlerini planlamada ve uygulamada bana yardım ederler.	1	2	3	4	5
9. öğretimle ilgili materyalleri bulmama yardımcı olurlar.	1	2	3	4	5
11. sınıflarında gözlem yapmama izin verirler.	1	2	3	4	5
13. bu okulda rahat hissetmemi sağlarlar.	1	2	3	4	5

BÖLÜM IV
Yöneticiniz

YÖNERGE: *Aşağıda, beraber çalıştığınız yöneticiniz ile ilişkilerinizle ilgili 13 madde yer almaktadır. Lütfen cevaplarınızı "Kesinlikle Katılmıyorum (1)" dan "Kesinlikle Katılıyorum (5)" a kadar uzanan beşli değerlendirme ölçeği üzerinde size en uygun rakamı işaretleyerek belirtiniz.*

Yöneticim…	**Kesinlikle Katılmıyorum**	**Katılmıyorum**	**Ne Katılıyorum Ne Katılmıyorum**	**Katılıyorum**	**Kesinlikle Katılıyorum**
1. sınıfımdaki öğretim şeklimi geliştirmeye yönelik bir girişimde bulunduğumda bana yardımcı olur.	1	2	3	4	5
6. destekleyici ve yardımcı bir ortam yaratır.	1	2	3	4	5
10. okutmanlara, okulda yeni çalışmaya başladıklarında okulun kuralları ve uygulamaları hakkında faydalı bir yönlendirme (oryantasyon) programı sunar.	1	2	3	4	5
12. öğretimim hakkında düzenli dönüt verir.	1	2	3	4	5

APPENDIX B

SAMPLE ITEMS FROM DATA COLLECTION INSTRUMENT (ENGLISH)

PART 1
Teacher Beliefs

DIRECTIONS: *Please indicate your opinion about each of the statements below on the scale from "None (1)" to "A Great Deal (9)".*

		None		**Very Little**		**Some Influence**		**Quite a Bit**		**A Great Deal**
1.	How much can you do to get through to the most difficult students?	1	2	3	4	5	6	7	8	9
3.	How much can you do to control disruptive behavior in the classroom?	1	2	3	4	5	6	7	8	9
6.	How much can you do to get students to believe they can do well in school work?	1	2	3	4	5	6	7	8	9
9.	How much can you do to help your students value learning?	1	2	3	4	5	6	7	8	9
12.	How much can you do to foster student creativity?	1	2	3	4	5	6	7	8	9
15.	How much can you do to calm a student who is disruptive or noisy?	1	2	3	4	5	6	7	8	9
18.	How much can you use a variety of assessment strategies?	1	2	3	4	5	6	7	8	9
23.	How well can you implement alternative strategies in your classroom?	1	2	3	4	5	6	7	8	9

PART II
Mastery Experiences

DIRECTIONS: *Below are 8 items about your mastery experiences. Please indicate your preference on the scale from "Definitely Not True (1)" to "Definitely True (7)".*

	Definitely Not True	Generally Not True	Sometimes True	Often True	Mostly True	Generally True	Definitely True
1. I have had many positive opportunities to teach.	1	2	3	4	5	6	7
3. I have learned a great deal from teaching in classrooms.	1	2	3	4	5	6	7
5. When I make instructional mistakes, I am able to learn from the experience.	1	2	3	4	5	6	7
8. I have developed many of my teaching skills by actually teaching.	1	2	3	4	5	6	7

PART III
Colleague Support

DIRECTIONS: *Below are 13 items about your colleagues. Please indicate your preference on the scale from "Strongly Disagree (1)" to "Strongly Agree (5).*

My Colleagues…	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. help me in planning and accomplishing effective teaching tasks.	1	2	3	4	5
9. help me locate instructional materials.	1	2	3	4	5
11. allow me to observe their classes.	1	2	3	4	5
13. make me feel complacent at this school.	1	2	3	4	5

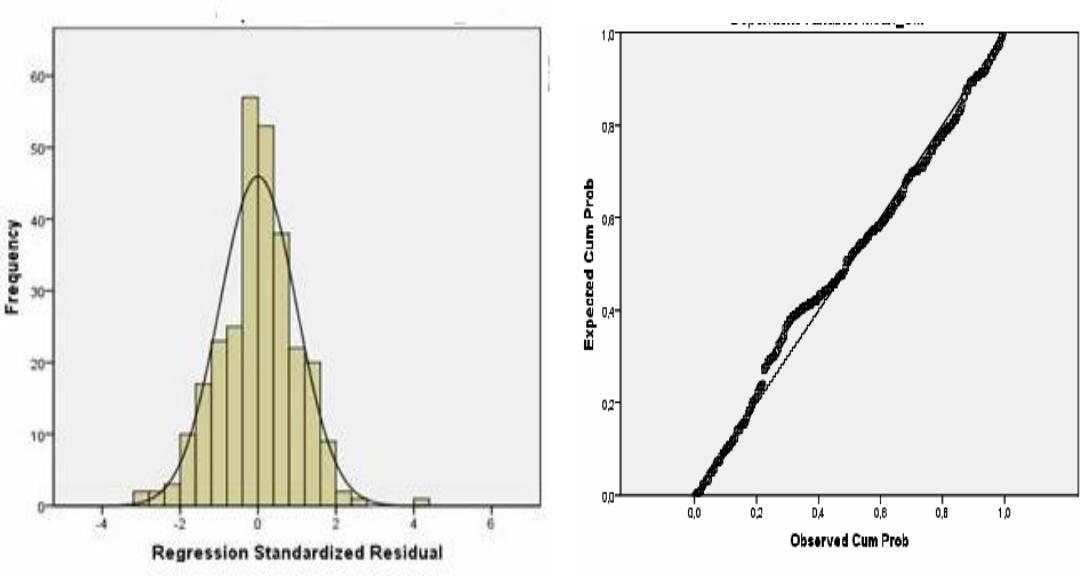
PART IV
Administration Support

DIRECTIONS: *Below are 13 items about your administrator. Please indicate your preference on the scale from "Strongly Disagree (1)" to "Strongly Agree (5).*

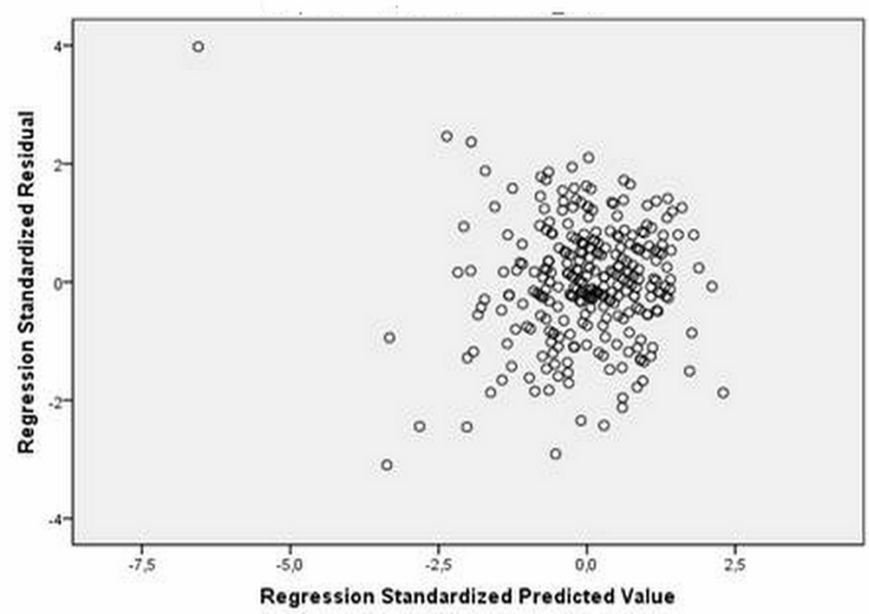
My Administrator…	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
1. helps me as I attempt to improve my instruction in my classroom.	1	2	3	4	5
6. creates an environment that is supportive and helpful.	1	2	3	4	5
10. offers a helpful orientation program for teachers on school policies and procedures when they first start to work at this school.	1	2	3	4	5
12. provides regular feedback on my instruction.	1	2	3	4	5

APPENDIX C

HISTOGRAMS, NORMAL Q-Q PLOTS, AND SCATTER PLOTS FOR EFFICACY FOR CLASSROM MANAGEMENT

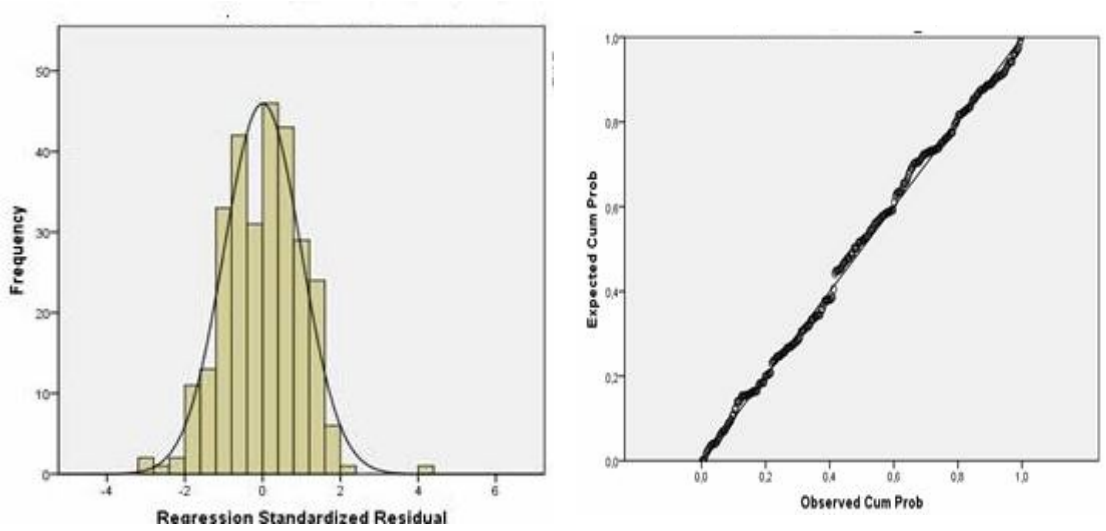


Histogram and Normal Q-Q Plot of Efficacy for Classroom Management

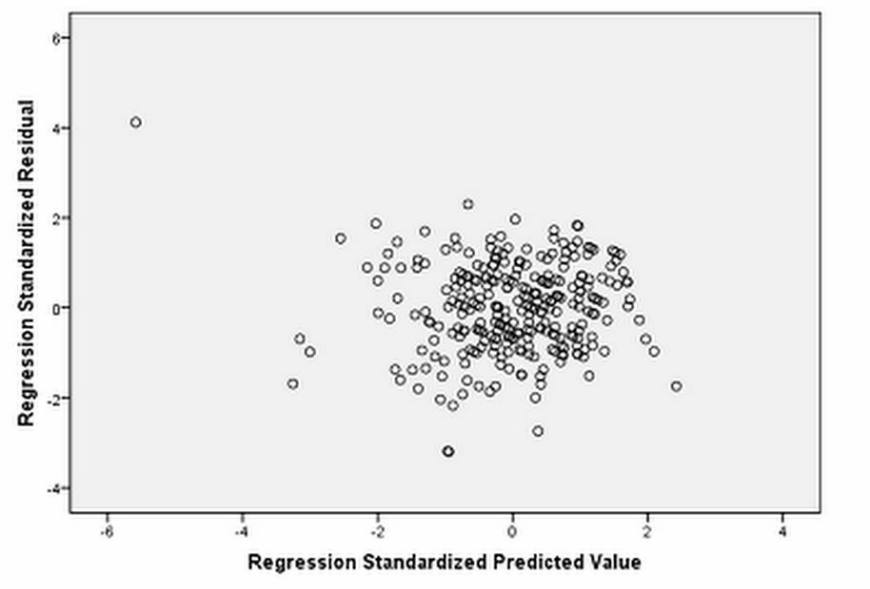


Scatter Plot of Efficacy for Classroom Management

HISTOGRAMS, NORMAL Q-Q PLOTS, AND SCATTER PLOTS FOR EFFICACY FOR INSTRUCTIONAL STRATEGIES

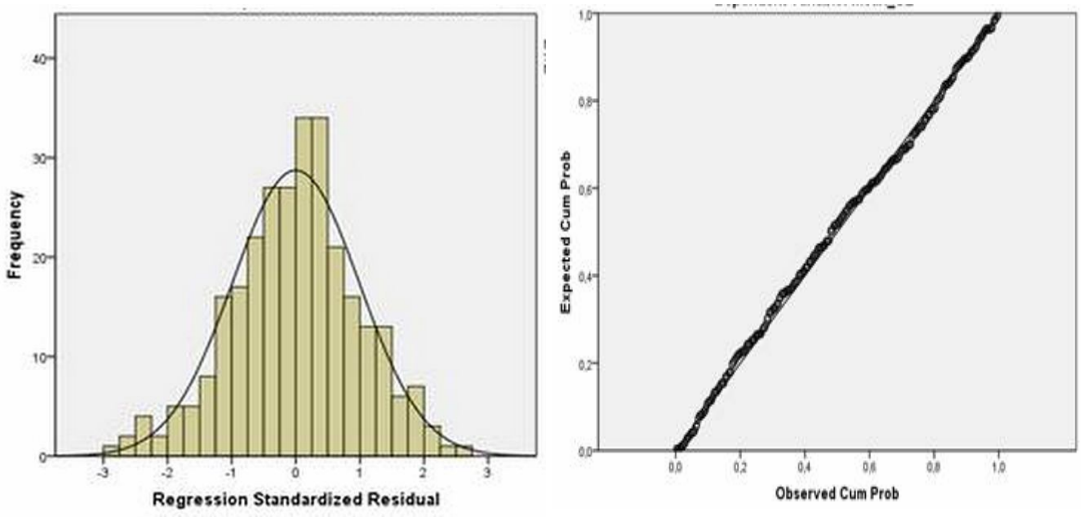


Histogram and Normal Q-Q Plot of Efficacy for Instructional Strategies

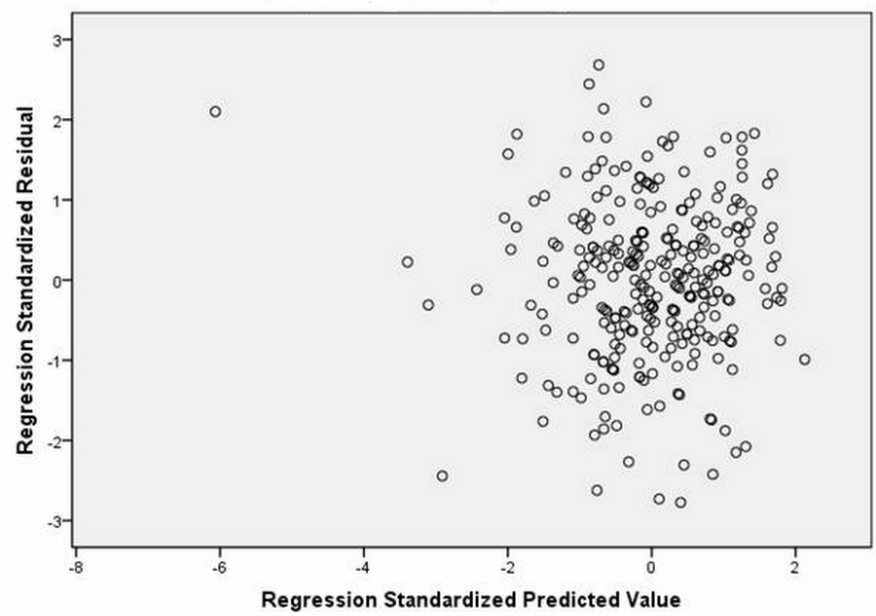


Scatter Plot of Efficacy for Instructional Strategies

HISTOGRAMS, NORMAL Q-Q PLOTS, AND SCATTER PLOTS FOR EFFICACY FOR STUDENT ENGAGEMENT



Histogram and Normal Q-Q Plot of Efficacy for Student Engagement



Scatter Plot of Efficacy for Student Engagement

APPENDIX D

TEZ FOTOKOPİSİ İZİN FORMU

ENSTİTÜ

Fen Bilimleri Enstitüsü ☐

Sosyal Bilimler Enstitüsü ☐

Uygulamalı Matematik Enstitüsü ☐

Enformatik Enstitüsü ☐

Deniz Bilimleri Enstitüsü ☐

YAZARIN

Soyadı :
Adı :
Bölümü :

TEZİN ADI (İngilizce) :

TEZİN TÜRÜ : Yüksek Lisans ☐ Doktora ☐

1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir bölümünden kaynak gösterilmek şartıyla fotokopi alınabilir. ☐
3. Tezimden bir (1) yıl süreyle fotokopi alınamaz. ☐

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: