

**ISTANBUL SABAHATTIN ZAIM UNIVERSITY**  
**GRADUATE EDUCATION INSTITUTE**  
**DEPARTMENT OF ENGLISH LANGUAGE TEACHING**

**AN INVESTIGATION INTO THE RELATIONSHIP  
BETWEEN ENGLISH PREPARATORY TEACHERS'  
MINDSETS AND THEIR SELF EFFICACY BELIEFS**

**MA THESIS**

**Aslıhan YILMAZ**

**Istanbul**  
**August - 2020**

**ISTANBUL SABAHATTIN ZAIM UNIVERSITY**  
**GRADUATE EDUCATION INSTITUTE**  
**DEPARTMENT OF ENGLISH LANGUAGE TEACHING**

**AN INVESTIGATION INTO THE RELATIONSHIP BETWEEN**  
**ENGLISH PREPARATORY TEACHERS' MINDSETS AND**  
**THEIR SELF EFFICACY BELIEFS**

**MA THESIS**

**Aslıhan YILMAZ**

**Supervisor**

**Asst. Prof. Dr. Abdul Kasım Varlı**

**Istanbul**  
**August - 2020**

# THESIS APPROVAL

To the Graduate Education Institute

This is to certify that this study has been approved in partial fulfilment of the requirements for the MASTER THESIS in English Language Teaching.

## JURY

Chair Person of Jury      Asst. Prof. Abdül Kasım Varlı      .....

Member of Jury      Assoc. Prof. Emrah GÖRGÜLÜ      .....

Member of Jury      Asst. Prof. Osman Sabuncuoğlu      .....

Approval

I approve that the signatures above belong to the academic members specified here.

Prof. Dr. Ali GÜNEŞ  
Director,  
Graduate Education Institute

## **DECLARATION OF SCIENTIFIC ETHICS AND ORIGINALITY**

This is to certify that this MA thesis titled “**An Investigation Into The Relationship Between English Preparatory Teachers’ Mindsets And Their Self Efficacy Beliefs**” is my own work and I have acted according to scientific ethics and academic rules while producing it. I have collected and used all information and data according to scientific ethics and guidelines on thesis writing of Istanbul Sabahattin Zaim University. I have fully referenced, in both the text and bibliography, all direct and indirect quotations and all sources I have used in this work.



Aslıhan Yılmaz

August, 2020

## DEDICATION

*Dedicated to the founder of the Republic of Turkey:  
Mustafa Kemal Atatürk*

## ACKNOWLEDGMENT

There are no proper words to convey my deep gratitude and respect for my advisor Asst. Prof. Dr. Abdul Kasım Varlı for guiding me with his patience and constructive feedback throughout this process. His continuous support helped me through all the stages.

I would also like to express my gratitude for Asst. Prof. Dr. Emrah Görgülü and Asst. Prof. Dr. Osman Sabuncuoğlu for their valuable time and beneficial feedback.

I am fortunate to have friends who have always stood beside me. I extend my heartfelt thanks to my friend and colleague Kübra Uğurlu, who has been there for me through most of the stages in my life. I would like to thank my dear friend Hilal Melahat Fırat for always making me laugh and keeping me sane throughout this process. I sincerely appreciate Ece Sağlık for enduring my endless speeches and offering advice for my dissertation. I appreciate Nehir Çakmak with whom I was on the same journey: countless hours of editing, writing, and reading. I would also like to thank Esra Karan and İpek Yücel for being the great sisters, I have always felt your support. Lastly, I wish to thank Esmâ Şenel and Mehtap Çiçen Efe for their constructive feedbacks along with my process.

My acknowledgment would be incomplete without thanking the biggest source of my strength: my family. I would like to thank my mother; Nurcan Yılmaz, and my father; Mehmet Yılmaz for giving me the strength, knowledge, ability, and opportunity to write this dissertation and to persevere and complete it satisfactorily. I would like to express my gratitude for my sister; Ayşegül Yılmaz Shafai, and her husband Shahin Shafai for their tremendous contribution to helping me to reach this stage in my life. I would sincerely thank my grandfather, without whose upbringing and nurturing; I would not have been where I am today and who I am today. Most importantly, I would like to thank my best friend, my wonderwall, my nephew; Aslan Shafai for just being there with me. Everything seemed much easier when you were around, my angel. Thank you for making my life fuller with your beautiful smile.

Finally, I want to show my gratitude to all the people whose assistance was a milestone in the completion of my dissertation.

**ABSTRACT**  
**AN INVESTIGATION INTO THE RELATIONSHIP BETWEEN**  
**ENGLISH PREPARATORY TEACHERS' MINDSETS AND**  
**THEIR SELF EFFICACY BELIEFS**

**Ashhan Yilmaz**

**Master, English Language Teaching**

**Thesis Supervisor: Asst. Prof. Dr. Abdul Kasım Varlı**

**August, 2020 - 98 pages + xv**

This study aims to reveal the relationship between teachers' mindsets and their perceived self-efficacy beliefs. This study also focuses on teachers' self-efficacy beliefs in instructional strategies, classroom management, and student engagement subscales by using Teachers' Sense of Efficacy Scale. Participants of this study are English teachers who are working in preparatory programs at state or foundation universities in Turkey. Also, this study investigates the effects of the demographical aspect of the participants on their mindset and perceived self-efficacy beliefs and the subscales. In this study, a quantitative research method was used and during the data collection process, two Likert scales: Teacher Mindset Scale (TMI) and Teachers Sense of Efficacy Scale (TSES) were applied to the teachers. The quantitative data collected through Likert scales and the demographic information were analyzed with the SPSS v.25. To find out the statistically significant correlation between the English teachers' mindset and their perceived self-efficacy belief and the subscales, Pearson Correlation Analysis, and Multiple Regression Analysis was conducted. According to the findings, there is a statistically significant relationship between teacher mindset scale total score, self-efficacy total score, self-efficacy in instructional strategies, and classroom management subscales. According to the findings, there is a statistically significant relationship between teacher mindset scale total score, self-efficacy total score, and its subscales such as efficacy in instructional strategies and classroom management. As for the demographical aspects of the participants, firstly, female participants have higher TMI scores than male participants. However, there is no statistically significant difference among TSES total scores in terms of gender.

Secondly, there is no statistically significant difference among TMI total scores in terms of the place of work. However, a statistically significant difference is found among the Instructional Strategies subscale. Thirdly, there is no statistically significant difference in TMI scores, TSES scores, and the subscales according to the highest education level. Fourthly, a statistically significant difference was found among the total scores of TMI regarding the participation in a teacher training program, however, there is no statistically significant difference among TSES score and its subscales. Fifthly, there is no statistically significant difference among TMI scores according to teaching experience. A statistically significant difference was found among the total scores of TSES and Instructional Strategies, and Classroom Management subscales according to the teaching experience. Lastly, there is no statistically significant difference in teachers' TMI scores, TSES Score, and its subscales according to their BA degree. Since teachers' self-efficacy beliefs and mindsets have an impact on student achievement, researching these two concepts will contribute to the success of the teachers in the future. At the same time, this study can shed light on the teacher development programs that universities will offer to their teachers.

**Keywords:** Mindset, Self-efficacy, English Language Teaching

**ÖZET**  
**İNGİLİZCE HAZIRLIK ÖĞRETMENLERİNİN ZİHNİYETLERİ**  
**İLE ÖZ YETERLİK İNANÇLARI ARASINDAKİ İLİŞKİNİN**  
**ARAŞTIRILMASI**

**Aslıhan YILMAZ**

**Yüksek Lisans, İngiliz Dili Eğitimi**

**Tez Danışmanı: Dr. Öğr. Gör. Abdul Kasım Varlı**

**Ağustos, 2020 - 98 sayfa + xv**

Bu çalışmanın amacı Türkiye’de bulunan vakıf ve devlet üniversitelerinde hazırlık departmanlarında görev alan 151 İngilizce öğretmeninin zihniyetleri ile öz-yeterlikleri ve alt faktörleri olan öğretim stratejisi yeterliliği, sınıf yönetimi yeterliliği ve öğrenci katılım yeterliliği arasındaki ilişkiyi araştırmaktır. Aynı zamanda bu çalışma katılımcıların demografik özelliklerinin, zihniyetlerine ve öz-yeterlik seviyeleri ve alt faktörlerine olan etkilerini inceler. Bu çalışmada nicel yöntemler kullanılmış olup, veri toplama sürecinde iki Likert ölçek: Öğretmen Zihniyet Ölçeği ve Öğretmen Öz-Yeterlik Ölçeği öğretmenlere uygulanmıştır. Ölçeklerden elde edilen nicel veriler ve demografik bilgiler SPSS 25.0 ile analiz edilmiştir. İngilizce öğretmenlerinin zihniyetleri ile öz-yeterlik inançları ve alt faktörleri arasındaki ilişkiyi bulabilmek adına Pearson Korelasyon Analizi ve Çoklu Regresyon Analizi yapılmıştır. Bulgulara göre, öğretmenlerin zihniyetleri ile öz-yeterlik inançları, öğretim stratejisi ve sınıf yönetimi alt faktörleri arasında güçlü bir ilişki bulunmaktadır. Katılımcıların demografik özelliklerinin, öğretmenlerin zihniyeti ve öz-yeterlik inançları üzerinde istatistiksel olarak önemli bir etkisi olup olmadığını ortaya çıkarmak için Kruskal Wallis H Testi ve bağımsız örneklem T testi kullanılmıştır. İlk olarak, kadın öğretmenlerin zihniyet ölçeği skorları erkek öğretmenlere göre daha yüksek bulunmuştur. Cinsiyetin, öğretmenlerin öz-yeterlik seviyeleri ile bir ilişkisi bulunmamaktadır. İkinci olarak, öğretmenlerin çalıştıkları kurumların zihniyetleri üzerine bir etkisi bulunmamaktadır ancak, öğretim stratejileri yeterliliği ile arasında güçlü bir ilişki bulunmaktadır. Üçüncü olarak, öğretmenlerin mezun oldukları eğitim seviyeleri ile zihniyetleri, öz-yeterlik inançları ve alt faktörleri arasında bir ilişki

bulunamamıştır. Dördüncü olarak, Öğretmenlerin gelişim programlarına katılmaları ile öz-yeterlikleri ve alt faktörleri arasında bir ilişki bulunmamaktadır ancak zihniyetleri arasında güçlü bir bağlantı vardır. Beşinci olarak, Öğretmenlerin zihniyetleri ile mesleki yeterlilikleri arasında bir ilişki bulunamamıştır. Öğretmenlerin mesleki tecrübeleri ile öz-yeterlik inançları, sınıf yönetimi yeterliliği ve öğretim stratejileri yeterliliği arasında önemli bir ilişki bulunmaktadır. Son olarak, öğretmenlerin mezun oldukları departmanlar ile zihniyetleri, öz-yeterlik inançları ve alt faktörleri arasında bir ilişki bulunamamıştır. Öğretmenlerin öz-yeterlik inançları ve zihniyetlerinin öğrenci başarısına etkisi bulunduğu için bu iki kavramın araştırılması gelecekte öğretmenlerin başarısına katkı sağlayacaktır. Aynı zamanda bu çalışma, üniversitelerin gelecekte sunacakları öğretmen gelişim programlarına ışık tutabilir.

**Anahtar Kelimeler:** Zihniyet, Öz yeterlik İnancı, İngiliz Dili Eğitimi

## TABLE OF CONTENTS

<b>THESIS APPROVAL</b> .....	<b>i</b>
<b>DEDICATION</b> .....	<b>iii</b>
<b>ACKNOWLEDGMENT</b> .....	<b>iv</b>
<b>ABSTRACT</b> .....	<b>v</b>
<b>ÖZET</b> .....	<b>vii</b>
<b>TABLE OF CONTENTS</b> .....	<b>ix</b>
<b>LIST OF ABBREVIATIONS</b> .....	<b>xiv</b>
<b>CHAPTER I</b>	
<b>INTRODUCTION</b> .....	<b>1</b>
1.1 Statement of the problem .....	4
1.2 Purpose of the Study .....	5
1.3 Significance of the Study .....	5
1.4 Research Questions .....	6
1.5 Key Terms .....	7
<b>CHAPTER II</b>	
<b>LITERATURE REVIEW</b> .....	<b>8</b>
2.1 Introduction .....	8
2.2 The Meaning System .....	8
2.3 Implicit Theories of Intelligence .....	10
2.4 Mastery-Oriented vs. Helpless-Oriented Responses to the Failures .....	12
2.5 Learning Goals vs. Performance Goals .....	13
2.6 Student Effort and Self Confidence .....	14
2.7 Mindset .....	16
2.7.1 Fixed Mindset (The Entity Theory) .....	16
2.7.2 Growth Mindset (The Incremental Theory) .....	17
2.8 The Role of Mindset in Education .....	18
2.8.1 Students' Mindsets .....	18
2.8.2 Teachers' Mindsets .....	20
2.8.3 Can mindset types be changed? .....	24
2.9 Mindset in English Language Teaching .....	28
2.10 The Importance of Having A Growth Mindset for Educators .....	30
2.11 Self-efficacy Theory .....	33
2.12 Sources of Self-efficacy .....	34

2.12.1 Mastery experiences .....	34
2.12.2 Vicarious experiences .....	35
2.12.3 Social Persuasion .....	35
2.12.4 Physiological and Emotional States.....	36
2.13 Teacher Efficacy and Its Measurement .....	36
2.14 Factors Influence Teachers' Sense of Efficacy Beliefs .....	38
2.15 Teachers' Sense of Efficacy Beliefs and Teachers' Behaviors .....	39
2.16 Teachers' Sense of Efficacy Beliefs and Student Achievement .....	40
2.17 Relationship Between Mindset and Perceived Self-Efficacy Belief .....	41
2.18 Conclusion.....	41
<b>CHAPTER III</b>	
<b>METHODOLOGY .....</b>	<b>42</b>
3.1 Introduction .....	42
3.2 Nature of the Research .....	42
3.3 Research Design .....	43
3.4 Setting and Participants .....	44
3.5 Data Collection Instrument .....	45
3.5.1 Teacher Mindset Instrument (TMI) .....	46
3.5.2 Teachers' Sense of Efficacy Scale .....	47
3.6 Data Analysis Procedure .....	48
3.7 Research Questions .....	48
<b>CHAPTER IV</b>	
<b>FINDINGS .....</b>	<b>50</b>
4.1. Introduction .....	50
4.2 Results of Descriptive Statistics .....	50
4.2.1 Descriptive Statistics for Teachers' Sense of Efficacy Scale .....	50
4.2.2 Descriptive Statistics for Teacher Mindset Scale .....	51
4.3 Results of the Item Statistics .....	52
4.3.1 Item Statistics for Teachers' Sense of Efficacy Scale .....	52
4.3.2 Item Statistics for Teacher Mindset Scale .....	52
4.4 Results for Research Question 1 .....	52
4.4.1 Pearson Correlation Analysis Between English Teachers' Mindsets and Their Perceived Self-Efficacy Beliefs .....	53
4.4.2 Regression Analysis Results.....	53

4.5 Results for Research Question 2 .....	55
4.5.1 Results of Teachers’ Mindset Scale Scores Regarding Gender.....	55
4.5.2 Results of Teachers’ Mindset Scale Scores Regarding Place of Work .....	56
4.5.3 Results of Teachers’ Mindset Scale Scores Regarding Highest Education Level .....	56
4.5.4 Results of Teachers’ Mindset Scale Scores Regarding Participation in Teacher Training or Certificate Programs .....	57
4.5.5 Results of Teachers’ Mindset Scale Scores Regarding Teaching Experience .....	57
4.5.6 Results of Teachers’ Mindset Scale Scores Regarding BA Degree .....	58
4.6 Results for Research Question 3 .....	58
4.6.1 Results of Teachers’ Sense of Efficacy Scale Scores Regarding Gender..	58
4.6.2 Results of Teachers’ Sense of Efficacy Scale Scores Regarding Place of Work .....	59
4.6.3 Results of Teachers’ Sense of Efficacy Scale Scores Regarding the Highest Education Level .....	60
4.6.4 Results of Teachers’ Sense of Efficacy Scale Scores Regarding Participation in Teacher Training or Certificate Programs.....	60
4.6.5 Results of Teachers’ Sense of Efficacy Scale Scores Regarding Teaching Experience .....	61
4.6.6 Results of Teachers’ Sense of Efficacy Scale Scores Regarding BA Degree .....	62
<b>CHAPTER V</b>	
<b>DISCUSSION AND CONCLUSION.....</b>	<b>64</b>
5.1. Introduction .....	64
5.2. Discussion of the Findings .....	65
5.2.1 Discussion of Research Question 1 .....	65
5.2.2 Discussion of Research Question 2 .....	67
5.2.3 Discussion of Research Question 3 .....	69
5.3. Pedagogical Implications .....	73
5.4. Suggestions for Further Research and Limitations of the Study.....	74
5.5. Conclusion.....	74
<b>REFERENCES .....</b>	<b>76</b>
<b>APPENDICES .....</b>	<b>94</b>
<b>CV .....</b>	<b>98</b>

## LIST OF TABLES

Table 3.1: Demographic Characteristics of the Participants.....	44
Table 3.2: Subscale Items in Teachers’ Sense of Efficacy Scale and Regarding Questions.....	48
Table 4.1: Descriptive Statistics for Teachers’ Sense of Efficacy Scale.....	51
Table 4.2: Descriptive Statistics for Teacher Mindset Scale.....	51
Table 4.3: Item Statistics for Teachers’ Sense of Efficacy Scale.....	52
Table 4.4: Item Statistics for Teacher Mindset Scale.....	52
Table 4.5: Pearson Correlation Analysis Between English Teachers’ Mindset Scores and Their Perceived Self-Efficacy Beliefs.....	53
Table 4.6: Testing Regression Assumptions for Regression Analysis.....	54
Table 4.7: Regression Analysis for Predicting Teachers’ Mindset Scale Scores by Teachers’ Sense of Efficacy Scale.....	55
Table 4.8: Independent Samples T-Test Results of Teachers’ Mindset Scale Scores Regarding Gender.....	56
Table 4.9: Independent Samples T-Test Results of Teachers’ Mindset Scale Score Regarding Place of Work.....	56
Table 4.10: ANOVA Test Results of Teachers’ Mindset Scale Scores Regarding Highest Education Level.....	56
Table 4.11: Independent Samples T-Test Results of Teachers’ Mindset Scale Scores Regarding Participation in Teacher Training or Certificate Programs.....	57
Table 4.12: Kruskal Wallis H Test Results of Teachers’ Mindset Scale Scores Regarding Teaching Experience.....	57
Table 4.13: Kruskal Wallis H Test Results of Teachers’ Mindset Scale Scores Regarding BA Degree .....	58
Table 4.14: Independent Samples T-Test Results of Teachers’ Sense of Efficacy Scale Scores Regarding Gender .....	59

Table 4.15: Independent Samples T-Test Results of Teachers' Sense of Efficacy Scale Scores Regarding Place of Work.....	59
Table 4.16: ANOVA Test Results of Teachers' Sense of Efficacy Scale Scores Regarding the Highest Education Level.....	60
Table 4.17: Independent Samples T-Test Results of Teachers' Sense of Efficacy Scale Scores Regarding Participation in Teacher Training or Certificate Programs .....	61
Table 4.18: Kruskal Wallis H Test Results of Teachers' Sense of Efficacy Scale Scores Regarding Teaching Experience .....	61
Table 4.19: Kruskal Wallis H Test Results of Teachers' Sense of Efficacy Scale Scores Regarding BA Degree .....	62



## **LIST OF ABBREVIATIONS**

**ITIS** Implicit Theories of Intelligence Scale

**TMI** Teacher Mindset Instrument

**TSES** Teachers' Sense of Efficacy Scale

**SAT** Scholastic Aptitude Test

**ELT** English Language Teaching



# CHAPTER I

## INTRODUCTION

In our swiftly developing world, there is a growing need for people who have a good command of the English language in society. English belongs to the world and mostly non-native speakers – who today far outnumber native speakers. This situation has led many countries to focus on teaching English and force them to find ways to provide better English teaching methods. The younger generation is our tomorrow, but much of the duty of forming our future in the civilization and conditions rely on teachers. Teachers influence their students not only with their knowledge or academic competence in the field but also with their passion, endeavor, and self-efficacy (Patrick & Joshi, 2019). As Segal (1988: 3) stated:

*From studies conducted around the world, researchers have distilled a number of factors that enable such children of misfortune to beat the heavy odds against them. One factor turns out to be the presence in their lives of a charismatic adult—a person with whom they can identify and from whom they gather strength. And in a surprising number of cases, that person turns out to be a teacher.*

Teachers have an important place in students' lives, and they affect students in many ways. Teachers' mindsets and their perceived self-efficacy beliefs are included in these ways. Mindsets are the beliefs of people's characteristics such as intelligence, character, and language aptitude, whether they are inherently determined or can be improved (Lou & Noels, 2019). Whereas some people have a fixed mindset and believe that their attributes, such as intelligence, are inherited and unchangeable, other people believe in the growth mindset that their abilities and intelligence can be improved through effort. People can have different types of mindset in different areas such as business, education. However, regardless of the field, the mindset of people plays a significant role in their life-long success (Dweck, 2015). People who have growth mindsets are more open to trying new ways, do not avoid difficulties, and are more persistent in overcoming challenging tasks and failures. Dweck (1999) examined the relationship between mindset and education and stated that students with growth mindsets are more advantageous. Students who have fixed mindsets avoid making mistakes because they think that it makes them look stupid; however, they want to

look smart. Furthermore, they do not strive because they think they are incapable of overcoming the difficulties. Contrarily, students with growth mindsets attach importance to learning itself. Their main goal is to benefit from the school for learning itself and using strategies and effort where they are necessary. They do not give up despite challenging tasks; they learn from the mistakes they make (Dweck, 1999).

Teachers have a notable influence on the students' mindsets (Blazar & Kraft, 2015; Ruzek et al., 2015; Kraft, 2019). It should be mentioned that teachers associated with a growth mindset give importance to learning and taking risks rather than being a "good" teacher. Like the students with growth mindsets, they give importance to the learning process rather than their reputation. For those teachers, it is not enough to define somebody as a good teacher when a lesson goes as planned; these teachers are always open to trying new methods. This part is especially crucial for new teachers. In the early years of their profession, teachers tend to assume that everything will be fine and perfect. Instead, teachers should give themselves time and should not hesitate to try new approaches and find the one that suits them and their students best. They can achieve this goal by paying attention to professional development and following current literature, observing their colleagues, and receiving feedback from them. Teachers with fixed mindsets are reluctant to put themselves under a scope like this. They are not open to negative comments from their colleagues. Therefore, these people are less involved in collaborative works (Dweck, 2015).

Mostly focusing on mathematics teachers, researchers have tried to find out the effects of teachers' mindsets on students' mindsets through questionnaires, interviews, and lesson observation methods (Park et al., 2016; Anderson, Boaler & Dieckmann, 2018; Sun, 2018). When teachers have growth mindsets, they assume that students' abilities and intelligence are flexible so that they can be expanded and improved over time with effort. However, teachers who have fixed mindsets believe that intelligence is something we were born with, and that is why it is not possible to change it. As a result, those with fixed mindsets incline to avoid difficulties and circumstances that are perceived as creating a hindrance (Elliott & Dweck, 1988; Dweck & Leggett, 1988; Dweck, 1991, 2006; Dweck, Chiu & Hong, 1995; Hong et al., 1999). Teachers who believe that their abilities can be improved are also more likely to develop the belief that students' abilities can be improved. This situation is reflected in the strategies that teachers prefer in the classroom (Gutshall, 2013). Teachers' mindset types affected the

effectiveness of the teacher and students' success (Duckworth, Quinn & Seligman, 2009). At the same time, studies have shown that the teachers' self-efficacy beliefs affect the student support which is provided by the teacher in the students' learning process (Guo et al., 2012; Muijs & Reynolds, 2015). Bandura (1990: 101) defines self-efficacy as: "What people think, believe, and feel affects how they behave.". A teacher's sense of efficacy is a crucial element of efficient teaching (Bandura, 1997). According to the studies of Chong & Kong (2012), teachers with higher self-efficacy beliefs set higher objectives than those with low self-efficacy.

The self-efficacy concept takes its roots from the Social Cognitive Theory. According to the Social Cognitive Theory, the learning process takes place through the observation of other people in a social context (Bandura, 1971). People's behavior, personal factors, and their environment are interrelated and affect each other. Self-efficacy and mindset concepts are included in personal factors. Mindset and self-efficacy concepts have an impact on teachers' strategies used in the classroom and their way of perceiving students (Watanabe, 2006, Gutshall, 2013). Teachers enter the classroom within the framework of a certain mindset and a belief in self-efficacy, and the teachers' student expectations directly or indirectly affect the teaching method and the academic achievement of the students (Webb, 2015).

Mindset and self-efficacy concepts were investigated as students' beliefs and teachers' beliefs and their effects on students' learning processes (Watanabe, 2006; Guo et al., 2012; Gutshall, 2013; Muijs & Reynolds, 2015). However, the relationship between the two concepts has not been extensively studied in terms of the English language teaching area. This study aims to reveal the relationship between English preparatory teachers' mindsets and their perceived self-efficacy beliefs such as efficacy beliefs in instructional strategies, classroom management, and student engagement. Also, in this study, the effects of demographic aspects of the participants such as gender, place of work, highest education level, participation in a teacher training or certificate programs, teaching experience, BA degree on these two concepts are investigated. Participants of this study are English teachers who are working in preparatory programs at state and foundation universities in Turkey. Elimination of uncertainty can contribute to teachers' and university administrations' future professional development and student achievement.

## **1.1 Statement of the problem**

The way the teacher approaches the student creates a reaction. Due to this reciprocal relationship, teachers' mindsets and perceived self-efficacy beliefs are essential for establishing a productive relationship. Even the teachers' small gestures have a significant impression on students' lives (Brooks & Goldstein, 2008). When a teacher has a fixed mindset, learning something new will come as a threat to the "good" teacher concept. In some scenarios, teachers blame students and complain about their lack of motivation or disruptions of the course. They perceive these types of students as threats. However, those who have a growth mindset discern these situations as challenges and react them as opportunities to develop their skills and make them better teachers (Dweck, 2015). The teacher might be angry with a student because the student continually asks questions and interrupts the lesson. Still, even though the teacher thinks that the face does not show it, this irritation may be evident from the teacher's face and tone. Another teacher might think otherwise about the same learner. For instance, the teacher may assume that the learner is following the course material well so that the negative reaction will be less than the first teacher. Teachers may have different beliefs, even with the same student, due to their mindset types. Students endeavor to fulfill the expectations of the teacher. If the teacher sees the student as a failure, the student will accept it and react accordingly (Brooks & Goldstein, 2008). Rather than waiting for the student to change, teachers can change their mindset that it makes little sense to continue repeatedly doing the same thing if the actions are not leading to positive results (Brooks & Goldstein, 2004).

Dweck (2017) states that when a teacher has a fixed mindset, student achievement remains the same throughout the year. High-level students continue to get high grades and low-level students continue to get low grades. Nevertheless, when a teacher has a growth mindset, improvements are also seen in students with low grades. To increase student success, another important element can be the teachers' perceived self-efficacy beliefs. Jerald (2007) states that teachers with high self-efficacy attach more importance to planning and organizing, are more open to new ideas and try to use new teaching techniques and strategies according to the needs of their students, are more stable when the course flow does not go as expected, and they criticize less the students who are trying to succeed and make mistakes more often than their classmates. Mindset and self-efficacy have positive effects on the teaching; accordingly, this study

aims to demonstrate the relationship between mindset and self-efficacy and their relations to the demographic factors such as gender, workplace, highest education level, participation in a teacher training program, teaching experience and graduated departments. The researcher believes that teachers with growth mindsets will have higher self-efficacy levels than those with fixed mindsets. It is assumed that teachers who believe that intelligence and skills can be improved also apply this idea to their lives and have higher self-efficacy beliefs in their teaching methods.

### **1.2 Purpose of the Study**

Mindset and self-efficacy concepts were investigated separately, however, how the mindset affects the teachers' perceived self-efficacy beliefs and the relationship between these two concepts was not studied in terms of English language teachers. This study aims to reveal the relationship between mindset and perceived self-efficacy belief and its subscales such as efficacy belief in instructional strategies, classroom management, and student engagement by focusing on educators who teach English in preparatory programs at the state and foundation universities. The study considers self-efficacy and mindset as two of the foremost factors in prognosticating teacher achievement. At the same time, this study aims to determine the effects of demographic factors such as gender, workplace, highest education level, participation in a teacher training program, teaching experience and graduated departments on the perceived self-efficacy beliefs and mindsets of the teachers.

### **1.3 Significance of the Study**

After reviewing the related literature, it can be said that there is minimal research in Turkey in terms of the relationship between mindset and self-efficacy. This study reveals the relationship between teachers' mindsets and their perceived self-efficacy beliefs and their subscales such as efficacy in instructional strategies, classroom management, and student engagement while relating them to the English Language Teaching (ELT) field. In this context, this study is essential for the ELT field because the findings of the study will shed light on the perceived self-efficacy beliefs and mindsets of English preparatory teachers. The role of English teachers is vital in today's world, where learning English is essential. Taking into consideration of the student's learning process, teachers' belief systems such as self-efficacy and mindsets are critical. Teachers' belief systems affect the strategies or methods they use in the

classroom, so students learning processes are also affected (Watanabe, 2006). Trouilloud et al. (2006) observed that teachers with growth mindsets created a classroom environment that would help students to learn more. However, when the teacher had a fixed mindset, it was seen that instead of being process-oriented, it was more performance-oriented, and they created a threatening classroom environment. This situation causes students to take fewer responsibilities in their learning processes in the apprehension of making a mistake (Stipek et al. 2001). If teachers do not have growth mindsets, the strategies they use in the classroom are also doubtful to support students' growth mindsets. However, Dweck (2008) emphasizes that mindsets can change. Likewise, self-efficacy levels can be increased through experiences, observations, and learning from mistakes (Bandura, 1997; Tobery-Nystrom, 2011; Bonner, 2012). When teachers believe in their teaching abilities, they have high self-efficacies (Wood & Bandura, 1989). Teachers with high self-efficacy believe that all students can learn and are likely to have a growth mindset. Teachers with growth mindsets try to help even the underachiever students in their classes (Dweck, 2017). Since these two concepts are variable, examining the relationship between the two will be beneficial for teachers' future success. Overall, this study will have a substantial effect on personal development and student-teacher relationship in English language education. If teachers' self-efficacy beliefs are low or they are inclined to have fixed mindsets, institution administrators can aim to change their mindsets and increase their self-efficacy levels by providing teachers with professional development workshops. In this way, they can also increase student success since teachers' mindset and their self-efficacy beliefs are related to it.

#### **1.4 Research Questions**

This research tries to find answers to these questions:

- 1) Is there a statistically significant relationship between the English Preparatory teachers' mindsets and their perceived self-efficacy beliefs in teaching?
- 2) Do English Preparatory teachers' mindset scale scores differ in terms of gender, place of work, highest education level, participating in teacher training programs, having a training certificate, teaching experience, or their BA degree?
- 3) Do the scores of English Preparatory teachers' sense of efficacy scale and its subscales differ in terms of gender, place of work, highest education level,

participation in teacher training programs, having a training certificate, teaching experience, or their BA degree?

### **1.5 Key Terms**

**Fixed Mindset (Entity Theory of Intelligence)** - A fixed mindset is a mindset type based on the belief that one's intelligence and ability cannot change over time and effort. The entity theory is interchangeable with a fixed mindset (Dweck, 2006).

**Growth Mindset (Incremental Theory of Intelligence)** - A growth mindset is a mindset type based on the belief that one's intelligence and ability can change through hard work and effort over time. The incremental theory is interchangeable with the growth mindset (Dweck, 2006).

**Self-efficacy** - Self-efficacy is a person's belief in his or her capabilities to accomplish outcomes and succeed in what a person plans to do (Bandura, 1997).

**Teacher Efficacy** - Teacher efficacy is the belief of a teacher in his or her capability to impact students learning processes (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998).

**Teacher Mindset Instrument (TMI)** - The TMI is an instrument utilized for measuring teacher mindset (Gero, 2013).

**Teacher Sense of Efficacy Scale (TSES)** - The TSES is an instrument utilized for determining the level of teacher self-efficacy in three factors. These factors include efficacy in student engagement, instructional strategies, and classroom management (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998).

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents the previous studies regarding teachers' perceived self-efficacy beliefs and mindset. Mindset and perceived self-efficacy have an impact on teachers' strategies in the classroom (Bandura, 1997; Dweck, 2006). Teachers must maintain their lessons with students from different levels, age groups, countries, regions, and assist them in their educational process. Therefore, teachers must be prepared for different situations and provide students with a successful education.

Mindset research, which has been going on for 30 years in the fields of psychology and education, has an impact on classroom motivation and behavior (Dweck, Walton & Cohen, 2014). It is necessary to investigate the mindset and self-efficacy beliefs of the teachers in detail and comprehensively for establishing the necessary connection in the education and psychology literature. The fact that teachers' behaviors and strategies in the classroom have some effects on student achievement makes these two concepts very important. In this section, the researcher aims to review the related literature on these two concepts.

#### **2.2 The Meaning System**

The view that people's attributes such as behavior, intelligence can be improved has a very long history, and it became even more critical during the Renaissance period. Renaissance is not only a period when science and art come to the fore but also a time when the puzzle of which part of human beings is different from other creatures is raised. Pico della Mirandola (1486/2012), a key thinker of the age, argued that humans are the only species with the ability to transform themselves. He explained that the underlying reason for humans to be different from other species is that their potential to turn themselves into what they strive to be (Pico della Mirandola, 1486/2012).

Towards the end of the 1960s, the behavioral process in the field of psychology began to lose its importance, and the cognitive process started to gain importance (Dweck & Yeager, 2019). It is not enough to focus only on the behavioral process and its development. People's attributes are also important in people's thoughts and actions (Dweck, 1999). Therefore, Attribution Theory claimed that people create explanations

for the actions that happened to them, and according to these explanations, they create a counter-reaction. For example, unsuccessful students consider this situation by seeing their failure as a disability. Alternatively, other students think that their lack of effort causes the error, and they look for a solution (Weiner & Kukla, 1970).

People attach meaning to their experiences, and they organize their worlds by developing beliefs. These are called meaning systems, and every person has different systems. People's meaning systems allow people to think, feel, and behave differently, even when the situations are the same. Meaning systems have an important place in people's lives because their responses to difficulties in life, self-control, and their desire to improve themselves depend on these systems. People's experiences enable them to form beliefs, and these beliefs and meaning systems affect their behavior and motivation (Dweck, 1999). Dweck & Yeager (2019) claimed that "Some beliefs are not isolated ideas, but rather can serve an organizing function, bringing together goals, beliefs, and behaviors into what might be called a meaning system" (p. 483). Based on this perspective, Dweck (1999) claimed that people can be divided into two groups in terms of how they perceive their intelligence and talents. Those with entity theory would care about their performance and avoid challenges. Likewise, good performances are attributed to being very talented, and poor performances and failures are attributed to being untalented. On the contrary, when people hold incremental theory, they perceive intelligence and talent as a developable phenomenon, learning goals become more important, and challenges are inevitable in learning. The effort is part of the learning process, and this leads to persistence (Leggett, 1986; Miele & Molden, 2010; Miele, Metcalfe & Son, 2013). Within the framework of meaning systems, more extensive studies were also conducted. Robins & Pals (2002) conducted a study with 363 university students and the researchers examined students' implicit theories of intelligence, goals, and their reactions to difficulties for three years. According to the findings of the study, implicit theories of intelligence are related to all the variables (Robins & Pals, 2002). Later, in a correlational study conducted by Blackwell, Trzesniewski & Dweck (2007), 373 seventh-grade students were observed for two years, and the same variables were examined as the study of Robins and Pals (2002). In this study, effort beliefs were also included in the variables. All these variables were found to have a connection with the implicit theories of intelligence.

### **2.3 Implicit Theories of Intelligence**

The implicit theory of intelligence tries to find the answer to the question of why some people perceive challenges as opportunities to improve while others try to avoid difficulties even when they have the same abilities (Dweck & Yeager, 2019). Dweck & Yeager (2019) stated that: "We called them theories because they were potentially falsifiable ideas about what intelligence is and how it might work. We called them implicit because we believed that people were often unaware of them." (p. 483). People are classified on a continuum according to their perspective of intelligence (Molden, Plaks & Dweck, 2006). There is an entity theory at one end of this continuum and claims that intelligence is fixed, and it is an innate capacity. At the other end of the continuum is the incremental theory and claims that intelligence can be developed with the appropriate strategy and necessary effort. People who have entity theory believe that intelligence cannot be developed. People have a certain amount of intelligence, and this cannot be changed over time. People who have an incremental theory, on the other hand, do not see intelligence only as something they have and believe that it can be improved with the new information they learn. Henderson & Dweck (1990) found that students with incremental theory were significantly more advantageous than those with entity theory with higher grades in the first year of secondary school. An experimental study later supported the relationship between implicit theories of intelligence and success. Aronson, Fried & Good (2002) offered incremental theory interventions to university students and compared them with a control group. The group who took incremental theory interventions had higher SAT (Scholastic Assessment Test) results than the control group. In another study, Good, Aronson & Inzlicht (2003) supported that the incremental theory interventions on adolescents led to a significant increase in grades compared to control groups. According to these studies, it can be said that incremental theory had a positive effect on test results in real life. However, these studies had some limitations. These studies did not examine the long-term effect of incremental theory and did not observe changes in the motivational sense.

Implicit theories of intelligence not only have effects on students but also teachers. Teachers' beliefs toward intelligence affect their behavior in the classroom (Lee, 1996; Deemer, 2004; Dupeyrat & Marine, 2005). Lee (1996) examined teachers' approaches to students according to their implicit theories of intelligence. Teachers with entity

theory based their beliefs about student achievement on intelligence and ability. On the contrary, teachers with the incremental theory were more focused on the strategies, and the effort students put into the learning process. Teachers with the incremental theory considered errors as part of the learning process. On the contrary, those with the entity theory described the errors as obstacles to be removed. Teachers who think that students have a certain amount of intelligence provide more limited support to their students. Contrarily, when teachers believe that intelligence is developable, they are expected to provide their students with the necessary strategies to solve problems and show more support in their learning processes. In addition, since teachers with entity theory do believe that talents can be improved, their beliefs are relatively less than teachers with the incremental theory for their contribution to the development of students' learning process (Deemer, 2004). That is why they focus more on students whom they acknowledge potentially better than the others. Heslin, Vandewalle & Latham (2006) carried out a study apart from the education field and revealed that managers with incremental theory try to guide their employees more than those with entity theory.

According to the researches, there is also a relationship between implicit theories of intelligence and the types of praises and feedbacks provided by teachers (Hokoda & Fincham, 1995; Mueller & Dweck, 1998; Grolnick et al., 2002; Rattan, Good & Dweck, 2012; Ng & Wang, 2012). Mueller & Dweck (1998) indicated that even minor changes in teachers' vocabulary choices while providing feedback to the students who were working on a task could affect students' next task choices. In their study, the teachers with the entity theory chose the way of praise over intelligence, while the teacher with the incremental theory preferred praising the learning process. Students who received result-oriented praise chose the next stage easier to keep proving that they were smart. On the contrary, students who received the process-oriented praise undertook a more difficult task. Being focused on results and performances can send entity theory signals to children and ensures that academic failure becomes a concern to the students. On the contrary, being focused on the learning process may send a message to children that intelligence will develop along with the learning process (Hokoda & Fincham, 1995; Grolnick et al., 2002; Ng & Wang, 2012). Rattan, Good & Dweck (2012) stated that teachers who had entity theory were more open to judging students. Likewise, they were more prone to ignore unsuccessful students. According

to those teachers, the reason behind the failure of students who were academically behind was that students' intelligence was insufficient.

In the learning process, some people prefer to give up, and some of them resist difficulties. According to the reactions to the failures, people are classified into two groups as mastery-oriented and helpless-oriented.

#### **2.4 Mastery-Oriented vs. Helpless-Oriented Responses to the Failures**

The way people react to failures and errors is one of the factors that determine their learning processes and academic success. The difference between how some people avoid obstacles and others view them as opportunities to improve themselves was investigated. As a result, people's reactions to failures are divided into two: helpless and mastery-oriented patterns (Diener & Dweck, 1978,1980). Mastery-oriented is a term that describes students who are focused on achieving success despite difficulties (Diener & Dweck, 1978,1980). Helpless-oriented is a term that indicates students' reactions against errors, and in case of failure, the students say that the situation is out of their control and nothing can be done (Dweck & Reppucci, 1973; Dweck, 1975, 1976).

Seligman & Maier (1967) first found helpless responses in animals. In their study, animals could not get out of a painful situation because they thought it was out of their control. In another study, Diener & Dweck (1978,1980) gave some problems to fifth and sixth-grade students. After solving the first eight questions with the necessary clues, the students had problems in the last four questions because these questions were difficult to solve for their age. Researchers observed the reactions and thoughts of the students when an obstacle appeared. Firstly, the strategies used by the students were observed. Secondly, students were asked to express their opinions while solving questions. Finally, students were asked to remember which ones they did right or wrong at the end of the questions. When the emotions experienced by students were observed, it was seen that students experienced rapid emotional changes against failure. Even though students were pleased with the first four questions, later, they showed negative emotions when they encountered difficulties. Many reported that they were bored, even though they were happy a few minutes ago. When the strategies and emotional processes experienced by the students were examined, two different reactions emerged. One of these two results, helpless-oriented students thought that

their intelligence was insufficient when they faced difficulties and started to blame their memories. When they were asked whether they could solve the questions they had solved before, students stated that they could not. However, those who were mastery-oriented said that they could answer the questions when asked again. Students in the mastery-oriented group supported the idea that effort was necessary in order to succeed. They showed their effort while they were addressing difficult problems. The helpless-oriented group of students not only lost trust in their abilities but also lost their confidence. When asked how many questions they successfully answered, they thought they gave more wrong answers, although only four questions were above their level. The mastery-oriented group remembered the right and wrong answers correctly. Students who fit the helpless pattern gave up very quickly and deteriorated their skills and shifted to depression. To sum up, helpless-oriented students ceased to strive for success, meanwhile, mastery-oriented students perceived difficulties as an opportunity to improve themselves (Diener & Dweck, 1978, 1980). This situation poses a significant disadvantage to students who are in the learning process at school. Some students are ready to give up and feel pessimistic as there is always confusing new information in the English language learning process.

## **2.5 Learning Goals vs. Performance Goals**

The implicit theory of intelligence leads students to pursue different goals. Students who have entity theories think that intelligence is not developable and they are more focused on performance goals to show that they are smart. Students who have incremental theories believe that intelligence can be improved, care about being smarter, and they promote learning goals (Bandura & Dweck, 1985; Farrell & Dweck, 1985; Robins & Pals, 1998). In a study conducted by Bandura & Dweck (1985), eighth-grade students' theory of intelligence was measured through a questionnaire. Then, different tasks were given, and one of them was asked to be selected. The first two tasks were easy and performance goal-oriented, which could be done without mistakes. Other tasks were a bit difficult and focused on learning goals. It was about learning something new and useful. A significant relationship was found between students' theory of intelligence and their goal preferences. Those with the entity theory of intelligence were more focused on performance goals. Those with the incremental theory were mostly focused on learning goals. In another study conducted by Farrell & Dweck (1985), middle school students received a material to learn during the week

in science class. Along the week, informative and visual booklets were given regarding how to solve new problems. After the learning process, students were given new problems to apply what they had learned. Although these problems were not the same as the ones in the material, they were very similar to what they had learned. Students with learning goals were significantly more successful than those with performance goals.

In the study conducted by Robins & Pals (1998) at the university level, the relationship between students' theory of intelligence and achievement goals was tried to be determined. The study showed that entity theorists were more focused on performance goals and incremental theorists were more focused on learning goals. Besides, it was determined that those with entity theory were more prone to blame their skills in the face of mistakes, to be more stressed, to be embarrassed by their academic averages, and to give up in stressful situations. Robins & Pals (1988) stated that holders of entity theory enrolled Berkeley University with higher scores in the SAT exam, but this did not turn into higher success. On average, the self-confidence of those with entity theory was lower than those with the incremental theory, and the gap widened over the years. Entity theorists who were also performance-goal-oriented experienced a significant decrease in their self-confidence with the negative feedback they received. Students experienced anxiety in the face of difficulties, as the entity theory belief regarded intelligence as determined and unalterable. Those who had incremental theory were more willing to learn and challenge because they believed that intelligence could be improved. According to them, failures and obstacles were part of the long-term learning and specialization, so they continuously strived to come up with new strategies. Therefore, it can be said that the way students perceive intelligence also affects their effort and self-confidence.

## **2.6 Student Effort and Self Confidence**

Students' implicit theories of intelligence affect their academic success and self-confidence. Although students who do not believe that intelligence is developable have high confidence in themselves, their self-confidence decrease in the face of obstacles. Students with entity theory do not believe that clever people should strive to be successful. On the contrary, those who have incremental theory believe that it is necessary to strive for success (Dweck,1999). Studies were conducted to determine

the effects of implicit theories of intelligence on students' efforts (Leggett & Dweck 1986; Henderson & Dweck, 1990; Mueller & Dweck, 1997; Hong et al., 1998).

Leggett & Dweck (1986) measured eighth-grade students' implicit theories of intelligence and goals. Learners with entity theory supported that when a subject was studied a lot, it implied that they were not smart. Students stated that if people were good at something, they would not need to put extra effort. Students with the incremental theory, on the other hand, took the opposite view. Students perceived effort not as disdainful, but as an integral part of the learning process and realization of their potential. According to those students, even genius people had to exert effort. Mueller & Dweck (1997) conducted a study with university students and they found similar results. Studies showed that although self-confidence is a good thing, it often does not contribute to students when they faced difficulties (Henderson & Dweck, 1990; Hong et al., 1998). Students who held an entity theory in their transition to secondary school came with confidence in their intelligence; however, their academic performance decreased over time (Henderson & Dweck, 1990). According to Henderson & Dweck (1990), students' self-confidence contributed to their academic success. However, this was only possible when students did not encounter new difficulties. When students underwent difficult transitions or encountered failures, students lost their self-confidence. Believing that talents were innate made the transition process threatening for students due to the mistakes, and competitions which were very common during the transition process. These difficulties can cause students to stop trying where they need to try harder. Because if people have an entity theory regardless of their confidence in themselves, failures imply that their intelligence is low. Hong et al. (1998) measured the students' confidence in their intelligence and their theories of intelligence. Then, they focused on the meanings they attributed to failures. In both studies, students who supported entity theory had high confidence in their abilities, but also, they perceived failure as a result of their intelligence. The group that blamed their abilities least in their mistakes were those with an incremental theory. Making mistakes in the incremental theory was a natural part of the learning process and was an opportunity to develop new strategies. These studies revealed the importance of the students' theories of intelligence no matter how high the level of self-confidence students have.

## **2.7 Mindset**

Implicit theories of intelligence investigate why people with equal abilities differ in success. According to this theory, intelligence can be regarded in two ways. While the theory of entity believes that intelligence is permanent and cannot be improved, incremental theory acknowledges that intelligence can be developed over time and effort (Dweck, 1999). Mindset term was introduced in 2006 by Carol Dweck. Mindset is people's belief that they hold whether intelligence and other characteristics are fixed or developable. Lou and Noels (2019) provided a definition as mindsets are the beliefs of people's characteristics such as intelligence, character, and language aptitude, whether they are inherently determined or can be improved. These beliefs affect the goals people have and whether they give up or not while they try to achieve these goals. According to Dweck (2006), people are divided into two: those with growth mindsets and those with fixed mindsets. These varieties of people affect their decisions and behaviors in their lives. While the growth mindset advocates that the abilities can be improved and it is necessary to strive to achieve the goals, the fixed mindset believes that intelligence is stable and cannot be developed with effort and time. Dweck (2006: 16) stated that “In one world, effort is a bad thing. It, like failure, means you’re not smart or talented. If you were, you wouldn’t need effort. In the other world, effort is what makes you smart or talented.”.

The term mindset can be used interchangeably with Dweck’s (1999) implicit theories of intelligence. Likewise, instead of the incremental theory of intelligence, a growth mindset can be used interchangeably, and a fixed mindset can be used instead of the entity theory of intelligence (Dweck, 2006).

### **2.7.1 Fixed Mindset (The Entity Theory)**

People with a fixed mindset do not believe that their abilities can be improved, while those with a growth mindset believe that abilities and intelligence can be developed over time (Dweck, 2006). People who perceive intelligence as an innate capacity care about their competencies. They are afraid of making mistakes and try to avoid difficulties as much as possible (Wood & Bandura, 1989). People with a fixed mindset avoid taking risks while learning new information. Edmondson (1999: 352) stated that “asking for help, admitting errors, and seeking feedback exemplifies the kind of behaviors that pose a threat to face.”. This kind of threat limits individuals’ eagerness

to participate in problem-solving tasks. As a result, people tend to act in ways that hinder learning when they face the potential for threat or embarrassment.

From the fixed mindset framework, hard work, and challenges are bad things. Dweck (1999) observed that people who perceive intelligence as fixed are result-oriented rather than process-oriented. When students have fixed mindsets and fail tests, they show a sense of helplessness and qualify themselves as unsuccessful. Because students with fixed mindsets do not believe that this situation can be changed when they fail, and they fall into the circle of academic failure (Dweck, 1999). If students believe in a fixed mindset, their first goal is to feel smart. So, instead of choosing activities that will improve them, they choose tasks that prove they are smart. At the same time, these students say that hard work will make them feel stupid and that if they have the talent, they do not have to exert any effort (Shaughnessy & Veronikas, 2004). People who hold a fixed view of intelligence is entitled to have a fixed mindset (Dweck, 1999).

### **2.7.2 Growth Mindset (The Incremental Theory)**

People with an incremental theory of intelligence believe that intelligence can be improved through people's effort, experiences, and time (Dweck, 1999). A growth mindset is a belief that people's capacities can be developed over time (Dweck, 2006). These people are focused on learning and describe failures as their experiences (Dweck & Leggett, 1988). For example, students who have a growth mindset and in the process of learning a second language believe that they can learn it by spending time and effort. A growth mindset determines their goals as learning goals, so they are open to challenges and see errors as part of the learning process (Wood & Bandura, 1989). Those with an incremental view of intelligence are considered to have growth mindsets (Dweck, 1999). According to Dweck (2006: 21), "People in a growth mindset do not just seek challenges; they thrive on it. The bigger the challenge, the more they stretch." and Dweck (2006: 99) also stated that "Those with the growth mindset found setbacks motivating. They are informative. They are a wake-up call.". Moser et al. (2011) proved that people with growth mindsets focused on learning lessons from their mistakes by shedding light on the neural connections of the brain. Tirri & Kujala (2016) conducted brain research through neuropsychological mechanisms and found evidence supporting mindset types. Students who have a growth mindset pay attention to learning and improving themselves. They believe that even genius people reach their

potential by making an effort. Therefore, directing students to growth mindsets is one of the essential parts of education (Shaughnessy & Veronikas, 2004).

## **2.8 The Role of Mindset in Education**

Mindset studies in education draw attention to the effects of teacher mindset on students' beliefs, behaviors, and academic performances (Watanabe, 2006; Gutshall, 2013). Brooks, Goldstein & DeVries (2013: 74) defined mindset concerning teachers: "Mindsets are assumptions and expectations we have for ourselves and others that guide our teaching practices and our interactions with students, parents, and colleagues". In this context, the types of mindset that teachers and students have are important. Teachers with growth mindsets believe that their students' skills can be improved, and they can demonstrate this with the praise methods and teaching strategies they utilize in the classroom (Swann & Snyder, 1980; Mueller & Dweck, 1998). Through the praise methods and strategies that teachers employ in the classroom, the mindset of teachers has an impact on students' beliefs, academic performance, and classroom behavior (Gutshall, 2013). Students with a growth mindset put more effort and try different strategies to be successful (Dweck, 1999). So, those students who employ a growth mindset might also have more academically successful results (Henderson & Dweck, 1990; Mueller & Dweck, 1997; Blackwell, Trzesniewski, & Dweck, 2007).

### **2.8.1 Students' Mindsets**

Students' beliefs on intelligence are either fixed, or developable affect their academic achievement and their level of motivation. Students with fixed mindsets do not believe that intelligence can be improved. Therefore, when students begin to have difficulties in academic studies, they doubt their abilities and eventually they stop trying. Students who have a fixed mindset are more likely to give up when faced with difficulties. This situation reduces their academic success. In contrast, students with growth mindsets believe that intelligence can be improved, and they will succeed with the right strategy and hard work. This belief ensures that they put more effort and do not give up in stressful situations. Thus, they reach more successful results academically (Henderson & Dweck, 1990; Mueller & Dweck, 1997; Blackwell, Trzesniewski & Dweck, 2007).

School transitions periods are hard times in students' lives, and they might decrease the students' academic success. For example, in elementary schools, teachers keep

challenging environments as minimum as possible, and therefore students do not face difficulties that prevent their success. However, when they go to secondary school or high school, it becomes difficult to pass, the workload increases, and exam results become critical. Students who have fixed mindsets are ready to give up in this stressful environment. Also, if students have fixed mindsets, they are concerned about how smart they are and perceive failure as a threat, and school transitions pose a significant danger to them. Alternatively, when students have growth mindsets, they perceive failures and difficulties as a part of learning, the new environment will not be problematic for them (Dweck, 1999). Therefore, students with fixed mindsets who are transferred to secondary school are expected to stress more and doubt their intelligence in the new environment. On the contrary, it is estimated that those students who have a growth mindset will be able to create new strategies and less stress in the face of difficulties and maintain their academic success during this transition period. To test these estimates, a study was conducted by Henderson & Dweck (1990). Researchers measured students' trust in their abilities and their theory of intelligence. Students' exam results in the sixth grade were examined to determine their academic success. Then, their academic success at the end of seventh grade was compared. The success of students who believed in the entity theory of intelligence had decreased compared to those with incremental theory. The findings also revealed the students' feelings and thoughts. Students with entity theory were skeptical of their intelligence when they got low marks, but those with the incremental theory thought to reconsider their strategies or put more effort (Henderson & Dweck, 1990).

Students with different theories of intelligence have different views not only the development but also the definition of intelligence. Muller & Dweck (1997) asked university students to define intelligence. While students with the theory of entity defined intelligence as the inherent capacity and potential, those with the incremental theory mostly defined as people's skills and knowledge. Secondly, those with entity theory did not see effort and motivation as elements that increase intelligence. Those with the incremental theory, on the other hand, regarded motivation and effort as an indispensable part of intelligence. Students with incremental theory value the process on the road to academic success and know that many factors affect good and bad performance. In their mistakes, they mostly focus on improvement and they are ready to reconsider their efforts and strategies by focusing on solutions.

Blackwell, Trzesniewski, & Dweck (2007) conducted two studies regarding the relationship between the implicit theories of intelligence and student achievement. In the first longitudinal study, researchers observed the 373 ethnically diverse students. Then, researchers measured students' theory of intelligence and followed their results in the seventh and eighth grades. At the beginning of the period, participants completed a questionnaire that measured their implicit theory of intelligence and effort beliefs. When students started their education, whether they had an entity or incremental theory did not affect the mathematic grades. However, there was an increase over time in the grades of students who supported the incremental theory. In the second study, students with low grades were examined for a shorter period. The incremental theory was taught to half of the students through workshops, and its relationship with classroom motivation and success was examined. 99 seventh-grade students participated in the study. The students who participated were those who were relatively more unsuccessful in sixth-grade mathematics. The first study confirmed that adolescents with incremental theory believed that intelligence could be improved, while at the same time they undertook more challenging goals and perceived effort necessary to reach success. This situation led to an increase in their academic success. The second study proved that teaching the incremental theory of intelligence increased students' motivations in mathematics, according to teachers' reports. Overall, it can be said that mindset types have an important impact on students' achievement and their motivation level.

### **2.8.2 Teachers' Mindsets**

Teachers have a significant influence on the success of students (Swann & Snyder, 1980; Watanabe, 2006; Gutshall, 2013). The studies on teachers' mindsets are generally conducted through surveys, and teachers are expected to respond to predetermined situations. As a result, it was observed that teachers with growth mindsets pay attention to their students' development and efforts over time for measuring students' performance (Mueller & Dweck, 1998; Butler, 2000; Plaks et al., 2001; Rattan, Good & Dweck, 2012).

In their study, Swann & Snyder (1980) investigated the effects of teachers' mindsets on their preferred teaching strategies and student outcomes in the classroom. As a result of the research, it was revealed that the mindset types of the teachers had a fundamental relationship with the teaching strategy they used. Teachers who believed

that intelligence was fixed used fewer effective methods and generally supported students whom they perceived as more capable. On the contrary, teachers who believed that intelligence could be improved had used more effective teaching methods and supported students who had less ability than other students.

Watanabe (2006) studied the relationship between teachers' mindsets and their preferred teaching strategies. The researcher divided teachers into groups and collected qualitative data from them. Based on the information gathered from interviews, a significant relationship was found between the teachers' mindset and the teaching strategies they used. The teachers, who had growth mindsets, introduced new teaching strategies in line with their students' needs. On the other hand, teachers with fixed mindsets blamed the students' capacity when they failed.

Gutshall (2013) conducted a study with 238 teachers and, through a questionnaire, measured how teachers perceived students' abilities. Accordingly, teachers were divided into two categories as a fixed mindset and a growth mindset. The researcher showed scenarios to the teachers about the students who were struggling in certain aspects of the school but showed positive behaviors during the learning process. As a result of this study, the researcher found an essential relationship between teachers' mindset and their reactions to the scenarios given. The teachers who had growth mindsets believed that the students' intelligence and abilities could be improved over time with effort. However, teachers with fixed mindsets did not care about the effort and focused mostly on academic outcomes.

Butler (2000) and Plaks et al. (2001) measured teachers' beliefs through a questionnaire whether they believed intelligence is fixed or growth. According to these studies, teachers who believed that intelligence could change and develop also believed in progress over time. Therefore, teachers' mindsets affected the teaching strategies they utilized and their support to their students. While having a growth mindset had positive effects, having a fixed mindset had adverse effects. Teachers with fixed mindsets tended to create adverse classroom environments. In their classroom environment, mistakes were not tolerated, and students who failed were often ignored. Students with poor performances continued to perform poorly in the classroom of teachers with fixed mindsets. On the other hand, low performing students had a chance

to improve themselves, and they could even perform higher with a growth-minded teacher.

Besides teachers' teaching strategies, teachers' praising styles also affect students' performance (Mueller & Dweck, 1998; Rattan, Good & Dweck, 2012; Gunderson et al., 2013). Mueller & Dweck (1998) showed the effects of praise on students' success in six studies. This study revealed the effects of the positive language used by teachers on student behavior and performance. It was observed that the praising styles of the teachers towards the students' endeavors had an increasing effect on the student's motivation to continue this behavior and the effort. However, merely praising talents made students more focused on performance, and students set goals only to prove that they were smart. This study reveals not only the importance of the teachers' mindset types but also the kinds of praise they prefer in the classroom. It was seen that praising personal qualities triggered susceptibility to fixed mindsets. At the same time, reactions to failures were also affected due to the fixed mindset. Therefore, teachers should not praise the students for doing things quickly or easily because this indicates that they do not need to work hard, and in return, they learn very little. Adults often talk about how gifted their children are in such situations. Instead, students deserve praise when they try something new and do not give up when they face difficulties. Finally, teachers should show their satisfaction when students make progress, improve, or work hard. So, the real support that students need is that whatever their current level of intelligence, their teachers' belief in each one of the students can improve with effort and the right strategies. Teachers and their mindset types become prominent in that sense. As Brooks & Goldstein (2008: 118-119) stated:

*It is essential for educators to appreciate that the assumptions they hold for themselves and their students, often unstated, have a profound influence in determining effective teaching practices, the quality of relationships with students, and the positive or negative climate that is created in the classroom and school building. Educators have a lifelong effect on students and their resilience. Closely associated with this previous point is the belief by teachers that what they say and do each day in their classroom can have a lifelong influence on their students.*

Rattan, Good & Dweck (2012) also supported the importance of teacher mindset. In their study, participants were asked to imagine themselves as a seventh-grade mathematics teacher and to discuss the performance of the first year with their students. Then, based on the performance of a student who scored 65 points, they were asked whether the reason was the student's lack of mathematics intelligence or not. Those who had the entity theory thought that the student was not smart enough for mathematics. Moreover, they linked this to the lack of intelligence rather than a lack of hard work. Teachers who had entity theory comforted students when they failed by saying that not everyone could be successful in every subject. Although teachers had done so because they wanted the well-being of their students, they might have been demotivating and convincing them that they had a low ability. When the students realized the low expectations of the teachers, they internalized this situation, lowered their expectations about themselves, which eventually caused a low motivation (Rattan, Good & Dweck, 2012).

In another study, the effects of parents' praise on children's mindset was examined. Gunderson et al. (2013), in their study, observed the types of praise that children between the ages of 1-3 years heard from their parents. They divided the praise processes into three categories: process phrase, person phrase, other phrases. A questionnaire was carried out as to whether the features they possessed could be improved when children reached the age of 7 and 8. The study found that children who received process feedback from their families developed incremental theory. This study supported the importance and effects of language and feedback types that teachers use in the classroom on students' mindsets and beliefs. Praising children's intelligence (person praise), as opposed to their effort or strategies (process praise), could put them into a fixed mindset, made them afraid of challenges or mistakes, and inhibited their passion for learning (Dweck, 1999).

Since students with fixed mindsets think that intelligence is not developable and believe that it is only a certain amount; they tend to appear smart in classroom settings. This leads them to see it as futile to put an effort to overcome difficulties, and they quickly give up without showing effort. They view the success of others as a threat and ignore feedback, even if it is beneficial (Miller, 2013). When students have fixed mindsets, trusting their abilities, and being successful is not enough because these two elements do not prepare them for difficulties. Success can be a driving force only when

the student is successful. A growth mindset is more process-oriented than the result. Instead of praising students' correct answers, teachers can praise their efforts and strategies in their learning process (Master, 2017). Thus, teachers can reach out to each one of their students inside the classroom. As Brooks and Goldstein (2008: 125) stated,

*The fear of making mistakes and failing permeates every classroom, and if it is not actively addressed it remains an active force, compromising the joy and enthusiasm that should be part of the learning process. It is the proverbial elephant in the room, and in this case one that may be on a destructive rampage; yet it is not acknowledged. Effective teachers recognize that when the fears of failure and humiliation are actively addressed in the classroom, students will be more motivated to take realistic risks and to learn.*

Therefore, the challenge for educators is to create environments that foster the development of skills over time that allows children to identify and pursue their specific fascinations; and that teach them to love challenges, to enjoy effort, and to be resilient in the face of setbacks (Dweck, 1999). The real potential of the growth mindset can be seen when teachers provide an environment where challenges are appreciated; errors are seen as part of the learning process rather than punished. Teachers can support a growth mindset in the classroom by sharing their own mistakes (Robinson, 2017). Also, they can apply appropriate strategies and allow an atmosphere that everyone's features are respected and can be developed.

In summary, much up-to-date research is promoting the idea that intelligence and talents are not just gifts that are granted to some students and reserved from others. Alternately, researches are pinpointing ways in which intellectual abilities can be increased through practice and hard work. In this process, teachers' role becomes pivotal since teachers can follow their students' educational process.

### **2.8.3 Can mindset types be changed?**

Dweck (2006) classified mindsets as a fixed mindset and a growth mindset. The students with fixed mindsets are very focused on how clever they are, paying attention to whether the answers are right or wrong, not the learning process itself, which will help them to learn. In contrast, those with a growth mindset focus on both how they do it and how to improve it (Shaughnessy & Veronikas, 2004). When students believe

that intelligence can be improved, they have a growth mindset. They think of intelligence as a muscle rather than genetics or luck and believe that it can be improved with effort. They see the endeavor as a way to specialization, and it does not matter how smart they are now. They always welcome the challenges to become better and use constructive feedbacks for their benefit (Miller, 2013). According to Dweck (1999) mindset can be changed, and thus motivation and behavior can also be changed. To change mindset types, the first attempt was made through growth mindset workshops which were aimed to teach scientific knowledge that the brain is developable. The brain is made up of neurons with lots of connections, and these bonds get more durable and more effective whenever new knowledge is learned, or a compelling material is used. Although face-to-face workshops have an impact on academic achievements, they have problems in terms of time and material. To avoid this problem, the growth mindset workshops are delivered via the internet. A study proved that online growth mindset workshops can also change the mindset and academic success under certain conditions (Yeager et al., 2019). When the students are taught a growth mindset, their motivation and grades will also likely increase (Dweck, 2017). Therefore, it is essential to teach the students that the brain is something that can be improved by learning. Researches revealed the effects of having a growth mindset intervention on students' academic success (Aronson, Fried & Good, 2002; Good, Aronson & Inzlicht, 2003; Blackwell, Trzesniewski & Dweck, 2007; Da Fonseca et al., 2008).

People who have fixed mindsets focus mostly on their IQ levels since they believe that they cannot improve it through hard work (Dweck, 2017). However, according to Stenberg (1985), by looking at the IQ levels, one can measure what a person can do now, but one cannot measure their future potential. The margin of error of the predictions is substantial. Measuring academic achievement with IQ levels causes many errors, and IQ level is not essential when it comes to measuring future success. At this point, teachers' beliefs are essential because teachers reflect their beliefs through the strategies they practice in the classroom. Likewise, their beliefs can affect students' motivation levels. Cohen, Steele & Ross (1999) stated that even students did not perform successfully when the teacher had high expectations; it led to more effort and attention. Since having a fixed mindset can lead to detrimental results, it can be suggested that growth mindsets should be learned through workshops (Da Fonseca et al., 2008; Yeager et al., 2019). For example, praising intelligence makes students think

that it is an innate trait. This situation puts them in a fixed mindset and sensitizes them because they do not want to worsen this innate capacity by making mistakes. When the learning process is praised rather than intelligence, it improves the growth mindset (Dweck, 2017).

Hong et al. (1998) used two different types of articles for university students. Half of the students read the article, which supported a fixed mindset, and the other half read the article, which supported the growth mindset. After the students answered a few questions about the texts, they solved the problems and received feedback on their solutions. Before moving on to the next problem, students were offered a tutorial that was beneficial for improving their performance. Of the students who successfully solved the problems, 73.3% of students who supported incremental theory and 60% of students who supported the entity theory agreed to take tutorials. These figures did not make any significant difference. However, those who performed poorly in the first problems were very different. 73.3% of those who were inclined to the incremental theory wanted to get a tutorial. However, only 13.3% of those with entity theory wanted to have tutorials. If students had entity theory, they did not want to face problems as much as possible and thought that they could not solve it. In short, it is possible to influence students' theory of intelligence, and by doing so, one can indirectly influence their goals. Also, if students' beliefs about intelligence can be changed, student motivation can be increased (Dweck, 1999). People with fixed mindsets prefer looking smart while avoiding showing their deficiencies, and they perceive them as a threat and give up opportunities to learn new information. On the other hand, people who view intelligence as malleable take on challenging tasks and perceive them as opportunities to improve themselves. Thus, students' academic success is affected by mindset types.

Aronson, Fried & Good (2002) examined the effect of growth mindset interventions on the success of African American students. University students were taught that the brain is a muscle and would become stronger as it is used. It was observed that African American University students, whose growth mindset workshops were held, received higher grades than those in the control groups. A study conducted by Da Fonseca et al. (2008) put forward the relationship between students' test performances and their mindset. As a result of the study, students who were directed to the idea that the brain is not developable showed less success in the exam than the students who were showed

incremental statements. These studies demonstrated that a growth mindset could be taught through interventions. Also, by changing mindsets, teachers could improve the students' academic success.

Difficulties faced by students at school and during transition periods might decrease their success (Henderson & Dweck, 1990). Many students must quit their educational process, which increases the likelihood that they will suffer poverty in the future (Yeager et al., 2019). This situation forced the educators to seek new methods to reach out the under-achiever students. One of these methods is to provide students with the opportunity of social-psychological interventions. Through these interventions, students were taught that intelligence can be improved, and they should develop new strategies and persevere despite the difficulties. Through this process, especially called growth mindset intervention, it is aimed to increase the academic success of under-achiever students (Yeager et al., 2019). Yeager et al. (2019) revealed the effects of online growth mindset interventions on students' achievements. In these interventions, students were shown that talents could be improved. The study was carried out with 6320 students who were academically unsuccessful than other classmates. As a result of the study, an increase was observed in the math grades of the students who adopted growth mindsets.

To have a growth mindset, teachers and students should remember that learning is a process and requires effort and the right strategies. Focusing on the development process allows students to learn more, achieve success, and be more successful in tests (Master, 2017). First, teachers can teach directly by lecturing about the changes that the brain has gone through while learning, and that abilities are not fixed and can be developed over time. Secondly, they may identify themselves as a mentor who is the source of knowledge, not as someone who questions the students' abilities. Thirdly, they can provide feedback on students' learning processes on a regular basis and praise students' efforts and different strategies throughout the process (Dweck, 2017). There are many websites for teachers to adopt growth mindsets such as [mindsetonline.com](http://mindsetonline.com), [mindsetworks.com](http://mindsetworks.com). These websites describe methods of having a growth mindset step by step with neuropsychological reasons behind it. As it is seen that the mindset can be changed with interventions, the schools and universities can provide social-psychological interventions to their teachers and students. In this way, they can increase their teachers' effectiveness and students' academic success.

## **2.9 Mindset in English Language Teaching**

Mindsets are the beliefs of people's attributes such as intelligence, character, and language aptitude, whether they are inherently determined or can be improved (Lou & Noels, 2019). Having a growth mindset means believing that everyone can improve their abilities in some way. Those with growth mindsets work harder, are learning-oriented, and do not give up when they face difficulties. Having a fixed mindset is to believe that people have an innate ability, and there is nothing that can be done to improve (Dweck, 1999). Although mindsets are involved in many studies in the fields of psychology and education, they are under-presented in foreign language education. However, studies examining the mindset in the field of foreign language learning are becoming more common (Mercer & Ryan, 2010, 2012; Lou & Noels, 2016, 2020). Studies concerning the effects of mindsets on foreign language education were carried out on both students' mindsets and teachers' mindsets.

Mercer & Ryan (2012) introduced the language learning mindset concept and divided it into two: fixed language learning mindsets and growth language learning mindsets. People with growth language learning mindsets attach importance to effort and hard work during the language acquisition process. On the contrary, people with a fixed language learning mindset believe that language ability is innate, and they do not believe it can be developed. Students with fixed language learning mindsets believe that language acquisition requires talent. So, they feel more anxious during the learning process and try to avoid challenging questions in the classroom. On the contrary, students with growth language learning mindsets believe that their language learning ability could be improved over time. Therefore, they can maintain their positive attitudes when they fail, and they contribute more to challenging questions in the classroom (Mercer & Ryan, 2010; Papi et al., 2019). Students with fixed language learning mindsets are afraid to make mistakes and avoid negative feedback from their teachers as much as possible (Mercer & Ryan, 2010; Lou & Noels, 2016). It can be said that learners who have growth mindsets enjoy challenges and define their mistakes as part of their learning process. Also, they think that mistakes are necessary for their development and they try to develop new learning strategies in the face of difficulties. Since they are process-oriented, they do not refrain from working hard and taking risks (Lespinasse & Bech, 2018). Students with fixed language learning mindsets tend to think that they will not be successful because they perceive language acquisition as an

ability. Therefore, the language mindset of the students is pivotal in their language learning process. Barcelos & Kalaja (2011) showed that students' beliefs in language acquisition can be changed as a result of their interaction with their teachers, classmates, and the environment. The role of teachers cannot be denied in this process.

According to Hattie (2012), teachers who have high expectations about their students also increase the students' expectations about themselves. Therefore, teachers' and students' attitudes toward language skills are essential. Teachers with growth mindsets will challenge students over time and wait for their development. Also, they attach importance to learning and perceive the development process of students as a success. Teachers with fixed language mindsets are performance-oriented and give importance to the competition. They regard most successful students; therefore, they compare students' achievements with other classmates. Gero (2013) examined teachers' mindsets in his study with pre-service teachers. Gero (2013) tried to determine whether the teachers perceived the teaching process as a natural ability or a developable process. As a result of the study, it was revealed that the teachers with fixed mindsets refrained from taking risks and showed less resilience in the problems they faced.

Teachers must create a positive learning environment to support the growth mindset. Teachers should also perceive students' abilities as developable and they need to believe that their students' abilities will develop along the learning process. Dweck (1999) stated that teachers should praise effort rather than talent, be a role model of growth mindsets, present different strategies to students, and provide materials that students will realize their development. When teachers apply these stages, they will likely create a positive learning environment. Classroom environments created by teachers affect students' mindset and motivation (Park et al, 2016). Therefore, teachers should provide useful feedback to students on their language learning journeys (Lou & Noels, 2019). Besides, the feedback provided by the teachers may send a message to the students as to whether the language ability can be improved or not. To succeed in the language learning process, students must constantly strive because it is inevitable for students to make mistakes in the foreign language learning process. The feedback that teachers provide to students for their efforts will contribute to the development processes of the students (Lespinasse & Bech, 2018). Poorly performing students may be skeptical about whether they can learn the language. In this case, while teachers with fixed mindsets provide feedback that students are not capable, teachers

with growth mindsets emphasize the language learning process and indicate that efforts and different strategies should be applied (Rattan, Good & Dweck, 2012). When students are successful, teachers with fixed mindsets praise students' abilities, while teachers with growth mindsets praise students' development processes and efforts. Praising the learning process instead of talent can also help students to adopt growth mindsets (Pomerantz & Kempner, 2013).

Different types of feedback also affect the level of motivation students have (Lou & Noels, 2019). Many studies have shown that mindset can be changed, and people's mindset and motivation can be changed through social-psychological interventions (Aronson, Fried & Good, 2002; Good, Aronson & Inzlicht, 2003; Yeager et al., 2019). After observing the impact of having a growth mindset on academic resilience and success, the effect of fostering growth mindsets through interventions began to be explored in language education. In their study with immigrant students, Lou & Noels (2020) investigated whether the language mindset could predict the students' anxiety during the language practice outside of the classroom. Students with fixed language mindsets preferred to use the English language less in their social interactions. On the contrary, those who had growth language mindsets reflected that they spoke the English language as much as possible in their social lives, even though their language proficiency is low. Based on this, it can be said that immigrant students' who get growth mindset interventions in their university adaptation processes can also increase their social experience and academic success. Language mindset interventions can also enable students to adapt to English-speaking school settings. Overall, it can be said that growth mindsets can aid students not only in the classroom setting but also in their social experiences outside of the classroom.

## **2.10 The Importance of Having A Growth Mindset for Educators**

Teachers in all parts of the world are responsible for students' learning processes. There is an interaction between teachers and students daily, and teachers have the power to change the beliefs that students have (Rau, 2016). To change students' beliefs, teachers can reflect their mindset through their words, praising styles, and their perception towards the mistakes. Dweck (2006) stated that people can adopt two different mindsets. One type is defined as a growth mindset and it is process-oriented and looks for contextual or psychological reasons behind human behavior. The other type is

defined as a fixed mindset and it suggests that behavior is a reflection of a personal trait and cannot be changed. Dweck (2017: 197) stated that “Great teachers believe in the growth of the intellect and talent, and they are fascinated with the process of learning.”. Moreover, Dweck (2017: 200) added that “Great teachers set high standards for all their students, not just the ones who are already achieving.”. Teachers should make sure that students know everyone they admire got there through struggle and effort. Very successful people in sports, science, art, or business become who they are not because they have talents but for devoting themselves and working hard. (Dweck, 2017). This is possible when teachers adopt a growth mindset. Rissanen et al. (2019) stated that teachers with growth mindsets are process-oriented and they give importance to the pedagogical thinking. According to the research, teachers who had growth mindsets cared about the emotional processes and contextual backgrounds lying under the students' behaviors, learning processes, and their academic success. Having a growth mindset strengthens people’s creativity and critical thinking skills in today's complex and continuously evolving world (Hadwin, 2019). Dweck, Walton & Cohen (2014: 3) stated that “with greater awareness of non-cognitive factors, educators may be able to do relatively small things in classrooms that can make a big difference in their students’ learning”. There is a growing interest in how noncognitive skills such as having a growth mindset can influence people’s success (Blackwell, Trzesniewski & Dweck, 2007; Yeager & Walton, 2011; Paunesku et al., 2015; West et al., 2016; Broda et al., 2018). Researchers focused on the effects of a growth mindset on students through social-psychological interventions. Blackwell, Trzesniewski & Dweck (2007) conducted a study with seventh-grade students with low-income. The researchers taught the treatment group that intelligence could be improved through hard work and necessary effort. In the workshops which lasted 8 weeks, the treatment group was taught how the brain strengthened in the face of challenges along with the functioning mechanisms of the brain. As a result of the study, while the math scores of the students in the control group decreased, a significant increase was observed in the mathematics grades of the students in the treatment group. However, according to Yeager & Walton (2011), social-psychological interventions should not be considered as magic. When these interventions are made, student achievement should not be expected to increase automatically. Although it may appear in more than one study that it has yielded to positive results, it may vary depending on the context in which they are applied.

Interventions can make a major contribution to education when it is implemented in proper ways and methods. Interventions cannot teach students the content of the lessons. However, through these interventions, students can benefit more from the teaching processes offered to them, thereby contributing to students for reaching their true potential. It may contribute to a positive change in education, especially by contributing to students who have a lower academic achievement or belong to the minority groups. Paunesku et al. (2015) observed the effect of mindset interventions on students' success. What made this study unique from other studies was the higher number of participants. In this study, 45-minutes online interventions were made for the benefit of students who were qualified as an underachiever in schools. 1594 students took part in this study. As a result, mindset interventions increased the academic achievement of the students. West et al. (2016) collected data from students regarding their cognitive skills including growth mindset through self-report surveys. In this study, in which more than 1300 students participated, they investigated the relationship between growth mindset, one of the non-cognitive skills, and student success. As a result of the study, it was observed that students who had growth mindsets preferred a more challenging academic environment. The academic success of students who believed in the importance of making effort due to the challenging environment was also higher.

Social-psychological interventions can also contribute to reducing inequality in education (Broda et al., 2018). Broda et al. (2018) provided a growth mindset intervention to 7686 students who belonged to a racial and ethnic minority. Students were randomly assigned to a growth mindset intervention group or a comparison group. In this intervention, the students read an article called "Building the Brain" and were informed that the brain is a muscle and it develops as it encounters difficulties. With this article, it was aimed to show students that intelligence could be developed with the necessary effort and focus. After reading the article, reflective questions were asked to the students and it was aimed to determine when they were prone to have growth mindsets in their own lives. It was observed at the end of the term that the GPA of Latino students who received growth mindset intervention was increased. These results revealed that the GPA difference between White and Latino students decreased by 72%. This study suggested that inequality in education could be reduced via growth mindset interventions.

Overall, many studies suggest that it is possible to change the students' mindsets (Blackwell, Trzesniewski & Dweck, 2007; Yeager & Walton, 2011; Paunesku et al., 2015; West et al., 2016; Broda et al., 2018). Educators need to believe this, and they need to ensure that students perceive their abilities developable in their learning process. Language ability is not a gift, but rather a life-long process that requires effort, a motivational and supportive learning environment. Teachers and their mindset types are also valuable members of this process.

### **2.11 Self-efficacy Theory**

Bandura (1977) put forward the self-efficacy concept based on the Social Cognitive Theory. Bandura (1997: 3) defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments". Self-efficacy is a belief about the future and determines the level of competence people will demonstrate in specified situations. Self-efficacy beliefs affect people's thoughts and feelings. Accordingly, it enables people to react differently to goals, challenges, and failures (Bandura, 1986, 1989, 1997). The level of self-efficacy that people have determines how much effort they will put and how enduring they will be to achieve their goals (Bandura, 1977; Schunk, 1991). Self-efficacy is of great importance in people's actions and motivation levels because if people do not have the belief that they will achieve successful results, it is more likely that they prefer to give up in the face of difficult situations (Pajares, 1996).

Self-efficacy is a different concept than the value people give themselves or their self-confidence. Gist & Mitchell (1992: 185) stated that "Self-esteem usually is considered to be a trait reflecting an individual's characteristic affective evaluation of self (e.g., feelings of self-worth or self-liking). By contrast, self-efficacy is a judgment about task capability that is not inherently evaluative". While a person does not consider himself competent for some activities, a decrease in self-esteem may not be seen. Because he did not make the necessary investment to do that activity, and there is no expectation of the outcome. Otherwise, people skilled in that activity may consider themselves insufficient because their standards are higher than others. Self-efficacy is more about how people see their competence rather than the exact level of competence. People can predict their talents more or less, and they make their future choices based on this perspective.

There is a direct relationship between cognitive, environmental, and behavioral factors that influence human behavior. By working simultaneously, these factors assure the expansion of the concept of self-efficacy and thus affect the behavior of the individual (Bandura, 1986). It can be said that self-efficacy can change the perception of the environment thanks to its power to produce desired results, and without this concept, people will not be motivated to continue or act when they face difficulties (Ventura, Salanova & Llorens, 2014). Yılmaz (2004) stated that the concept of self-efficacy is in line with the person's self-opinion, and low self-efficacy causes doubts about the self and the skills. While those with high self-efficacy can achieve successful results and are satisfied with these results, people with low efficacy can suffer from stress. Those with a high self-efficacy belief achieve success with less stress (Bandura, 1982). According to Bandura (1994), there are four different sources of self-efficacy: mastery experiences, social persuasion, vicarious experience, and psychological states.

## **2.12 Sources of Self-efficacy**

Bandura (1994) created four different sources of self-efficacy: mastery experiences, vicarious experiences, social persuasion, and physiological and emotional states. Bandura (1994) stated that these sources may affect the concept of self-efficacy either positively or negatively and they are also a source for the formation of the self-efficacy belief. These four sources are connected and can affect each other, or they can be a source for creating self-efficacy beliefs by working simultaneously. The following paragraphs will present the resources for self-efficacy in detail.

### **2.12.1 Mastery experiences**

Mastery experiences are the most crucial source of perceived self-efficacy belief because it is directly related to one's performance (Bandura, 1977). It is the strongest pillar of self-efficacy, and when a situation results in successfully, it increases the belief that the same situation will eventuate favorably in the future. Experiences are the essential sources for the formation of self-efficacy belief in individuals. In the case of being successful, the belief that people can reach their target will increase enthusiasm, and thus they will have the belief of self-efficacy by believing in their skills. On the other hand, failures reduce the self-efficacy beliefs of people, and they lead to a decrease in expectations. Likewise, the meaning people attached to success is also significant. If the source of success is seen as possessing necessary skills, this

increases self-efficacy. However, self-efficacy may not be strengthened if luck and other people are seen as the source of success (Bandura, 1993; Pintrich & Schunk, 1996). The application of this theory into the English teaching area might result in teachers who have succeeded with their students in the past can expect to succeed with alike thoughts or practices in similar situations in the future (Mehmood, 2019).

### **2.12.2 Vicarious experiences**

It is another source of perceived self-efficacy belief that summarizes the experiences gained by individuals in their social environments such as work, school, or friends through the pursuit of success or encountered failures experienced by other individuals in their lives. People can develop high or low self-efficacy by observing people whom they see similar to their characteristics in similar situations. If the observed person achieves a successful result, this contributes positively to the self-efficacy level of the observer (Schunk & Pajares, 2002). Observers' behaviors can be affected while observing the attitudes of colleagues or friends while they experience success and failure in their lives. Because of this, the person to be exemplified should be competent enough to demonstrate a skill that the observer wants to specialize successfully. The individuals' beliefs in their skills may increase according to the success level of individuals equipped with similar skills (Bandura, 1994). The success of others may have impressive results on the individual, or it may have adverse effects if they fail despite their perseverance (Bandura, 1982). Mehmood (2019) emphasized that for vicarious experiences to affect the perception of self-efficacy, the person who will become a social model should be seen by the individual, and if there is a distance, the probability of an impact on self-efficacy will be weak. The better the modeled person performs, the higher the self-efficacy of the observer. In the opposite case, the lower the performance, the lower the self-efficacy of the observer.

### **2.12.3 Social Persuasion**

The individuals' skills are formed, and from the very first moment of development, with the influence of the environment, people create their beliefs within their experiences. Social persuasion arises in the comments on whether one person can successfully achieve a target or not (Bandura, 1977). For example, if employers express their belief that their employees will be successful, the employees' effort and successes will increase. On the contrary, if the employers question the abilities of the

employees, the employees also suspect their abilities and have lower self-efficacy. Therefore, while positive persuasion undoubtedly affects higher levels of self-efficacy, negative persuasion creates the opposite effect (Schunk & Pajares, 2002). Mehmood (2019) stated that a father could assist his son and give him moral support for his lifelong success. Bandura (1994) stated that the concept of a social persuasion should be created by developing the individual's skills instead of comparing the individual with others. Social persuasion includes teachers' conversations with each other, encouraging talks or feedback from supervisors. Although the relationship of social persuasion with self-efficacy alone is not very strong, it can increase self-efficacy by providing new strategies to be learned (Bandura, 1982). The potential of persuasion depends on the credibility and expertise of the person who is trying to persuade (Bandura, 1986).

#### **2.12.4 Physiological and Emotional States**

Since people may be happy, sad, stressed, peaceful, or anxious, depending on their condition, Mehmood (2019) stated that this mood could affect the self-efficacy level of the individual. Mehmood (2019) argued that stress and anxiety would affect individuals' perception of self-efficacy; it might also result in affecting their performance. Bandura (1994) emphasized that fear of anxiety and failure can be seen as an indicator of weakness that will harm an individual's belief in performing a task successfully. All these factors also influence the teachers' perceived self-efficacy beliefs.

#### **2.13 Teacher Efficacy and Its Measurement**

Berman et al. (1977: 136) defined the teacher's sense of efficacy as "A belief that the teacher can help even the most difficult or unmotivated students". Guskey & Passaro (1994: 4) provided another definition to teacher efficacy as "teachers' belief or conviction that they can influence how well students learn, even those who may be difficult or unmotivated". Teachers with a high level of self-efficacy believe that they can control students' achievements and motivation levels and they believe that they have a significant impact on them. According to Bandura (1977), teacher efficacy is a type of self-efficacy. Teachers create their perceived self-efficacy beliefs related to their teaching performances in certain situations. These beliefs determine how much effort teachers make, how long they endure difficulties, and how they respond to

mistakes. Teachers with high efficacy levels show longer working times for challenging students with learning difficulties (Gibson & Dembo, 1984). These teachers show less inclination for advising students to special education (Meijer & Foster, 1988; Podell & Soodak, 1993). Teachers who have higher efficacy are less critical about their students' mistakes (Ashton & Webb, 1986). Also, teachers with higher efficacy are more enthusiastic about their profession (Guskey, 1982; Hall et al., 1992; Allinder, 1994), and their commitment to their profession is more exceptional than teachers with a lower efficacy (Trentham, Silvern & Brogdon, 1985; Evans & Tribble, 1986; Coladarci, 1992). Therefore, they are more inclined not to leave the profession and continue despite difficulties (Glickman & Tamashiro, 1982; Burley et al., 1991). While teachers with low efficacy prefer to give up in stressful situations, teachers with high efficacy beliefs resist difficulties.

Researchers tried to measure teachers' sense of self-efficacy. The first studies on the teacher efficacy demonstrated by the Rand organization and considered the Social Learning Theory as a base. Armor et al. (1976: 73) asked these two questions to the teachers:

- 1) "When it comes right down to it, a teacher really cannot do much because most of a student's motivation and performance depends on his or her home environment."
- 2) "If I try really hard, I can get through to even the most difficult or unmotivated students."

In Rand studies, the researchers asked teachers to indicate to what extent they agreed with the statements above. Along with the answers given by the teachers, the concept of teacher efficacy was introduced (Armor et al., 1976). Later, the researchers tried to create longer and more subject-oriented tools to reach the outcomes that Rand Corp desired to achieve. The studies carried out for this purpose led to the expansion of the concept, and a deeper understanding of the concept was provided. Gibson and Dembo (1984) introduced a broader and more reliable teacher efficacy questionnaire. Based on the Rand studies, they also added the concepts underlined by Bandura. Gibson and Dembo (1984: 570) stated that:

*If we apply Bandura's theory to the construct of teacher efficacy, outcome expectancy would essentially reflect the degree to which teachers believed that environment could be controlled, that is, the extent to which students can*

*be taught given such factors as family background, IQ, and school conditions. Self-efficacy beliefs would be teachers' evaluation of their abilities to bring about positive student change.*

With the Gibson and Dembo scale (1984), it was tried to measure teachers' classroom behavior, whether they are open to new ideas, and their beliefs about teaching as a profession. At the same time, with this scale, the school structures and the atmosphere in the school were also included. These scales helped researchers to expand their knowledge on teachers' sense of self-efficacy.

Tschannen-Moran & Hoy (2001) introduced a teacher efficacy instrument with higher reliability and validity. This instrument was called the Teachers' Sense of Efficacy Scale (TSES) which is also utilized in the current study. With this instrument, teachers' sense of efficacy beliefs is measured by three factors. The first of these factors is the efficacy in student engagement and it consists of the questions including how much teachers believe that they can motivate their students or engage them in with the necessary materials. The second factor is the efficacy in instructional strategies, and it measures the teachers' beliefs in the different instructional methods they use in the classroom. The third factor is the efficacy in classroom management which measures teachers' belief in their classroom management skills.

#### **2.14 Factors Influence Teachers' Sense of Efficacy Beliefs**

Social Cognitive Theory put forward by Bandura (1986, 1997) reveals that behaviors and cognitive processes and other personal factors affect each other by interacting with the environment. Therefore, teacher efficacy beliefs are closely related to the school context. So, many researchers have tried to reveal a more in-depth meaning and relationship using both survey and interview methods (Ashton & Webb, 1986; Rosenholtz, 1989). Ashton & Webb (1986) examined whether education level affects teachers' self-efficacies in their studies. Efficacy levels of teachers working in middle school were higher than teachers working in junior high school. Middle school teachers had higher expectations about their students' academic achievement, and they were more satisfied with their work. This implies that the workplace of the teachers can affect their efficacy level. For example, a high school chemistry teacher with a high self-efficacy may not have the same efficacy level when teaching middle school science. Likewise, a teacher who is a rural teacher and confident may not have the

same confidence in the city. Some other factors caused teachers to have lower self-efficacy levels. Webb & Ashton (1987) conducted interviews with teachers and identified lower self-efficacy factors. Some of them are factors such as insufficient salary, not getting enough positive feedback, not being appreciated, and low morale. Rosenholtz (1989) identified a vital link between teacher efficacy and four school factors. These factors are positive feedback received by teachers for their performances, teamwork with other teachers, parents' relationship with the school, and schoolwide coordination for students' behaviors. Teachers' self-efficacy levels can vary, even when transitioning from just one class to another (Raudenbush, Rowan & Cheong, 1992; Ross, Cousins & Gadalla, 1996). Therefore, examining the context in which teachers are involved in is vital in terms of teacher efficacy.

Studies were conducted to reveal the effect of gender factor on teachers' sense of efficacy. (Hamurcu, 2006; Cubukcu, 2008; Gurbuzturk & Sad, 2009; Mitchual, Donkor & Quansah, 2010; Klassen & Chiu, 2010; Karimvand, 2011). Cubukcu (2008), Mitchual, Donkor & Quansah (2010), and Karimvand (2011) did not find a relationship between gender and teacher efficacy. However, Klassen & Chiu (2010) observed that female teachers have lower teacher efficacy beliefs. Also, Gurbuzturk & Sad (2009) and Hamurcu (2006) revealed that male teachers have higher efficacy levels.

### **2.15 Teachers' Sense of Efficacy Beliefs and Teachers' Behaviors**

Goddard, Hoy, & Woolfolk Hoy (2000) stated that the teachers' sense of efficacy revealed two types of beliefs. The first one is personal teaching efficacy and covers teachers' trust in their teaching techniques. The second is called general teaching efficacy and shows the belief that the teachers have power in reaching difficult students. According to Goddard, Hoy & Woolfolk Hoy (2000), educational institutions are environments where teachers socialize, and they have an impact on teachers' sense of efficacy. An environment where a new teacher is encouraged to ask questions and receive information reduces the teacher's vulnerability to errors. This affects mastery experiences, one of the most important aspects of self-efficacy.

According to Hoy (2000: 2), "some of the most powerful influences on the development of teacher efficacy are mastery experiences during student teaching and the induction year." The first year is significant for the development of teachers in

future processes. It was observed that teachers who quit their teaching profession in the first year and fifth years have significantly lower self-efficacy levels (Glickman & Tamashiro, 1982). Jerald (2007) also identified some behavior patterns based on teachers' sense of efficacy. Teachers with higher self-efficacy attach more importance to planning and organizing, are more open to new ideas and try to use new teaching techniques and strategies in terms of the needs of their students, are more stable when the course flow does not go as expected, and they criticize less the students who make mistakes more often than the other students. Besides, Jerald (2007) stated that they are less willing to send challenging students to private education. In another study, it was revealed that teachers with higher self-efficacy are more organized and better at planning (Allinder, 1994). Teachers with high self-efficacy are open to new ideas and do not hesitate to try new strategies in line with their students' needs (Berman et al., 1977; Guskey, 1988).

### **2.16 Teachers' Sense of Efficacy Beliefs and Student Achievement**

If the students are in an educational environment where they feel secure and cared for, their interest in the course will likely be higher and they are likely to be more motivated. Students who are interested in the course tend to have higher academic success. This creates a link between teacher efficacy and student achievement since teachers can create such environments (Barkley, 2006). The relationship between teacher efficacy and student success was identified by several studies. Armor et al. (1976) observed that as teachers' efficacy levels increase, students' success in reading tests also increases. Caprara et al. (2006) revealed that teacher efficacy has important effects on student achievement and job satisfaction. Teachers who have high efficacy beliefs also have higher expectations for success and the learning process of the students. On the contrary, teachers with lower efficacy beliefs have expectations of failure (Ashton & Webb, 1986). Khan (2011) investigated the relationship between teacher efficacy and secondary school students' achievements. Khan (2011) found that teacher's sense of efficacy affects their expectations for student achievement. This situation can be seen in the efforts of teachers inside the classroom. In summary, while teachers with high efficacy try to motivate students more, teachers with low efficacy keep their expectations low and do not try to motivate their students.

### **2.17 Relationship Between Mindset and Perceived Self-Efficacy Belief**

Few studies tried to reveal the relationship between mindset and self-efficacy. Wood & Bandura (1989) predicted that people who believe that intelligence can be improved will have higher self-efficacy, while people who believe intelligence is an innate trait will have lower self-efficacy. In their study with 24 graduate students, Wood & Bandura (1989) found that people who perceive their talents and intelligence as fixed have lower self-efficacy levels, and those who perceive their talents and intelligence as developable keep their self-efficacy levels higher. In another study with 44 pre-service teachers in the field of science, Palazzolo (2016) examined the relationship between teachers' mindset types and their self-efficacy beliefs. According to the research, self-efficacy levels of teachers with growth mindsets are found higher than the ones with fixed mindsets. In the thesis study, Glos (2018) investigated the relationship between mindset types and self-efficacies of 234 high school teachers. The researcher analyzed the quantitative data obtained through questionnaires. According to the findings of the study, a significant relationship is found between teacher efficacy in student engagement factor and growth mindset. At the same time, it was revealed that female teachers have more growth mindsets compared to male teachers. Keenan (2018) examined the effect of growth mindset instructions on students' academic self-efficacy. The study conducted with 21 students who had different academic levels. Firstly, students were given pre-tests, and their levels were measured. Then, students took growth mindset interventions for six weeks. Throughout this process, students were provided with the qualifications of the growth mindset, and thus they were expected to believe that the talents could be improved with effort and time. According to the findings of the post-test, an increase in self-efficacy levels is observed after the growth mindset intervention.

### **2.18 Conclusion**

This chapter is based on the literature review regarding mindset and perceived self-efficacy beliefs. It provides knowledge about the concepts and findings of the previous researches concerning the results of mindset and self-efficacy. The literature review exposed the relevant studies and these studies will shed a light on the answers for which this study is looking for. The following section will continue with the methodology of the study.

## **CHAPTER III**

### **METHODOLOGY**

#### **3.1 Introduction**

Mindset and self-efficacy have an impact on students' motivation, behavior, and academic achievement (Bandura, 1989; Schunk & Pajares, 2002; Watanabe, 2006; Blackwell, Trzesniewski & Dweck, 2007; Gutshall, 2013; Rau, 2016). Teachers should be aware of their impact on students. In addition, mindset and self-efficacy have an impact on the teaching strategies that teachers prefer to use in the classroom (Swan & Snyder, 1980; Butler, 2000; Plaks et al., 2001). This study aims to contribute to the field by examining the relationship between teachers' mindset and their perceived self-efficacy beliefs in the field of foreign language teaching. Besides, the effects of demographic factors on the teachers' mindset and their perceived self-efficacy beliefs will be examined. In this chapter, the researcher will present the research design, setting and participants, data collection instrument, and data analysis procedures of the research.

#### **3.2 Nature of the Research**

By using the Teacher Mindset Instrument (TMI) and Teachers' Sense of Efficacy Scale (TSES) and its three subscales, this study aims to reveal the relationship between teachers' mindsets and their perceived efficacy beliefs in instructional strategies, classroom management, and student engagement. In addition, in this study, the effects of demographic aspects of the participants such as gender, place of work, highest education level, participation in a teacher training or certificate programs, teaching experience, BA degree on teachers' mindset, and self-efficacy beliefs are investigated. Given the aim of the study, it can be said that the present study is descriptive research in nature. Survey and correlational researches are types of descriptive research. The descriptive research method aims to clearly and systematically explain a population, situation, or phenomenon. Descriptive research uses data gathering and analysis procedures that produce reports regarding the measures of variation, and correlation. Descriptive research is different from other research models since it combines the correlational statistics along with the particular types of research questions, methods, and outcomes (Mertens, 2010). Survey research is one of the most common types of descriptive research. Check & Schutt (2012: 169) defined survey research as "The

collection of information from a sample of individuals through their responses to questions.” This type of research provides for a variety of methods to select participants, gather data, and employ different ways of instrumentation. Survey research can apply quantitative research procedures (e.g., Likert scales), qualitative research strategies (e.g., open-ended questions), or both strategies (i.e., mixed methods). In the present study, quantitative research procedures will be applied. Quantitative research, which is the sub-branch of descriptive research methods, is a type of research that objectively observes, measures, and numerically expresses facts and events (Mertens, 2010). Surveys are commonly utilized in social and psychological research since surveys are employed to explain and examine social behavior (Singleton & Straits, 2009). Due to the nature of the first research question, this study also contains elements of correlational research. A correlational study is a kind of research design where a researcher attempts to put forward what kind of relations occurring between two different variables.

### **3.3 Research Design**

Research design is probably the most important stage of any research endeavor. According to Creswell & Clark (2017: 53), research design can be defined as ‘procedures for collecting, analyzing, interpreting, and reporting data in research studies. It is the overall outline for combining the conceptual research questions with the relevant answers. By using the Teacher Mindset Instrument and Teachers’ Sense of Efficacy Scale and its three subscales, this study aims to reveal the relationship between teachers’ mindsets and their perceived efficacy beliefs in instructional strategies, classroom management, and student engagement. In addition, this study focuses on the effects of demographic aspects of the participants such as gender, place of work, highest education level, participation in teacher training or certificate programs, teaching experience, BA degree. The researcher will use two Likert-scales: Teachers’ Sense of Efficacy Scale (TSES) and Teacher Mindset Instrument (TMI) to collect the quantitative data. The first part of the questionnaire will elicit demographic information of the participants. The second part of the questionnaire contains the Teachers’ Sense of Efficacy Scale (TSES) and the last part of the questionnaire includes Teacher Mindset Instrument (TMI). English teachers who are working in English preparatory programs at state or foundation universities in Turkey will fill out the questionnaire which will be sent via e-mail. The data obtained through the

questionnaire will be classified and analyzed with SPSS v.25. First, Pearson correlation analysis and multiple regression analysis will be used to find out whether there is a statistically significant correlation between the English language teachers' mindset and their perceived self-efficacy beliefs. The mindset will be the dependent variable and self-efficacy will be the independent variable. Second, Kruskal-Wallis H Test and independent samples T-test will be used to find out whether or not demographic characteristics such as gender, place of work, highest education level, participation in teacher training or certificate programs, teaching experience, BA degree have a statistically significant effect on English teachers' mindset and their perceived self-efficacy beliefs.

### 3.4 Setting and Participants

This study was conducted in the preparatory programs at the foundation and state universities, which are located in Turkey. Participants are English teachers who are working in the preparatory programs of these universities. Teachers who are working in the English Preparatory Programs are a unique sample because the relationship between mindset and self-efficacy has not been investigated with such a sample before. Table 3.1 presents the demographic characteristics of the participants.

**Table 3.1: Demographic Characteristics of the Participants**

	<b>Groups</b>	<b>N</b>	<b>%</b>
<b>Gender</b>	Male	43	28.5
	Female	108	71.5
	Total	151	100.0
<b>Place of Work</b>	State University	77	51.0
	Foundation University	74	49.0
	Total	151	100.0
<b>Graduate Department</b>	English Language Teaching	81	53.6
	English Language and Translation	19	12.6
	Linguistics	4	2.6
	English Language and Literature	37	24.5
	American Culture and Literature	10	6.6
	Total	151	100.0

<b>Highest Education Level</b>	Bachelor's Degree (B.A)	68	45.0
	Master's Degree (M.A)	66	43.7
	Doctoral of Philosophy (Ph.D.)	17	11.3
	Total	151	100.0
<b>Training Program Or Certificate</b>	Yes	87	57.6
	No	64	42.4
	Total	151	100.0
<b>Teaching Experience</b>	0-2	10	6.6
	2-5	26	17.2
	5-10	47	31.1
	10-20	52	34.4
	21 +	16	10.6
	Total	151	100.0

As shown in Table 1, out of 151 participants, 43 (%28.5) instructors are male, and 108 (%71.5) are female. 77 participants (51.0%) stated that they were working in a state university; 74 participants (49.0%) said that they were working in a foundation university. In terms of the undergraduate studies, 81 participants (53.6%) studied English Language Teaching, 19 participants (12.6%) studied English Translation and Interpreting, 4 participants (2.6%) studied Linguistics, 37 participants (24.5%) studied English Language and Literature, and 10 participants (6.6%) studied American Culture and Literature. Concerning the highest level of education, 68 participants (45.0%) had a bachelor's degree. 66 participants (43.7%) had a master's degree, and 17 participants (11.3%) had a doctoral degree. As to extra qualifications, 87 participants (57.6%) stated that they had attended teacher training or certificate programs, 64 participants (42.4%) stated that they had not attended any teacher training or certificate programs. Regarding the years of teaching experience, 10 participants (6.6%) had 0-2 years of experience, 26 participants (17.2%) had 2-5 years of experience, 47 participants (31.1%) had 5-10 years of experience, 52 participants (34.4%) had 10-20 years of experience, 16 participants had (10.6%) 21 years and more experience.

### 3.5 Data Collection Instrument

The researcher contacted the preparatory departments of the state and foundation universities to find the participants who met the requirements. To increase the scope

of the study, the researcher sent the questionnaire to universities that are in the various regions of Turkey. The researcher shared the link to the questionnaire via e-mail. It is stated at the beginning of the questionnaire that it is voluntary, and the information of the participants will be kept confidential. Since this study is mainly a survey, the researcher will use a questionnaire that consists of three parts. The first part of the questionnaire will elicit demographic information of the participants. The second part of the questionnaire contains the Teachers' Sense of Efficacy Scale (TSES), a 9-point Likert scale with 12 items. This part will elicit information about teachers' self-efficacy beliefs in instructional strategies, classroom management, and student engagement. The third part of the questionnaire contains the Teacher Mindset Instrument (TMI), a 5-point Likert scale with 7 items. This part will elicit information about teachers' beliefs about ability and intelligence. The two scales will collect the quantitative data. Demographic variables include gender, place of work, professional experience in teaching, graduated department, highest education level, having attended a training program, and BA degree. These variables are involved in the analysis because it is not known whether they have effects on the teachers' mindset and their perceived self-efficacy beliefs. Therefore, the demographic information will be used to find out possible relations between these factors and mindsets. The following parts will explain the two scales in detail.

### **3.5.1 Teacher Mindset Instrument (TMI)**

The teacher mindset will be measured with a scale with seven items. The Teacher Mindset Instrument (TMI), put forward by Gero (2013), bases its foundation on Dweck's Implicit Theory of Intelligence (ITIS) scale (Dweck, 1999). The ITIS scale consists of twenty items. Gero (2013) adapted these items to apply the scale specifically for teachers. These seven items specifically explore teachers' mindset through the statements about teachers' beliefs in their teaching abilities. Blackwell, Trzesniewski & Dweck (2007) found the reliability of the Implicit Theory Intelligence Scale as  $\alpha = .78$ . The reliability of the Teacher Mindset Instrument created by Gero (2013) was also found to have a reliability coefficient  $\alpha = .79$ . Due to its reliability, the present researcher chose to utilize Gero's (2013) Teacher Mindset Instrument to measure teachers' beliefs about whether teaching abilities could be improved or are fixed qualities. According to their scores, teachers will be categorized as growth-minded or fixed-minded. The statements in the scale aim to find out their perceptions

of the skills by asking them whether they agree or disagree with the statements. The first four statements of the scale are reverse scored because these statements are negatively worded. Teachers with high scores will be classified as a growth mindset and those with low scores as fixed mindsets.

### **3.5.2 Teachers' Sense of Efficacy Scale**

Developed by Tschannen-Moran & Hoy (2001), the Teachers' Sense of Efficacy Scale consists of three factors: efficacy in instructional strategies, efficacy in classroom management, efficacy in student engagement. This scale aims to expose teachers' self-efficacy beliefs. The scale has both a long 24-item form and a 12-item short form. This research will employ the 12-item short-form since it is more appropriate for in-service teachers due to the fact that the factor structure is less distinct for these respondents. With preservice teachers, the full-scale form can be used. TSES short form contains 12 items and determines how much participants agree with the questions through a 9-point Likert scale ranging from 1 (*none at all*) to 9 (*a great deal*). None of the statements are reverse scored. A higher score on TSES and subscales implies higher efficacy in one's beliefs in the capability to implement diverse teaching methods successfully. Tschannen-Moran & Hoy (2001: 800) found a reliability coefficient of  $\alpha = .90$  for total self-efficacy score,  $\alpha = .81$  for efficacy in student engagement,  $\alpha = .86$  for efficacy in instructional strategies, and  $\alpha = .86$  for efficacy in classroom management. Quite a few studies supported this research and found high reliability and validity for the full scale and its subscales (Hoy & Spero, 2005; Tschannen-Moran & Hoy, 2007; Pendergast, Garvis & Keogh, 2011; Nie et al., 2013). Thanks to its extensive use with high reliability and validity, the present researcher believes that the TSES is an approved instrument for measuring teachers' sense of efficacy beliefs. The short form of TSES (See APPENDIX A) consists of three subscales such as efficacy in classroom management, instructional strategies, and student engagement. Items 1, 6, 7, and 8 in the Teachers' Sense of Efficacy Scale measure teachers' efficacy beliefs in classroom management. Items 5, 9, 10, and 12 in the Teachers' Sense of Efficacy Scale measure teachers' efficacy beliefs in instructional strategies. Items 2, 3, 4, and 11 in the Teachers' Sense of Efficacy Scale measure teachers' efficacy beliefs in student engagement. Table 3.2 presents the subscales of the Teachers' Sense of Efficacy Scale and the distribution of the questions that measure these subscales.

**Table 3.2: Teachers' Sense of Efficacy Scale Subscales and Regarding Questions**

<b>Subscale Items</b>	<b>Questions</b>
Efficacy in Student Engagement	2, 3, 4, 11
Efficacy in Instructional Strategies	5, 9, 10, 12
Efficacy in Classroom Management	1, 6, 7, 8

### **3.6 Data Analysis Procedure**

The responses given by the participants are followed by the researcher online. When a sufficient number of returns is reached, the collected data will be analyzed through the SPSS v.25 program. Firstly, to find out the statistically meaningful correlation between the English teachers' mindset scores and their perceived self-efficacy beliefs, Pearson correlation analysis, and multiple regression analysis will be conducted. Pearson's correlation is a statistical analysis type that measures the statistical relationship, or association, between two continuous variables. Regression Analysis is utilized when one wants to predict the value of a variable formed on the value of two or more other variables. Mindset will be regarded as a dependent variable, and self-efficacy will be regarded as an independent variable. Secondly, to find out whether or not the demographic characteristics of the participants have a statistically meaningful effect on English teachers' mindset and their perceived self-efficacy beliefs, Kruskal-Wallis H Test and independent samples T-test will be used. Kruskal-Wallis H Test can be applied to find out if there are statistically important differences among two or more groups of an independent variable on a continuous or ordinal dependent variable. The Independent Samples T-test compares the means of two independent groups to find out whether there is statistical proof that the associated population means are significantly different.

### **3.7 Research Questions**

This research tries to find answers to the following questions:

- a)** Is there a statistically significant relationship between the English Preparatory teachers' mindsets and their perceived self-efficacy beliefs in teaching?
- b)** Do English Preparatory teachers' mindset scale scores differ in terms of gender, place of work, highest education level, participation in teacher training programs, having a training certificate, teaching experience, or their BA degree?

c) Do the scores of English Preparatory teachers' sense of efficacy scale and its subscales differ in terms of gender, place of work, highest education level, participation in teacher training programs, having a training certificate, teaching experience, or their BA degree?

### **3.8 Conclusion**

This chapter aimed to introduce the methodology of the research. The researcher presented the research design and information about the research setting and participants. Next, the data collection tools were explained. Finally, data analysis procedures were presented. In the next chapter, the collected data will be analyzed, and the results will be interpreted.



## CHAPTER IV

### FINDINGS

#### 4.1. Introduction

Teachers' sense of efficacy beliefs regarding their teaching abilities affect their performances in the classroom (Ashton & Webb, 1986; Bandura, 1997; Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). Teachers who have growth mindsets think that abilities can be improved through effort and hard work (Dweck, 1999, 2006; Gero, 2013). Therefore, it was observed that teachers who have growth mindsets also have higher self-efficacy scores. On the contrary, it was observed that teachers with fixed mindsets have lower self-efficacy scores (Wood & Bandura, 1989; Palazzolo, 2016). Considering the effects of mindset and self-efficacy concepts on student achievement, exploring teachers' mindset and self-efficacy scores can shed light on teachers' future professional development. This study aims to reveal the relationship between the mindset and perceived self-efficacy beliefs of English teachers who are working in preparatory programs at state and foundation universities. Also, in this study, the effects of demographic features on these two concepts will be examined separately. The quantitative data collected through a questionnaire and were analyzed with SPSS v.25. To find out the statistically significant correlations between the English teachers' mindset scores and their perceived self-efficacy beliefs, Pearson Correlation Analysis, and Multiple Regression Analysis was conducted. Secondly, to find out whether or not demographic characteristics of the participants' have significant effects on English teachers' mindsets and their perceived self-efficacy beliefs, Kruskal Wallis H Test and independent samples T-test were used.

#### 4.2 Results of Descriptive Statistics

##### 4.2.1 Descriptive Statistics for Teachers' Sense of Efficacy Scale

Table 4.1 presents the descriptive statistics, including values such as mean, standard deviation, and range of maximum and minimum values for Teachers' Sense of Efficacy Scale. Descriptive statistics for Efficacy in Student Engagement are as follows: mean (25.23 with a standard deviation of 4.04), minimum (14), maximum (36), skewness (-.049), kurtosis (-.093). Descriptive statistics for Efficacy in Instructional Strategies are as follows: mean (30.06 with a standard deviation of 3.34),

minimum (19), maximum (36), skewness (-.609), kurtosis (.344). Descriptive statistics for Efficacy in Classroom Management are as follows: mean (29.62 with a standard deviation of 3.34), minimum (20), maximum (36), skewness (-.373), kurtosis (.215). Descriptive statistics for the total scores of Teachers' Sense of Efficacy Scale\* are as follows: mean (84.91 with a standard deviation of 8.99), minimum (61), maximum (105), skewness (-.175), kurtosis (-.045).

**Table 4.1: Descriptive Statistics for Teachers' Sense of Efficacy Scale**

	Min	Max	Skewness	Kurtosis	$\bar{x}$	ss
Efficacy in Student Engagement	14	36	-.049	-.093	25.23	4.04
Efficacy in Instructional Strategies	19	36	-.609	.344	30.06	3.34
Efficacy in Classroom Management	20	36	-.373	.215	29.62	3.34
Teachers' Sense of Efficacy Scale*	61	105	-.175	-.045	84.91	8.99

\* indicates the total score

#### 4.2.2 Descriptive Statistics for Teacher Mindset Scale

Table 4.2 presents descriptive statistics, including values such as mean, standard deviation, and range of maximum and minimum values for the Teacher Mindset Scale. Descriptive statistics for the total scores of the Teacher Mindset Scale are as follows: mean (31.96 with a standard deviation of 5.83), minimum (19), maximum (42), skewness (-.075), kurtosis (-.796).

**Table 4.2: Descriptive Statistics for Teacher Mindset Scale**

	Min	Max	Skewness	Kurtosis	$\bar{x}$	ss
Teacher Mindset Scale*	19	42	-.075	-.796	31.96	5.83

\*indicates the total score

### 4.3 Results of the Item Statistics

#### 4.3.1 Item Statistics for Teachers' Sense of Efficacy Scale

Table 4.3 presents item statistics for Teachers' Sense of Efficacy Scale.

**Table 4.3: Item Statistics for Teachers' Sense of Efficacy Scale**

Teachers' Sense of Efficacy Scale	Min	Max	$\bar{x}$	Sd
Item 1	5	9	7.58	1.05
Item 2	2	9	6.73	1.38
Item 3	4	9	7.34	1.12
Item 4	4	9	7.26	1.15
Item 5	5	9	7.77	.95
Item 6	3	9	7.31	1.30
Item 7	4	9	7.47	1.09
Item 8	4	9	7.40	1.15
Item 9	3	9	7.02	1.47
Item 10	4	9	8.11	.98
Item 11	1	9	3.77	2.56
Item 12	3	9	7.15	1.22

#### 4.3.2 Item Statistics for Teacher Mindset Scale

Table 4.4 presents item statistics for the Teacher Mindset Scale.

**Table 4.4: Item Statistics for Teacher Mindset Scale**

Teacher Mindset Scale	Min	Max	$\bar{x}$	Sd
Item 1	1	6	4.30	1.40
Item 2	1	6	3.84	1.59
Item 3	1	6	3.81	1.60
Item 4	1	6	4.10	1.63
Item 5	2	6	5.38	.81
Item 6	1	6	5.03	1.14
Item 7	3	6	5.50	.68

### 4.4 Results for Research Question 1

Research Question 1: Is there a statistically significant relationship between the English Preparatory teachers' mindsets and their perceived self-efficacy beliefs in teaching?

To find out the statistically significant correlation between the English Preparatory teachers' mindset scores and their perceived self-efficacy beliefs, Pearson Correlation

Analysis, and Multiple Regression Analysis were conducted. The following paragraphs will present the findings for this research question:

#### 4.4.1 Pearson Correlation Analysis Between English Teachers' Mindsets and Their Perceived Self-Efficacy Beliefs

Table 4.5 presents the results of Pearson correlation analysis between English teachers' mindsets and their perceived self-efficacy beliefs. As seen in the table, there is a statistically significant relationship between Teacher Mindset Scale total score and Instructional Strategies ( $r=.203$ ;  $p<.05$ ), Classroom Management ( $r=.168$ ;  $p<.05$ ) subscale scores and Self-Efficacy Total Score ( $r=.173$ ;  $p<.05$ ). Accordingly, there is no statistical relationship between Teacher Mindset Scale total score and Student Engagement subscale score ( $p>0.05$ )

**Table 4.5: Pearson Correlation Analysis Between English Teachers' Mindset Scores and Their Perceived Self-Efficacy Beliefs**

		<b>Teacher Mindset Scale</b>
Student Engagement	r	.078
	p	.342
Instructional Strategies	r	<b>.203</b>
	p	<b>.013*</b>
Classroom Management	r	<b>.168</b>
	p	<b>.040*</b>
Self-Efficacy Total Score	r	<b>.173</b>
	p	<b>.034*</b>

\* $<0.05$ ; \*\* $<0.01$

#### 4.4.2 Regression Analysis Results

The findings that were obtained as a result of testing the assumptions of the regression models are presented in table 4.6 below. To obtain valid results from regression analysis, some assumptions must be met. The conditions that regression models must meet are listed below:

1. Multicollinearity
2. Autocorrelation
3. Normality of Residuals
4. Means of Residuals
5. Heteroscedasticity

In the first stage, the assumption of multicollinearity is examined. This assumption was evaluated using Tolerance and variance inflation factor (henceforth VIF) values. The tolerance value is more than 0.10, and the VIF value should be close to 1. In this study, when the calculated VIF and Tolerance values were examined, it was found that there is no multicollinearity. Secondly, the autocorrelation assumption is examined. Durbin Watson's coefficient (henceforth *DW*) should be approximately 2 to avoid autocorrelation problems among the variables in the regression model. In this study, the *DW* was found to be *DW*= 1.869, and it means that there is no autocorrelation problem. In the third step, the assumption of the normality of residuals is examined. The skewness and kurtosis values in the range of  $\pm 1$  indicate normal distribution. In this research, it was found that the skewness and kurtosis values of residuals are within the  $\pm 1$  range which means that this assumption is met. In the fourth step, the average of the residual values should be '0'. In this study, the average of residuals was calculated as 0.000 and this assumption is also met. Finally, a regression model was established using the White test to examine heteroscedasticity. As a result of the analysis, it was found that the assumption of heteroscedasticity was provided ( $\chi^2_{(2)} = 1.208$ ) which means that the last assumption was also met.

**Table 4.6: Testing Regression Assumptions for Regression Analysis**

Multicollinearity		Autocorrelation	Normality of Residuals	Means of Residuals	Heteroscedasticity
VIF	Tolerance	Durbin Watson			
1.000	1.000	1.869	Skewness: -.149 Kurtosis: .675	0.000	$\chi^2_{(2)} = 1.208$

Table 4.7 presents regression analysis results for predicting Teachers' Mindset Scale scores by Teachers' Sense of Efficacy Scale scores. While constructing the regression model, the 'Stepwise' method was preferred. As a result of the analysis, a single model was obtained. When the results were evaluated, Teachers' Sense of Efficacy Scale and Instructional Strategies subscale scores were found as predictors of Teachers' Mindset Scale scores. The established model is statistically significant. ( $F(1/149) = 6.376$ ;  $p$

<0.05). Classroom Management and Student Engagement subscale scores were excluded from the model. It was found that Instructional Strategies subscale scores explain 4.1% of the variance of Teachers' Mindset Scale scores.

**Table 4.7: Regression Analysis for predicting Teachers' Mindset Scale Scores by Teachers' Sense of Efficacy Scale**

Dependent Variable	Independent Variable	B	Standard Error B	Beta	t	p
Mindset	Constant	21.306	4.245		5.019	<b>.000**</b>
	Instructional Strategies	.354	.140	.203	2.525	<b>.013*</b>
R= .203		R <sup>2</sup> = .041	df:1/149	F: 6.376	<b>p=.013*</b>	

\*<0.05; \*\*<0.01

#### 4.5 Results for Research Question 2

The second research question of the study was “Do English Preparatory teachers' mindset scale scores differ in terms of gender, place of work, highest education level, participation in teacher training programs, having a training certificate, teaching experience, or their BA degree?”

To find out whether or not demographic characteristics of the participants have a statistically meaningful effect on their mindset scale scores, Kruskal Wallis H Test and independent samples T-test were used.

##### 4.5.1 Results of Teachers' Mindset Scale Scores Regarding Gender

Table 4.8 presents Independent Samples t-Test results for Teachers' Mindset Scale scores regarding gender. A statistically significant difference was found in the total scores of the Teachers' Mindset Scale in terms of gender. Female participants are found to have higher Mindset Scale scores than male participants ( $t_{(149)}=-3.606$ ).

**Table 4.8: Independent Samples t-Test Results of Teachers' Mindset Scale Scores Regarding Gender**

	Group	N	$\bar{x}$	Sd	t	df	p
Teacher Mindset Scale	Male	43	29.35	5.78	-3.606	149	<b>.000**</b>
	Female	108	33.00	5.55			

\*<0.05; \*\*<0.01

#### 4.5.2 Results of Teachers' Mindset Scale Scores Regarding Place of Work

Table 4.9 presents Independent Samples t-Test results of Teachers' Mindset Scale Scores regarding the place of work. There is no statistically significant difference in Teachers' Mindset Scale total scores in terms of the place of work.

**Table 4.9: Independent Samples t-Test Results of Teachers' Mindset Scale Scores Regarding Place of Work**

	Groups	N	$\bar{x}$	Sd	t	df	p
Teacher Mindset Scale	State University	77	31.52	5.44	-.947	149	.345
	Foundation University	74	32.42	6.23			

#### 4.5.3 Results of Teachers' Mindset Scale Scores Regarding Highest Education Level

Table 4.10 presents ANOVA test results of Teachers' Mindset Scale regarding the highest education level. It was found that there is no statistically significant difference in Teachers' Mindset Scale scores in terms of the highest education level.

**Table 4.10: ANOVA Test Results of Teachers' Mindset Scale Scores Regarding Highest Education Level**

	Group	N	$\bar{x}$	Sd	F	df	p
Teacher Mindset Scale	Bachelor's Degree	68	83.68	9.21	.973	2	.380
	Master's Degree	66	85.73	8.47			
	Doctorate	17	86.71	9.88			

#### 4.5.4 Results of Teachers' Mindset Scale Scores Regarding Participation in Teacher Training or Certificate Programs

Table 4.11 presents Independent Samples t-Test results of Teachers' Mindset Scale scores regarding participation in a teacher training program or having certificates. A statistically significant difference is found among the total scores of Teachers' Mindset Scale in terms of participation in a teacher training or certificate programs. Participants who had attended teacher training or certificate programs have higher Teachers' Mindset Scale scores than the ones who had not attended teacher training or certificate programs.

**Table 4.11: Independent Samples t-Test Results of Teachers' Mindset Scale Scores Regarding Participation in Teacher Training or Certificate Programs**

	Group	N	$\bar{x}$	Sd	t	df	p
Teacher Mindset Scale	Yes	87	33.00	5.53	2.601	149	<b>.010*</b>
	No	64	30.55	5.99			

\* $<0.05$ ; \*\* $<0.01$

#### 4.5.5 Results of Teachers' Mindset Scale Scores Regarding Teaching Experience

Table 4.12 presents the Kruskal Wallis H test results of Teachers' Mindset Scale scores by teaching experience. There is no statistically significant difference in Teachers' Mindset Scale scores in terms of their teaching experience.

**Table 4.12: Kruskal Wallis H Test Results of Teacher Mindset Scale Scores Regarding Teaching Experience**

	Group	N	Mean Rank	H	X <sup>2</sup>	p	Dif.
Teacher Mindset Scale	0-2	10	79.00	0.665	1.747	0.956	
	2-5	26	72.42				
	5-10	47	73.62				
	10-20	52	79.34				
	21 +	16	76.09				

#### 4.5.6 Results of Teachers' Mindset Scale Scores Regarding BA Degree

Table 4.13 presents Kruskal Wallis H test results of Teachers' Mindset scale Scores regarding BA degree. There was no statistically significant difference in Teachers' Mindset Scale scores in terms of their BA degree.

**Table 4.13: Kruskal Wallis H Test Results of Teacher Mindset Scale Scores Regarding BA Degree**

	Group	N	Mean Rank	H	$\chi^2$	p
Teacher Mindset Scale	ELT <sup>a</sup>	81	68.91	3.918	2.557	0.270
	ETI <sup>b</sup>	19	87.97			
	ELL <sup>c</sup>	37	79.28			
	ACL <sup>d</sup>	10	69.15			

<sup>a</sup> English Language Teaching; <sup>b</sup> English Translation and Interpreting; <sup>c</sup> English Language and Literature; <sup>d</sup> American Culture and Literature

#### 4.6 Results for Research Question 3

The third research question was “Do the scores of English Preparatory teachers' sense of efficacy scale and its subscales differ in terms of gender, place of work, highest education level, participation in teacher training programs, having a training certificate, teaching experience, or their BA degree?”

To find out whether or not the demographic characteristics of the participants have a statistically significant effect on their sense of efficacy scores, Kruskal Wallis H Test and independent samples T-test were used. The following paragraphs present the findings.

##### 4.6.1 Results of Teachers' Sense of Efficacy Scale Scores Regarding Gender

Table 4.14 presents Independent Samples t-Test results for Teachers' Sense of Efficacy Scale scores regarding gender. The findings show that there is no statistically significant difference in Teachers' Sense of Efficacy Scale total scores in terms of gender.

**Table 4.14: Independent Samples t-Test Results of Teachers' Sense of Efficacy Scale Scores Regarding Gender**

	Groups	N	$\bar{x}$	Sd	t	df	p
<b>Student Engagement</b>	Male	43	25.14	4.06	-.176	149	.860
	Female	108	25.27	4.05			
<b>Instructional Strategies</b>	Male	43	29.44	3.19	-1.441	149	.152
	Female	108	30.31	3.37			
<b>Classroom Management</b>	Male	43	29.30	3.06	-.741	149	.460
	Female	108	29.75	3.46			
<b>Teachers' Sense of Efficacy Scale</b>	Male	43	83.88	8.27	-.888	149	.376
	Female	108	85.32	9.26			

#### 4.6.2 Results of Teachers' Sense of Efficacy Scale Scores Regarding Place of Work

Table 4.15 presents Independent Samples t-Test results of Teachers' Sense of Efficacy Scale Scores regarding the place of work. A statistically significant difference was found among Instructional Strategies subscale scores in terms of the place of work. Participants who work in foundation universities have higher Instructional Strategies scores than the ones who work in state universities.

**Table 4.15: Independent Samples t-Test Results of Teachers' Sense of Efficacy Scale Scores Regarding Place of Work**

	Groups	N	$\bar{x}$	Sd	t	df	p
<b>Student Engagement</b>	State University	77	25.78	4.00	1.708	149	.090
	Foundation University	74	24.66	4.04			
<b>Instructional Strategies</b>	State University	77	29.44	3.65	-2.369	143.309	<b>.019*</b>
	Foundation University	74	30.70	2.86			
<b>Classroom Management</b>	State University	77	29.61	3.56	-.045	149	.964
	Foundation University	74	29.64	3.13			
<b>Teachers' Sense of</b>	State University	77	84.83	9.52	-.115	149	.909

<b>Efficacy Scale</b>	Foundation University	74	85.00	8.47
-----------------------	-----------------------	----	-------	------

\*<0.05; \*\*<0.01

#### 4.6.3 Results of Teachers' Sense of Efficacy Scale Scores Regarding the Highest Education Level

Table 4.16 presents ANOVA test results of Teachers' Sense of Efficacy Scale Scores regarding the highest education level. The study found that there is no statistically significant difference in Teachers' Sense of Efficacy Scale Scores in terms of the highest education level.

**Table 4.16: ANOVA Test Results of Teachers' Sense of Efficacy Scale Scores Regarding the Highest Education Level**

	<b>Group</b>	<b>N</b>	$\bar{x}$	<b>Sd</b>	<b>F</b>	<b>df</b>	<b>p</b>
<b>Student Engagement</b>	Bachelor's Degree	68	24.93	4.09	.357	2	.700
	Master's Degree	66	25.45	3.83			
	Doctorate	17	25.59	4.78			
<b>Instructional Strategies</b>	Bachelor's Degree	151	25.23	4.04	1.245	2	.291
	Master's Degree	68	29.62	3.20			
	Doctorate	66	30.32	3.39			
<b>Classroom Management</b>	Bachelor's Degree	17	30.82	3.61	1.406	2	.248
	Master's Degree	151	30.06	3.34			
	Doctorate	68	29.13	3.44			
<b>Teachers' Sense of Efficacy Scale</b>	Bachelor's Degree	66	29.95	3.22	1.257	2	.288
	Master's Degree	17	30.29	3.37			
	Doctorate	151	29.62	3.34			

#### 4.6.4 Results of Teachers' Sense of Efficacy Scale Scores Regarding Participation in Teacher Training or Certificate Programs

Table 4.17 presents Independent Samples t-Test results of Teachers' Sense of Efficacy Scale scores regarding participation in teacher training or certificate programs. It was found that there is no statistically significant difference in Teachers' Sense of Efficacy Scale scores in terms of participation in teacher training or certificate programs.

**Table 4.17: Independent Samples t-Test Results of Teachers' Sense of Efficacy Scale Scores Regarding Participation in Teacher Training or Certificate Programs**

	Groups	N	$\bar{x}$	Sd	t	df	p
<b>Student Engagement</b>	Yes	87	25.21	4.32	-.088	149	.930
	No	64	25.27	3.66			
<b>Instructional Strategies</b>	Yes	87	30.06	3.56	-.009	149	.993
	No	64	30.06	3.03			
<b>Classroom Management</b>	Yes	87	29.62	3.54	-.008	149	.994
	No	64	29.63	3.09			
<b>Teachers' Sense of Efficacy Scale</b>	Yes	87	84.89	9.67	-.046	149	.964
	No	64	84.95	8.04			

#### 4.6.5 Results of Teachers' Sense of Efficacy Scale Scores Regarding Teaching Experience

Table 4.18 presents the Kruskal Wallis H test results of Teachers' Sense of Efficacy Scale scores regarding teaching experience. A statistically significant difference is found between the total scores of Teachers' Sense of Efficacy Scale, Instructional Strategies, and Classroom Management subscales and the teaching experience. It was found that teachers with 21 years and more teaching experience have higher Teachers' Sense Self Efficacy Scale total scores and Classroom Management subscale scores than the ones with 2-5 years of teaching experience. Nevertheless, it was found that there is no statistically significant difference in pairwise comparisons for the Student Engagement subscale.

**Table 4.18: Kruskal Wallis H Test Results of Teachers' Sense of Efficacy Scale Scores Regarding Teaching Experience**

	Group	N	Mean Rank	H	$\chi^2$	p	Dif.
<b>Student Engagement</b>	0-2	10	98.80	5.940	6.9	0.204	
	2-5	26	69.98				
	5-10	47	68.95				
	10-20	52	76.96				
	21+	16	89.13				
<b>Instructional Strategies</b>	0-2	10	84.55	10.708	8.607	<b>0.030*</b>	-

	2-5	26	64.54				
	5-10	47	65.29				
	10-20	52	82.72				
	21 +	16	98.91				
<b>Classroom Management</b>	0-2	10	74.65	12.056	7.817	<b>0.017*</b>	<b>2&lt;5</b>
	2-5	26	61.58				<b>3&lt;5</b>
	5-10	47	71.02				
	10-20	52	78.25				
	21+	16	107.59				
<b>Teachers' Sense of Efficacy Scale</b>	0-2	10	87.10	12.174	12.472	<b>0.016*</b>	<b>2&lt;5</b>
	2-5	26	65.33				<b>3&lt;5</b>
	5-10	47	65.55				
	10-20	52	79.82				
	21+	16	104.69				

\*<0,05; \*\*<0,01

#### 4.6.6 Results of Teachers' Sense of Efficacy Scale Scores Regarding BA Degree

Table 4.19 presents the Kruskal Wallis H test results of Teachers' Sense of Efficacy Scale scores regarding BA degree. The results show that there is no statistically significant difference among Teachers' Sense of Efficacy Scale Scores regarding BA degree.

**Table 4.19: Kruskal Wallis H Test Results of Teachers' Sense of Efficacy Scale Scores Regarding BA Degree**

Scales	Grup	N	Mean Rank	H	$\chi^2$	p
<b>Student Engagement</b>	ELT <sup>a</sup>	81	73.94	0.845	3.094	0.839
	ETI <sup>b</sup>	19	80.16			
	ELL <sup>c</sup>	37	69.86			
	ACL <sup>d</sup>	10	78.10			
<b>Instructional Strategies</b>	ELT <sup>a</sup>	81	73.40	4.243	652	0.236
	ETI <sup>b</sup>	19	71.84			
	ELL <sup>c</sup>	37	82.41			
	ACL <sup>d</sup>	10	51.90			
<b>Classroom Management</b>	ELT <sup>a</sup>	81	74.94	0.322	068	0.956
	ETI <sup>b</sup>	19	70.03			
	ELL <sup>c</sup>	37	75.08			
	ACL <sup>d</sup>	10	69.95			

<b>Teachers' Sense of Efficacy Scale</b>	ELT <sup>a</sup>	81	72.80	0.614 272	0.893
	ETI <sup>b</sup>	19	75.13		
	ELL <sup>c</sup>	37	77.82		
	ACL <sup>d</sup>	10	67.45		

<sup>a</sup> *English Language Teaching*; <sup>b</sup> *English Translation and Interpreting*; <sup>c</sup> *English Language and Literature*; <sup>d</sup> *American Culture and Literature*;



## **CHAPTER V**

### **DISCUSSION AND CONCLUSION**

#### **5.1. Introduction**

When teachers' expectations about themselves are low, their expectations about students are also expected to be low (Webb, 2015). Teachers' perceived self-efficacy beliefs and mindsets have an impact on this expectation. Bandura (1997) states that self-efficacy has an impact on human behavior by influencing people's goals and motivation levels. According to Dweck (2006), people's mindset types have an impact on their goals, their reactions to failures, and their motivations. People with growth mindsets aim to learn and do not give up in the face of difficulties. On the contrary, people with fixed mindsets try to display their skills, so they are more inclined to give up in the face of difficulties because they do not believe that the skills are developable. It was found that teachers with growth or fixed mindsets reflect the same mindset to their students (Webb, 2015). Therefore, it can be said that teachers' mindset and perceived self-efficacy beliefs can affect students' achievements.

Self-efficacy can be increased through mastery experiences, vicarious experiences, verbal persuasion, and physical or emotional support (Wood & Bandura, 1989; Bandura, 1997). Increasing teachers' self-efficacy also has an impact on student success (Banks, 2016). Like self-efficacy, mindset can also be changed. Dweck (1999) did not state whether having growth or fixed mindsets had superiority over each other. However, teachers who have growth mindsets create more supportive classroom environments and, by doing so, they improve students' academic success. (Butler, 2000; Plaks et al., 2001)

This study aims to contribute to the English language teaching field by investigating the relationship between the mindset and self-efficacy beliefs of English teachers who work in the preparatory programs of both state and foundation universities. The researcher also aims to investigate the effects of demographic features of the teachers on their mindsets and perceived self-efficacy beliefs. In the first chapter of the present study, the researcher explains the statement of the problem and presents the variables within a theoretical framework. Then it proceeds with the purpose and the significance

of the study with key terms, and the research questions of the study. In the second chapter of this study, a literature review on self-efficacy and mindset was made and, the necessary theoretical framework was introduced. Chapter three of the present research explained in detail the method that was adopted, the data collection instruments, and the tests for the analyses of the collected data. In addition, the demographic aspects of the participants were explained. In the fourth chapter, the findings of the study were presented. In the present chapter, the researcher will discuss the results of the research. Then, the pedagogical implications, the limitations of the research, and suggestions for further research will be given.

## **5.2. Discussion of the Findings**

In this study, the researcher tried to find answers to three research questions. The first question sought an answer to whether there is a significant relationship between the mindsets of teachers who are working in the preparatory programs of state and foundation universities and their perceived self-efficacy beliefs. The second research question aimed to examine whether there is a relationship between teachers' mindset scores measured by Teachers Mindset Instrument and their demographic characteristics such as gender, place of work, highest education level, attending a teacher training program, or having a certificate, teaching experience, and BA degree. The third question aimed to examine the relationship between the teachers' aforementioned demographic features and their self-efficacy beliefs and their subscales such as efficacy in instructional strategies, classroom management, and student engagement which were measured by Teachers' Sense of Efficacy Scale.

### **5.2.1 Discussion of Research Question 1**

The researcher measured the mindsets and the perceived self-efficacy beliefs of 151 English teachers through Teacher Mindset Instrument (Gero, 2013) and the Teachers' Sense of Self- Efficacy Scale (Tschannen- Moran & Hoy, 2001). Pearson Correlation Analysis and Multiple Regression analysis showed that there is a significant relationship between teachers' mindset scores and total self-efficacy scores. In addition, a significant relationship was found between mindset and teacher efficacy in instructional strategies and classroom management sub-factors. No relationship was found between mindset scores and efficacy in the student engagement sub-factor. Based on the findings, it can be said that as the teachers' self-efficacy beliefs in

classroom management and instructional strategies scores increase, mindset scores also increase. In other words, the teachers' self-efficacy beliefs in the instructional strategies and classroom management are higher if the teachers have growth mindsets. Teachers who have growth mindsets believe that intelligence can be improved (Dweck, 1999). Beliefs of teachers affect their behavior in the classroom (Lee, 1996; Deemer, 2004; Dupeyrat & Marine; 2005). Teachers with growth mindsets care about the learning process and acknowledge the challenging students as part of this process. They care about the efforts of the students and perceive the students' mistakes as part of the education process (Lee, 1996). Therefore, they do not hesitate to endeavor to provide a beneficial education method to their students (Leggett, 1986). Growth-minded teachers persevere to find new ways and methods to reach out to their students and they base their opinions about student success on effort and development over time (Mueller & Dweck, 1998; Butler, 2000; Plaks et al., 2001; Rattan, Good & Dweck, 2012). Butler (2000) and Plaks et al. (2001) found in their study that teachers who had growth mindsets were not critical to students' mistakes in the learning process. They considered making mistakes as natural outcomes of learning and they did not ignore unsuccessful students in their classroom environments. Rattan, Good & Dweck (2012) also found that teachers with growth mindsets were not judgmental towards unsuccessful students. One of the most important reasons behind this attitude can be teachers' high self-efficacy in terms of instructional strategies and classroom management. They focus not only on the successful students but also the unsuccessful ones. Since they try to engage unsuccessful students in the education process, this might increase their efficacy in instructional strategies and classroom management. Therefore, teachers with growth mindsets have higher beliefs in terms of their contribution to students' learning processes (Deemer, 2004). Self-efficacy beliefs determine how much effort people will make and how durable they will be to achieve their goals (Bandura, 1977, Schunk, 1991). Therefore, it was found that teachers with higher self-efficacy do not give up in difficult situations and maintain their motivation (Pajares, 1996). In this case, these findings are not surprising because it can be said that teachers with growth mindsets do not give up on challenging students and try to reach them by developing new strategies. Swann and Snyder (1980) observed that teachers' mindsets have an impact on the strategies they employ in the classroom. Teachers who have growth mindsets prefer to apply various ways and strategies.

Watanabe (2006) also found that teachers with growth mindsets are seeking for approaches in line with their students' needs. Teachers with fixed mindsets, on the other hand, question the students' abilities when the method they used does not contribute to the success of the students. Therefore, it is not surprising that teachers with growth mindsets have higher self-efficacy beliefs in instructional strategies. Wood & Bandura (1989), in their research with 24 graduate students, observed that those with fixed mindsets show lower self-efficacy, while those with growth mindsets have higher self-efficacy. Results from the current study also support Wood & Bandura (1989). However, no relationship was found between teachers' self-efficacy beliefs in the student engagement sub-factor and teachers' mindset. This finding is surprising since Dweck (1999) claims that when teachers have growth mindsets, they offer their students more challenging tasks to engage them. In another study, Webb (2015) affirmed that there is a positive relationship between the student engagement sub-factor and the teacher mindset and stated that teachers with growth mindsets manage to attract their students' attention by offering challenging activities. However, in this study, this finding was not confirmed. Overall, it can be said that there is a positive relationship between teacher mindset scores and teacher self-efficacy total score, instructional strategies, and classroom management. There is no correlation between teacher mindset and efficacy in the student engagement sub-factor.

### **5.2.2 Discussion of Research Question 2**

The effects of demographic features of teachers on Teacher Mindset Scores are investigated. Firstly, it was found that in the gender category, female participants have higher mindset scores than male participants. In her thesis, which she conducted with high school teachers, Glos (2018) also found the mindset scores of female participants higher than male participants. Secondly, no relationship is found between teachers' mindset scores and teachers' workplaces. Working for a state or a foundation university does not affect teachers' mindset scores. However, Heslin, Vandewalle & Latham (2006) observed that managers who have growth mindsets try to help their employees more and provide more opportunities to increase their development. Teachers who receive constructive feedback from their supervisors may find more opportunities to improve themselves. In addition, the growth mindset is expected to be more common in institutions where professional development workshops are offered. Dweck (2017) states that when people have the resources and opportunities, they have

more chances for the efforts to yield results. Therefore, it was hypothesized that there was a relationship between the place where teachers work and their mindset. However, surprisingly, there is no relationship between the teachers' mindset scores and their workplaces. Thirdly, no relationship was found between the highest education level of teachers and their mindset scores. There is no difference between holding a bachelor's degree, or master's degree or doctoral degree. Surprisingly, there is no relationship between them because it was observed that people with growth mindsets care about learning processes and make use of opportunities to improve themselves.

The learning process itself is a priority for people with growth mindsets (Dweck, 1999). It was observed that people with growth mindsets also get more successful results academically (Henderson & Dweck, 1990; Mueller & Dweck, 1998; Blackwell, Trzesniewski & Dweck, 2007). Therefore, the researcher expected teachers with growth mindsets to have higher education levels. Fourthly, however, there is an essential relationship between teachers' participation in teacher training programs or receiving certificates and their mindset scores. Teachers who have growth mindsets pay more attention to professional development as they believe that talents and skills can be improved. Therefore, the results are not surprising since the related literature review supported this view. When people are born, they have a desire for learning. However, they can stop improving themselves when they face difficulties over time. These are the signals of having fixed mindsets. People with growth mindsets believe that talent and intelligence can be developed with effort (Dweck, 1999). Every time they learn some new information, they believe their brain will be strengthened by neural connections (Tirri & Kujala, 2016). The definition of success is the learning process itself for them. On the other hand, people with fixed mindsets focus only on feeling smart so they try to stay away from development programs where they feel the pressure. Because, according to them, striving for success is only for people with shortcomings. People with growth mindsets enjoy it when they encounter challenges in life. The bigger the challenges they face, the more excited they are. Because they are aware of their deficiencies, they focus on overcoming these deficiencies by effort (Dweck, 2017). Teachers with growth mindsets want to offer their students more teaching strategies and learning opportunities. Therefore, their personal development is an essential element to them. Fifthly, there is no relationship between teachers' experiences in the profession and their mindset. The researcher believed that teachers'

experiences would have an impact on their mindset scores. As a result of their experiences with students, they were expected to accept that intelligence could be improved with the right strategies. However, based on the findings of the present research, a relationship cannot be established between experience and mindset. These findings contradict Gutshall's (2013) study because it was observed that teachers who have fixed mindsets initially evolve into growth mindsets after student interaction and teaching experiences. Sixthly, there is no relationship between the university departments where teachers graduated and their mindset. Teachers who did not graduate from the field of English Language Teaching and who earned rights and privileges for this profession afterward were expected to be more inclined to have growth mindsets. Because after graduating from the fields other than the English Language Teaching Department, they are entitled to do the teaching profession after making the necessary effort. In this case, it can be said that they have made more effort to become teachers. In this sense, this result is also surprising since there is no relationship between teachers' mindset and their graduated departments.

### **5.2.3 Discussion of Research Question 3**

The relationship between demographic characteristics of teachers and their sense of self-efficacy total score and sub-factors such as efficacy in instructional strategies, efficacy in classroom management, and efficacy in student engagement were investigated. Firstly, the researcher investigated the relationship between English teachers' self-efficacy beliefs and their gender. Being a female or a male participant has no relationship with the overall self-efficacy score or its sub-factors such as efficacy in instructional strategies, efficacy in classroom management, efficacy in student engagement. These findings imply that female or male participants have the same self-efficacy levels in terms of teacher effectiveness. Çubukçu (2008) also did not find a relationship between self-efficacy beliefs and gender. Similarly, Mitchual, Donkor & Quansah (2010) did not find a relationship between gender and teachers' perceived self-efficacy beliefs in their quantitative study with the pre-service teachers in Ghana. In another study, Karimvand (2011) could not find any effect of gender on teachers' perceived self-efficacy beliefs with Iranian EFL teachers. However, according to Klassen & Chiu (2010) female teachers have lower efficacy in classroom management sub-scale. Female teachers experienced more stress due to student behavior and compared to male teachers they demonstrated lower teacher efficacy in

classroom management. Besides, Gurbuzturk & Sad (2009) and Hamurcu (2006) found that male teachers had higher self-efficacy beliefs scores in total. In this context, the relationship between gender and self-efficacy is not clear. The findings of the current study demonstrate parallelism with Çubukçu (2008), Mitchual, Donkor & Quansah (2010), Karimvand (2011). On the other hand, it contradicts Gurbuzturk & Sad's (2009) and Hamurcu's (2006) studies. Secondly, the researcher wondered whether the workplace of the teachers, either state or foundation university, has some effects on their perceived self-efficacy beliefs. Bandura (1986) stated that environmental, cognitive, and behavioral factors affect people's behavior. The combination of these three factors creates the self-efficacy beliefs. Therefore, the working environment is expected to have an impact on total self-efficacy scores. Goddard, Hoy & Woolfolk (2000) defined educational institutions as environments where teachers socialize. These environments have an impact on teachers' self-efficacy levels. Educational institutions where teachers are open to asking questions and can benefit from professional training facilities increase teachers' self-efficacy levels through mastery experiences. Vicarious experiences, another source of self-efficacy, include the experiences that are gained from the social environment. For teachers, this environment consists of the workplace and colleagues. People create self-efficacy beliefs about themselves, either high or low, by observing other people in these environments (Bandura, 1994). If the observed person achieves a successful result, it positively contributes to the self-efficacy level of the observer (Schunk & Pajares, 2002). Another important concept put forward by Bandura (1994) is the social persuasion. If supervisors within the educational institution provide teachers with positive persuasion, this positively affects teachers' self-efficacy levels. Likewise, negative persuasion reduces the teachers' self-efficacy. Social persuasion also includes the conversations of two colleagues with each other. In this way, they can share information that will be useful to them in the teaching processes. Learning new information can also increase self-efficacy levels (Bandura, 1982). Ashton & Webb (1986) demonstrated the effects of school structure on teachers' self-efficacy levels. Webb & Ashton (1987) observed that some factors in the school structure such as insufficient salary, not getting enough positive feedback from supervisors have negative effects on teachers' self-efficacy beliefs. Based on all these studies, the researcher thought that there would be a connection between workplace and self-

efficacy total scores and efficacy in classroom management and student engagement sub-factors. However, the workplaces of teachers either state or foundation universities do not affect the total efficacy score, efficacy in classroom management, and student engagement sub-factors. However, there is a strong relationship between instructional strategies and teachers' workplaces. The instructional strategy scores of teachers working in private universities were found to be higher than teachers who are working in state universities. Yılmaz (2004) stated that people with low efficacy can suffer from stress. In this case, it can be said that teachers working in state universities might experience more problems in terms of self-efficacy beliefs in the instructional strategy sub-factor. Thirdly, this study investigated the relationship between teachers' self-efficacy scores and subscales such as efficacy in instructional strategies, classroom management, and student engagement and teachers' highest education level. Teachers perceived total self-efficacy scores and the subscales have no relationship with the highest education level of the teachers. In other words, whether teachers' have a bachelor's degree, or master's degree or doctoral degree does not affect their self-efficacy scores and their efficacy in instructional strategies, classroom management, and student engagement sub-factors. This result is surprising because according to Bandura (1977), experiences are the most important pillar of self-efficacy beliefs. Being successful in one task increases people's enthusiasm and efforts for the next goals. When people achieve their goals, their confidence in their abilities increase and they demonstrate higher self-efficacy (Bandura, 1993). Fourthly, this study sought an answer to whether or not attending teacher training courses increases teachers' self-efficacy beliefs. Teacher training courses offer teachers a chance to gain experience related to their profession. Therefore, teachers can gain experience by observing a trainer from their profession. They can also receive beneficial feedbacks and they can try to implement these suggestions in their classrooms. Bandura (1994) stated that vicarious experiences gained in this way are one of the factors that develop self-efficacy. The present research assumed that the courses would increase the self-efficacy beliefs of the teachers, since they may have learned different strategies and tips about classroom management, student engagement, and instructional strategies in the courses. However, no relationship was found between the teachers' participation in training programs and the total score or sub-factors of self-efficacy. Redmon (2007) stated that pre-service teachers' self-efficacy levels will not increase if they attend

teacher training courses. The present study shows parallelism with Redmon's (2007) study. Fifthly, the researcher considered the relationship between the teachers' teaching experience and their self-efficacy beliefs. Teaching experience has a relationship with the overall self-efficacy score and instructional strategies and classroom management sub-scales. Mastery experiences, one of the four factors put forth by Bandura (1994), increase people's self-efficacy levels. The findings of the present study also support Bandura (1994) since the total self-efficacy scores of the teachers with more than 21 years of teaching experience were the highest. Klassen & Chiu (2010) also found higher self-efficacy in classroom management subscale with teachers who have at least 23 years of experience. People with higher self-efficacy beliefs are also expected to have higher expectations for completing the upcoming tasks successfully (Bandura, 1982). Those with low self-efficacy beliefs are expected to be more likely to give up in the face of difficulties (Schunk & Pajares, 2002). Therefore, it is not surprising that teachers with more experience will have higher self-efficacy levels and try to utilize different instructional strategies. Because self-efficacy level affects the strategies teachers practice in the classroom. Those with high self-efficacy put more effort into reaching students (Guo et al., 2012) and do not give up when they encounter challenging students and try to reach them with new strategies (Schunk & Pajares, 2002). That is why experienced teachers are also skillful in the classroom management subscale. However, it is surprising that there is no relationship between the student engagement subscale and teaching experience. Klassen & Chiu (2010) found that teachers with more than 23 years of experience had higher teacher efficacy belief in student engagement. Lastly, no relationship was found between the departments where teachers graduated from and their self-efficacy levels. Teachers who graduated from English Language Teaching departments would be expected to have higher self-efficacy levels. Bandura (1994) stated that mastery experiences would increase self-efficacy levels. Teachers who graduated from other departments would have less experience with the teaching process, while teachers who graduated from the English Language Teaching department would have more experience. However, no relationship was found between the teachers' graduate departments and their perceived self-efficacy total score or its subscales.

### **5.3. Pedagogical Implications**

In this study, the researcher aimed to contribute to the English language teaching field by investigating the relationship between the mindset and self-efficacy beliefs of English teachers who work in the preparatory programs of both state and foundation universities. The researcher also aimed to investigate the effects of demographic features of the teachers on their mindsets and perceived self-efficacy beliefs. Although the concepts of self-efficacy and mindset are not new, only a few studies explored the relationship between the two in the world. This study is unique in that it focuses only on English teachers who are working in state and foundation universities in Turkey.

The researcher emphasizes that teachers who are working in English preparatory programs at the state and foundation universities should pay attention to the concepts of self-efficacy and mindset. According to this research, the growth mindset affects self-efficacy beliefs and classroom management and instructional strategies subscales. Teachers' who have growth mindsets implement novel teaching strategies in the classroom. Since self-efficacy and mindset concepts can be developed, university administrations can create awareness by providing professional development opportunities to teachers. Professional development programs are important for teachers to increase their abilities in their careers and provide more effective teaching in the future. Using such professional development programs to increase teachers' skills can reduce their job stress and increase their job satisfaction at the workplace.

There are many benefits of enhancing self-efficacy beliefs. When teachers have high efficacy, it can increase motivation (Bandura, 1977), emotional well-being (Sezgin & Erdogan, 2015), and student success (Armor et al., 1976). The most important way to increase self-efficacy is to give the teachers opportunities in which they can improve their mastery experiences (Bandura, 1997). Therefore, university administrations should provide teachers a suitable environment and training where they can gain mastery experiences. Likewise, vicarious experiences are known to increase self-efficacy (Bandura, 1997). Therefore, university administrations need to provide teachers opportunities to observe their colleagues. If teachers do not have the courage for the related task, they can observe their colleagues who can accomplish the same task. Based on their experiences, teachers can increase the belief that they could complete the job successfully. Thus, teacher efficacy can be improved. University

administrators can regularly apply TSES and TMI scales to teachers in order to follow the benefits of the professional development opportunities that they offered. In this way, they can determine their next steps and plan the future professional development opportunities that they will provide to the teachers. This situation also leads to the improvement of the curriculum. If teachers' self-efficacy levels are low, leaders can supply teachers with proper ways and methods to increase self-efficacy. Likewise, if teachers have fixed mindsets, they can improve their awareness of growth mindsets by providing teachers with growth mindset workshops. Dweck (2009) believes that administrators need to support growth mindsets because teachers with growth mindsets set learning as a goal and have a more empathetical perspective towards students' mistakes, which are made during the learning process. Since both concepts are proved to contribute to students' academic success, this study took into consideration two concepts together and aimed to investigate their interactions with demographic features.

#### **5.4. Suggestions for Further Research and Limitations of the Study**

This study was conducted only in universities, and results might have differed in different settings such as high schools, primary schools. This study is also limited to 151 participants. It can be difficult to generalize the findings of such a study with only 151 teachers. All these factors may have affected the validity of the research. More participants could have participated in the study to increase the effectiveness and reliability of the study. New studies with more participants are needed.

#### **5.5. Conclusion**

This study investigated the relationship between mindset and self-efficacy concepts and the effects of demographic factors on these two concepts. Based on the findings of this study, the teachers who have growth mindsets also have higher self-efficacy beliefs. Since mindset and self-efficacy are developable (Bandura, 1997; Dweck, 1999), the researcher aimed to review these two concepts. At the same time, these concepts have impacts on teachers' strategies and student achievement (Swann & Snyder, 1980; Watanabe, 2006; Gutshall, 2013). In order to display a more successful management approach, administrators need to understand the self-efficacy beliefs that teachers possess, and they should plan the future professional development opportunities considering these factors. Further, teachers should follow the current

literature and believe that intelligence can be improved to increase student success. Otherwise, they cannot demonstrate the same educational performance to the students that they find low regarding their skills and intelligence. At the same time, they can only present an understanding to the students whom they perceived intelligent. This naturally leads to losses in student success.



## REFERENCES

- Allinder, R. M. (1994). The Relationship Between Efficacy and the Instructional Practices of Special Education Teachers and Consultants. *Teacher Education and Special Education, 17*(2): 86–95. <https://doi.org/10.1177/088840649401700203>
- Anderson, R. K., Boaler, J., & Dieckmann, J. A. (2018). Achieving Elusive Teacher Change through Challenging Myths about Learning: A Blended Approach. *Education Sciences, 8*(3): 98. <https://doi.org/10.3390/educsci8030098>
- Armor, D., Conroy-Oseguera, P., Cox, M., King, N., McDonnell, L., Pascal, A., Pauly, E. & Zellman, G. (1976). *Analysis of The School Preferred Reading Programs in Selected Los Angeles Minority Schools* (Report No. R-2007-LAUSD). Santa Monica, CA: Rand.
- Aronson, J., Fried, C. & Good, C. (2002). Reducing the Effects of Stereotype Threat on African American College Students by Shaping Theories of Intelligence. *Journal of Experimental Social Psychology, 38*(2): 113–125.
- Ashton, P. T. & Webb, R. B. (1986). Teacher Motivation and the Conditions of Teaching: A Call for Ecological Reform. *Journal of Thought, 21*(02): 43-60.
- Bandura, A. (1971). *Social Learning Theory*. New York: General Learning Press.
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review, 84*(02): 191-215.
- Bandura, A. (1982). Self-efficacy Mechanism in Human Agency. *American Psychologist, 37*(2): 122–147. <https://doi.org/10.1037/0003-066X.37.2.122>
- Bandura, A. (1986). *Social Foundations of Thought and Action: A Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1989). Human Agency in Social Cognitive Theory. *American Psychologist, 44*(9): 1175–1184. <https://doi.org/10.1037/0003-066X.44.9.1175>

- Bandura, A. (1990). Some Reflections on Reflections. *Psychological Inquiry*, 1(1): 101-105.
- Bandura, A. (1993). Perceived Self-Efficacy in Cognitive Development and Functioning. *Educational Psychologist*, 28(2): 117-148.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of Human Behavior* (Vol. 4: 71-81). New York: Academic Press.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman
- Bandura, M. & Dweck, C. S. (1985). The Relationship of Conceptions of Intelligence and Achievement Goals to Achievement-Related Cognition, Affect, and Behavior. Unpublished manuscript.
- Banks, A. D. (2016). *The Perception of Teacher Self-Efficacy of Traditionally and Alternatively Certified Teachers in A Suburban School District* (Ph.D. dissertation). Dallas Baptist University, Texas. Retrieved from ProQuest. (10241068)
- Barcelos, A. M. F. & Kalaja, P. (2011). Beliefs about SLA Revisited. *System*, 39(3): 281–289.
- Barkley, J. M. (2006). Reading Education: Is Self-Efficacy Important?. *Reading Improvement*, 43(4): 194-219.
- Berman, P., McLaughlin, M., Bass G., Pauly, E. & Zellman, G. (1977). *Federal Programs Supporting Educational Change: Vol. 2, Factors Affecting Implementation and Continuation* (Report No. R-1589/7-HEW). Santa Monica, CA: Rand.
- Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention. *Child Development*, 78(1): 246–263. <https://doi.org/0009-3920/2007/7801-0014>

- Blazar, D. & Kraft, M.A. (2015). Teacher and Teaching Effects on Students' Academic Behaviors and Mindsets. *Working Paper 41*. Cambridge, MA: Mathematica Policy Research, December 2015.
- Bonner, C. L. (2012). *An Exploration into Increasing Teacher Self-Efficacy Through Participation in Action Research* (Ph.D. Dissertation). Azusa Pacific University, California.
- Broda, M., Yun, J., Schneider, B., Yeager, D. S., Walton, G. M. & Diemer, M. (2018). Reducing Inequality in Academic Success for Incoming College Students: A Randomized Trial of Growth Mindset and Belonging Interventions. *Journal of Research on Educational Effectiveness*, 11(3): 317–338.
- Brooks, R. & Goldstein, S. (2008). The Mindset of Teachers Capable of Fostering Resilience in Students. *Canadian Journal of School Psychology*, 23(1): 114-126.
- Brooks, R., & Goldstein, S. (2004). *The Power of Resilience: Achieving Balance, Confidence, And Personal Strength in Your Life*. New York: McGraw-Hill.
- Brooks, R., DeVries, M. & Goldstein, S. (2013). Translating Resilience Theory for Application with Children and Adolescents by Parents, Teachers, and Mental Health Professionals. In Prince-Embury, S. & Saklofske D. H. (1<sup>st</sup> ed.), *Resilience in Children, Adolescents, and Adults Translating Research into Practice*, New York, NY: Springer Science Business Media, 73-90.
- Burley, W. W., Hall, B. W., Villeme, M. G. & Brockmeier, L. L. (1991). A Path Analysis of the Mediating Role of Efficacy in First- Year Teachers' Experiences, Reactions, and Plans. *Annual meeting of the American Educational Research Association*, Chicago.
- Butler, R. (2000). Making Judgments About Ability: The Role of Implicit Theories of Ability in Moderating Inferences from Temporal and Social Comparison Information. *Journal of Personality and Social Psychology*, 78: 965-978. doi:10.1037/0022-3514.78.5.965

- 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)*: 473-490.
- Check, J. & Schutt, R. K. (2012). *Research Methods in Education*. Thousand Oaks, CA: Sage.
- Cheung, H. Y. (2008). Teacher efficacy: A Comparative Study of Hong Kong and Shanghai Primary In-service Teachers. *Australian Educational Researcher*, 35(1): 103–123. <https://doi.org/10.1007/BF03216877>
- Chong, W. H. & Kong, C. A. (2012). Teacher Collaborative Learning and Teacher Self-efficacy: The Case of Lesson Study. *Journal of Experimental Education*, 80(3): 263–283. <https://doi.org/10.1080/00220973.2011.596854>
- Cohen, G. L., Steele, C. M. & Ross, L. D. (1999). The Mentor's Dilemma: Providing Critical Feedback Across the Racial Divide. *Personality and Social Psychology Bulletin*, 25(10): 1302–1318. <https://doi.org/10.1177/0146167299258011>
- Coladarci, T. (1992). Teachers' Sense of Efficacy and Commitment to Teaching. *Journal of Experimental Education*, 60(4): 323–337.
- Creswell, J. W. & Plano Clark, V. L. (2017). *Designing and Conducting Mixed Methods Research*, (3<sup>rd</sup> ed.). Los Angeles: SAGE Publications.
- Cubukcu, F. (2008). Study on The Correlation Between Self-Efficacy and Foreign Language Anxiety. *Egitimde Kuram ve Uygulama*, 4(1):148 – 158.
- Da Fonseca, D., Cury, F., Fakra, E., Rufo, M., Poinso, F., Bounoua, L. & Huguet, P. (2008). Implicit Theories of Intelligence and IQ Test Performance in Adolescents with Generalized Anxiety Disorder. *Behaviour Research and Therapy*, 46(4): 529-536. doi:10.1016/j.brat.2008.01.006

- Deemer, S. A. (2004). Classroom Goal Orientation in High School Classrooms: Revealing Links between Teacher Beliefs and Classroom Environments. *Educational Research*, 46(1): 73–90.
- Diener, C. I. & Dweck, C. S. (1978). An Analysis of Learned Helplessness: Continuous Changes in Performance, Strategy, and Achievement Cognitions Following Failure. *Journal of Personality and Social Psychology*, 36(5): 451–462. <https://doi.org/10.1037/0022-3514.36.5.451>
- Diener, C. I. & Dweck, C. S. (1980). An Analysis of Learned Helplessness: II. The Processing of Success. *Journal of Personality and Social Psychology*, 39(5): 940–952. <https://doi.org/10.1037/0022-3514.39.5.940>
- Duckworth, A. L., Quinn, P. D. & Seligman, M. E. P. (2009). Positive Predictors of Teacher Effectiveness. *Journal of Positive Psychology*, 4(6): 540–547.
- Dupeyrat, C. & Mariné, C. (2005). Implicit Theories of Intelligence, Goal Orientation, Cognitive Engagement, and Achievement: A Test of Dweck’s Model with Returning to School Adults. *Contemporary Educational Psychology*, 30(1), 43–59. <https://doi.org/10.1016/j.cedpsych.2004.01.007>
- Dweck, C. (2015). Every Student Has Something to Teach Me. *Educational Horizons*, 93(2): 10-14.
- Dweck, C. S. & Leggett, E. L. (1988). A Social-Cognitive Approach to Motivation and Personality. *Psychological Review*, 95(2): 256–273. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.583.9142&rep=rep1&type=pdf>
- Dweck, C. S. & Reppucci, N. D. (1973). Learned Helplessness and Reinforcement Responsibility in Children. *Journal of Personality and Social Psychology*, 25(1): 109–116. <https://doi.org/10.1037/h0034248>
- Dweck, C. S. & Yeager, D. S. (2019). Mindsets: A View from Two Eras. *Perspectives on Psychological Science*, 14(3): 481–496.

- Dweck, C. S. (1975). The Role of Expectations and Attributions in the Alleviation of Learned Helplessness. *Journal of Personality and Social Psychology*, 31(4): 674-685.
- Dweck, C. S. (1976). Children's Interpretation of Evaluative Feedback: The Effect of Social Cues on Learned Helplessness. *Quarterly of Behavior and Development* 22(2): 105-109.
- Dweck, C. S. (1991). Self-Theories and Goals: Their Role in Motivation, Personality, And Development. In R. A. Dienstbier (Ed.), *Current Theory and Research in Motivation, Vol. 38. Nebraska Symposium on Motivation, 1990: Perspectives on Motivation*. University of Nebraska Press, 199-235.
- Dweck, C. S. (1999). *Self-Theories: Their Role in Motivation, Personality, and Development*, (1<sup>st</sup> ed.). New York: Psychology Press.
- Dweck, C. S. (2006). *Mindset: The New Psychology of Success*, (1<sup>st</sup> ed.). New York: Random House.
- Dweck, C. S. (2008). Can Personality Be Changed?. *Psychological Science*, 17(6): 391-394.
- Dweck, C. S. (2009). Can We Make Our Students Smarter?. *Education Canada*, 49(4): 56-61.
- Dweck, C. S. (2017). *Mindset: The New Psychology of Success*, (Rev. ed.). London: Robinson.
- Dweck, C. S., Chiu, C. & Hong, Y. (1995). Implicit Theories and Their Role in Judgments and Reactions: A World from Two Perspectives. *Psychological Inquiry*, 6(4): 267–285. [https://doi.org/10.1207/s15327965pli0604\\_1](https://doi.org/10.1207/s15327965pli0604_1)
- Dweck, C.S., Walton, G.M. & Cohen, G.L. (2014). *Academic Tenacity: Mindsets and Skills that Promote Long-Term Learning*. Seattle, WA: Bill & Melinda Gates Foundation.

- Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams. *Administrative Science Quarterly*, 44(2): 350–383.  
<https://doi.org/10.2307/2666999>
- Elliott, E. S. & Dweck, C. S. (1988). Goals: An Approach to Motivation and Achievement. *Journal of Personality and Social Psychology*, 54(1): 5–12.
- Evans, E. D. & Tribble, M. (1986). Perceived Teaching Problems, Self-Efficacy, and Commitment to Teaching among Preservice Teachers. *Journal of Educational Research*, 80(2): 81-85. <http://dx.doi.org/10.1080/00220671.1986.10885728>
- Farrell, E. & Dweck, C. S. (1985). The Role of Motivational Processes in Transfer of Learning. Unpublished manuscript.
- Gero, G. P. (2013). *What Drives Teachers to Improve? The Role of Teacher Mindset in Professional Learning* (Ph.D. Dissertation). Claremont Graduate University, California.
- Gibson, S. & Dembo, M. H. (1984). Teacher Efficacy: A Construct Validation. *Journal of Educational Psychology*, 76(4): 569–582.  
<https://doi.org/10.1037/0022-0663.76.4.569>
- Gist, M. E. & Mitchell, T. R. (1992). Self-Efficacy: A Theoretical Analysis of Its Determinants and Malleability. *Academy of Management Review*, 17(2): 183–211. <https://doi.org/10.5465/amr.1992.4279530>
- Glickman, C. D., & Tamashiro, R. T. (1982). A Comparison of First-Year, Fifth Year, And Former Teachers on Efficacy, Ego Development, And Problem Solving. *Psychology in the Schools*, 19: 558–562
- Glos, K. S. (2018). *Exploring the Relationship Between Teacher Self-Efficacy and Mindset in High School Teachers* (Ph.D. Dissertation). Dallas Baptist University, Dallas.

- Goddard, R.D., Hoy, W.K. & Hoy, A.W. (2000). Collective Teacher Efficacy: Its Meaning, Measure, And Impact on Student Achievement. *American Educational Research Journal*, 37(2): 479-507.
- Good, C., Aronson, J. & Inzlicht, M. (2003). Improving Adolescents' Standardized Test Performance: An Intervention to Reduce the Effects of Stereotype Threat. *Journal of Applied Developmental Psychology*, 24(6): 645–662.  
<https://doi.org/10.1016/j.appdev.2003.09.002>
- Grolnick, W. S., Gurland, S. T., DeCoursey, W. & Jacob, K. (2002). Antecedents and Consequences of Mothers' Autonomy Support: An Experimental Investigation. *Developmental Psychology*, 38(1): 143–155.
- Gunderson, E. A., Gripshover, S. J., Romero C., Dweck, C. S., Goldin-Meadow, S. & Levine S. C. (2013). Parent Praise to 1-3-Year-olds Predicts Children's Motivational Frameworks 5 Years Later. *Child Development*, 84(5): 1526-1541.
- Guo, Y., Connor, C. M., Yang, Y., Roehrig, A. D. & Morrison, F. J. (2012). The Effects of Teacher Qualification, Teacher Self-efficacy, and Classroom Practices on Fifth Graders' Literacy Outcomes. *Elementary School Journal*, 113(1): 3–24.  
<https://doi.org/10.1086/665816>
- Gurbuzturk, O. and Sad, S. N. (2009). Student Teachers' Beliefs About Teaching and Their Sense of Self-Efficacy: A Descriptive and Comparative Analysis. *Inonu University Journal of the Faculty of Education*, 10(3): 201-226.
- Guskey, T. R. (1982). The Influence of Change in Instructional Effectiveness upon the Affective Characteristics of Teachers. *Annual Meeting of the American Educational Research Association*. New York, NY.
- Guskey, T. R. (1988). Teacher Efficacy, Self-Concept, And Attitudes Toward the Implementation of Instructional Innovation. *Teaching and Teacher Education*, 4(1): 63-69.

- Guskey, T.R. & Passaro, P. (1994). Teacher Efficacy: A Study of Construct Dimensions. *Annual Meeting of the American Educational Research Association*. Atlanta, GA.
- Gutshall, C. A. (2013). Teachers' Mindset for Students with and without Disabilities. *Psychology in the Schools, 50*(10): 1073- 1083.
- Hadwin, L. (2019). A 'Growth Mindset' in an English Language Teacher Training Programme. *The Teacher Trainer, 33*(2): 15-18
- Hall, B. W., Burley, W. W., Villeme, M. G. & Brockmeir, L. (1992). An Attempt to Explicate Teacher Efficacy Beliefs Among First-Year Teachers. *Annual meeting of the American Educational Research Association*, San Francisco.
- Hamurcu, H. (2006). Candidate Class Teachers' Self-Efficacy Beliefs About Science Teaching. *Eurasian Journal of Educational Research, 24*: 112-122.
- Hattie, J. (2012). *Visible Learning for Teachers Maximizing Impact on Learning*, (1<sup>st</sup> ed.). New York: Routledge.
- Henderson, V. L. & Dweck, C. S. (1990). Motivation and Achievement. In S. S. Feldman & G. R. Elliott (Eds.), *At the Threshold: The Developing Adolescent*. Harvard University Press, 308-329.
- Heslin, P. A., Vandewalle, D. & Latham, G. P. (2006). Keen to Help? Managers' Implicit Person Theories and Their Subsequent Employee Coaching. *Personnel Psychology, 59*(4): 871–902. <https://doi.org/10.1111/j.1744-6570.2006.00057.x>
- Hokoda, A. & Fincham, F. D. (1995). Origins of Children's Helpless and Mastery Achievement Patterns in the Family. *Journal of Educational Psychology, 87*(3): 375–385. <https://doi.org/10.1037/0022-0663.87.3.375>
- Hong, Y., Chiu, C., Dweck, C. S. & Lin, D. (1998). A Test of Implicit Theories and Self-Confidence as Predictors of Responses to Achievement Challenges. Unpublished manuscript.

- Hong, Y., Dweck, C. S., Chiu, C., Lin, D. M. S. & Wan, W. (1999). Implicit Theories, Attributions, and Coping: A Meaning System Approach. *Journal of Personality and Social Psychology*, 77(3): 588-599.
- Hoy, A. W. (2000, April). Changes in Teacher Efficacy During the Early Years of Teaching. *Annual meeting of the American Educational Research Association*. New Orleans, LA.
- Jerald, C. D. (2007). Believing and Achieving. *Center for Comprehensive School Reform and Improvement*. (January). Retrieved from <http://eric.ed.gov/?id=ED495708>
- Karbasi, S. & Samani, S. (2016). Psychometric Properties of Teacher Self-efficacy Scale. *Procedia - Social and Behavioral Sciences*, 217: 618–621.
- Karimvand, P. N. (2011). The Nexus Between Iranian EFL Teachers' Self-Efficacy, Teaching Experience and Gender. *English Language Teaching*, 4(3): 171 –183.
- Keenan, M. (2018). *The Impact of Growth Mindset on Student Self-Efficacy* (MA Dissertation). Goucher College, Baltimore, Maryland.
- Khan, A. (2011). Teacher Efficacy - A Tool to Enhance Academic Achievement of Secondary Schools. *Language in India*, 11(6): 235-247
- Klassen, R. & Chiu, M. (2010). Effects on Teachers' Self-Efficacy and Job Satisfaction: Teacher Gender, Years of Experience and Job Stress. *Journal of Educational Psychology*, 102: 741 – 756.
- Kraft, M. A. (2019). Teacher Effects on Complex Cognitive Skills and Social-Emotional Competencies. *Journal of Human Resources*, 54(1): 1–36.
- Lee, K. (1996). A Study of Teacher Responses Based on Their Conceptions of Intelligence. *Journal of Classroom Interaction*, 31(2): 1–12.
- Leggett, E. L. & Dweck, C. S. (1986). Individual Differences in Goals and Inference Rules: Sources of Causal Judgments. Unpublished manuscript.

- Leggett, E. L. (1986). Individual Differences in Effort/Ability Inference Rules and Goals: Implications for Causal Judgments. *Dissertation Abstracts International*, 47(6-B): 2662.
- Lespinasse, K., Bech, E. (2018). Promoting a Growth Mindset Approach in Foreign Language Students: Motivational Strategies for Teachers and Learners. *Proceedings of CLaSIC 2018, National University of Singapore*. Retrieved from [http://www.fas.nus.edu.sg/cls/CLaSIC/clasic2018/PROCEEDINGS/lespinasse\\_karine.pdf](http://www.fas.nus.edu.sg/cls/CLaSIC/clasic2018/PROCEEDINGS/lespinasse_karine.pdf)
- Lou, N. M. & Noels, K. A. (2016). Changing Language Mindsets: Implications for Goal Orientations and Responses to Failure in And Outside the Second Language Classroom. *Contemporary Educational Psychology* 46(2016): 22-33.
- Lou, N. M. & Noels, K. A. (2019). Promoting Growth in Foreign and Second Language Education: A Research Agenda for Mindsets in Language Learning and Teaching. *System*, 86: 102126. <https://doi.org/10.1016/j.system.2019.102126>
- Lou, N. M. & Noels, K. A. (2020). Breaking the Vicious Cycle of Language Anxiety: Growth Language Mindsets Improve Lower-competence ESL Students' Intercultural Interactions. *Contemporary Educational Psychology* 61(2020), 101847 <https://doi.org/10.1016/j.cedpsych.2020.101847>
- Master, A. (2017). Teachers' Mindsets About Math and Why They Matter. *Teaching Young Children*, 11(1): 22-23.
- Mehmood, N. (2019). Factors Impacting EFL Teachers' Self-efficacy: A Theoretical Perspective. *English Language Teaching*, 12(4): 39-48.
- Meijer, C.J.W. & Foster, S. F. (1988). The Effect of Teacher Self-Efficacy on Referral Chance. *The Journal of Special Education*, 22(3): 378-384.
- Mercer, S. & Ryan, S. (2010). A Mindset for EFL: Learners' Beliefs About the Role of Natural Talent. *ELT Journal* 64(4): 436-444.

- Mercer, S. & Ryan, S. (2012). Implicit Theories: Language Learning Mindsets. Psychology for Language Learning In: Mercer S., Ryan S., Williams M. (Eds.) *Psychology for Language Learning*. Palgrave Macmillan, London, 74-89.
- Mertens, D. M. (2010). *Research and Evaluation in Education and Psychology: Integrating Diversity with Quantitative, Qualitative, and Mixed Methods*, (3<sup>rd</sup> ed.). Los Angeles: SAGE Publications.
- Miele, D. B. & Molden, D. C. (2010). Naive Theories of Intelligence and the Role of Processing Fluency in Perceived Comprehension. *Journal of Experimental Psychology: General*, 139(3): 535–557. <https://doi.org/10.1037/a0019745>
- Miele, D. B., Metcalfe, J. & Son, L. K. (2013). Children’s Naive Theories of Intelligence Influence Their Metacognitive Judgments. *Child Development*, 84(6): 1879–1886. <https://doi.org/10.1111/cdev.12101>
- Miller, D. L. (2013). Got it Wrong? Think Again. And Again. *Phi Delta Kappan*, 94(5): 50–52. <https://doi.org/10.1177/003172171309400511>
- Mitchual, S. J., Donkor, F. & Quansah, C. (2010). The Relationship Between Self-Efficacy Beliefs and Performance of Pre-Service Teacher Interns. *Ghana Journal of Education and Teaching*, 11: 268 – 282.
- Molden, D. C., Plaks, J. E. & Dweck, C. S. (2006). “Meaningful” Social Inferences: Effects of Implicit Theories on Inferential Processes. *Journal of Experimental Social Psychology*, 42(6): 738–752. <https://doi.org/10.1016/j.jesp.2005.11.005>
- Moser, J. S., Schroder, H. S., Heeter, C., Moran, T. P. & Lee, Y. H. (2011). Mind Your Errors: Evidence for a Neural Mechanism Linking Growth Mindset to Adaptive Posterror Adjustments. *Psychological Science*, 22(12): 1484–1489.
- Mueller, C. M. & Dweck, C. S. (1997). Implicit Theories of Intelligence: Malleability Beliefs, Definitions, And Judgments of Intelligence. Unpublished manuscript.

- Mueller, C. M. & Dweck, C. S. (1998). Praise for Intelligence Can Undermine Children's Motivation and Performance. *Journal of Personality and Social Psychology*, 75(1): 33–52. <https://doi.org/10.1037//0022-3514.75.1.33>
- Muijs, D. & Reynolds, D. (2015). Teachers' Beliefs and Behaviors: What Really Matters? *Journal of Classroom Interaction*, 50(1): 25–40.
- Ng, F. F. & Wang, Q (2012). Chinese Students' Implicit Theories of Intelligence and School Performance: Implications for Their Approach to Schoolwork. *Personality and Individual Differences*, 52(8): 930–935.
- Nie, Y., Tan, G. H., Liau, A. K., Lau, S. & Chua, B. L. (2013). The Roles of Teacher Efficacy in Instructional Innovation: Its Predictive Relations to Constructivist and Didactic Instruction. *Educational Research for Policy and Practice*, 12(1): 67–77. <https://doi.org/10.1007/s10671-012-9128-y>
- Pajares, F. (1996). Self-efficacy Beliefs in Academic Settings. *Review of Educational Research*, 66(4): 543–578.
- Palazzolo, S. D. (2016). *The Relationship between Mindset and Self-efficacy in Pre-service Elementary Teacher Candidates Teaching Science, and its Implications on Science Teaching* (Electronic MA Dissertations). University of Windsor, Ontario, Canada. <https://scholar.uwindsor.ca/etd/5755>
- Papi, M., Rios, A., Pelt, H. & Ozdemir, E. (2019). Feedback-Seeking Behavior in Language Learning: Basic Components and Motivational Antecedents. *The Modern Language Journal*, 103(1): 205-226.
- Park, D., Gunderson, E.A., Tsukayama, E., Levine, S.C. & Beilock, S.L. (2016). Young Children's Motivational Frameworks and Math Achievement: Relation to Teacher-Reported Instructional Practices, but Not Teacher Theory of Intelligence. *Journal of Educational Psychology*, 108(3): 300-313
- Patrick, S. K. & Joshi, E. (2019). “Set in Stone” or “Willing to Grow”? Teacher Sensemaking During a Growth Mindset Initiative. *Teaching and Teacher Education*, 83: 156–167. <https://doi.org/10.1016/j.tate.2019.04.009>

- Paunesku, D., Walton, G. M., Romero, C., Smith, E. N., Yeager, D. S. & Dweck, C. S. (2015). Mindset Interventions Are a Scalable Treatment for Academic Underachievement. *Psychological Science*, 26(6): 784–793.
- Pendergast, D., Garvis, S. & Keogh, J. (2011) Pre-Service Student- Teacher Self-efficacy Beliefs: An Insight into the Making of Teachers. *Australian Journal of Teacher Education*, 36(12): 46-57
- Pico della Mirandola, Giovanni. (1486). *On the Dignity Of Man: A New Translation And Commentary*. Translated by Francesco Borghesi, Michael Papio & Massimo Riva, Eds.). New York, NY: Cambridge University Press, 2012. doi:10.1017/CBO9781139059565.
- Pintrich, P. & Schunk, D. (1996). *Motivation in Education: Theory, Research & Applications*, Englewood Cliffs, NJ: Prentice-Hall.
- Plaks, J. E., Stroessner, S. J., Dweck, C. S. & Sherman, J. W. (2001). Person Theories and Attention Allocation: Preferences for Stereotypic Versus Counterstereotypic Information. *Journal of Personality and Social Psychology*, 80(6): 876–893. <https://doi.org/10.1037/0022-3514.80.6.876>
- Podell, D. M. & Soodak, L.C. (1993). Teacher Efficacy and Bias in Special Education Referrals. *Journal of Educational Research*, 86(4): 247-253
- Pomerantz, E. M. & Kempner, S. G. (2013). Mothers' Daily Person and Process Praise: Implications for Children's Theory of Intelligence and Motivation. *Developmental Psychology*, 49(11): 2040-2046.
- Rattan, A., Good, C. & Dweck, C. S. (2012). “It’s Ok - Not Everyone Can Be Good at Math”: Instructors with an Entity Theory Comfort (and Demotivate) Students. *Journal of Experimental Social Psychology*, 48(3): 731–737. <https://doi.org/10.1016/j.jesp.2011.12.012>
- Rau, A. (2016). Exploring the Influence of Teacher Language on Fourth Grade Students’ Mindsets: A Multi-case Study. *Qualitative Report*, 21(9): 1684–1707.

- Raudenbush, S., Rowan, B. & Cheong, Y. (1992). Contextual Effects on The Self-Perceived Efficacy of High School Teachers. *Sociology of Education*, 65: 150–167.
- Redmon, R. J. (2007, October). Impact of Teacher Preparation Upon Teacher Self Efficacy.
- Rissanen, I., Kuusisto, E., Tuominen, M. & Tirri, K. (2019). In Search of a Growth Mindset Pedagogy: A Case Study of One Teacher’s Classroom Practices in A Finnish Elementary School. *Teaching and Teacher Education*, 77: 204-213.
- Robins, R. W. & Pals, J. (1998). Implicit Self-theories of Ability in the Academic Domain: A test of Dweck's Model. Unpublished manuscript.
- Robins, R. W. & Pals, J. L. (2002). Implicit Self-Theories in the Academic Domain: Implications for Goal Orientation, Attributions, Affect, and Self-Esteem Change. *Self and Identity*, 01(4): 313–337. <https://doi.org/10.1080/1529886029010680>
- Robinson, C. (2017). Growth Mindset in the Classroom. *Science Scope*, 41(2): 18–21.
- Rosenholtz, S. (1989). *Teacher’s Workplace: The Social Organization of Schools*. New York: Longman.
- Ross, J. A., Cousins, J.B. & Gadalla, T. (1996). Within-teacher Predictors of Teacher Efficacy. *Teaching and Teacher Education*, 12(4): 385-400.
- Ruzek, E. A., Domina, T., Conley, A. M. M., Duncan, G. J. & Karabenick, S. A. (2015). Using Value-Added Models to Measure Teacher Effects on Students’ Motivation and Achievement. *Journal of Early Adolescence*, 35(5-6): 852-882. <https://doi.org/10.1177/0272431614525260>
- Schunk, D. H. & Pajares, F. (2002). The Development of Academic Self-Efficacy. In A. Wigfield & J. S. Eccles (Eds.), *Development of Achievement Motivation*, Academic Press, 15-31.
- Schunk, D. H. (1991). Self-Efficacy and Academic Motivation. *Educational Psychologist*, 26(3-4): 207-231. <https://doi.org/10.1080/00461520.1991.9653133>

- Segal, J. (1988). Teachers Have Enormous Power in Affecting A Child's Self-Esteem. *Brown University Child Behavior and Development Newsletter, 10*: 1-3.
- Seligman, M. E. P. & Maier, S. F. (1967). Failure to Escape Traumatic Shock. *Journal of Experimental Psychology, 74*(1): 1–9. <https://doi.org/10.1037/h0024514>
- Sezgin, F. & Erdogan, O. (2015). Academic Optimism Hope and Zest for Work as Predictors of Teacher Self-efficacy and Perceived success. *Educational Sciences: Theory & Practice, 15*(1): 7–19. <https://doi.org/10.12738/estp.2015.1.2338>
- Shaughnessy, M. F. & Veronikas, S. (2004). A Reflective Conversation with Carol Dweck. *Gifted Education International, 19*(1): 27-33.
- Singleton, R.A. & Straits, B.C. (2009). *Approaches to Social Research* (5th ed.) Oxford University Press, New York.
- Stenberg, R. J. (1985). *Beyond IQ A Triarchic Theory of Human Intelligence*, (1<sup>st</sup> ed.) Cambridge University Press.
- Stipek, D. J., Givvin, K. B., Salmon, J. M. & MacGyvers, V. L. (2001). Teachers' Beliefs and Practices Related to Mathematics Instruction. *Teaching and Teacher Education, 17*(2), 213–226. [https://doi.org/10.1016/S0742-051X\(00\)00052-4](https://doi.org/10.1016/S0742-051X(00)00052-4)
- Sun, K. L. (2018). The Role of Mathematics in Fostering Student Growth Mindset. *Journal for Research in Mathematics Education, 49*(3): 330-355.
- Swann, W. B. & Snyder, M. (1980). On Translating Beliefs into Action: Theories of Ability and Their Application in an Instructional Setting. *Journal of Personality and Social Psychology, 38*(6): 879–888.
- Tirri, K. & Kujala, T. (2016). Students' Mindsets for Learning and Their Neural Underpinnings. *Psychology, 07*(09): 1231–1239.
- Tobery-Nystrom, J. C. (2011). *An Exploration of Self-Efficacy in a Teacher-Educator's Practice* (Ph.D. Dissertation) The George Washington University, Washington, D.C.

- Trentham, L., Silvern, S., & Brogdon, R. (1985). Teacher Efficacy and Teacher Competency Ratings. *Psychology in Schools*, 22: 343–352.
- Trouilloud, D. O., Sarrazin, P. G., Bressoux, P. & Bois, J. (2006). Relation Between Teachers' Early Expectations and Students' Later Perceived Competence in Physical Education Classes: Autonomy-supportive Climate as a Moderator. *Journal of Educational Psychology*, 98(1): 75–86. <https://doi.org/10.1037/0022-0663.98.1.75>
- Tschannen-Moran, M. & Hoy, A. W. (2001). Teacher Efficacy: Capturing an Elusive Construct. *Teaching and Teacher Education*, 17(7): 783-805
- Tschannen-Moran, M. & Hoy, A. W. (2007). The Differential Antecedents of Self-efficacy Beliefs of Novice and Experienced Teachers. *Teaching and Teacher Education*, 23(6): 944–956. <https://doi.org/10.1016/j.tate.2006.05.003>
- Tschannen-Moran, M., Hoy, A. W. & Hoy, W. K. (1998). Teacher Efficacy: Its Meaning and Measure. *Review of Educational Research*, 68(2): 202-248
- Ventura, M., Salanova, M. & Llorens, S. (2014). Professional Self-efficacy as a Predictor of Burnout and Engagement: The role of Challenge and Hindrance Demands. *Journal of Psychology: Interdisciplinary and Applied*, (149)3: 277-302. <https://doi.org/10.1080/00223980.2013.876380>
- Watanabe, M. (2006). “Some People Think This School is Tracked and Some People Don’t”: Using Inquiry Groups to Unpack Teachers’ Perspectives on Detracking. *Theory into Practice*, 45(1): 24–31. [https://doi.org/10.1207/s15430421tip4501\\_4](https://doi.org/10.1207/s15430421tip4501_4)
- Webb, M. B. (2015). *Exploring the Correlation Between Teachers’ Mindset and Judgment Accuracy to Reveal the Cues Behind Teachers’ Expectations* (Ph.D. Dissertation). Boise State University, Idaho.
- Webb, R. & Ashton, P. T. (1987). Teachers’ Motivation and The Conditions of Teaching: A Call for Ecological Reform. In S. Walker, & L. Barton (Eds.), *Changing Policies, Changing Teachers: New Directions for Schooling*, Milton Keyes, Philadelphia, PA: Open University Press, 22-40.

- Weiner, B. & Kukla, A. (1970). An Attributional Analysis of Achievement Motivation. *Journal of Personality and Social Psychology*, 15(1): 1–20. <https://doi.org/10.1037/h0029211>
- West, M. R., Kraft, M. A., Finn, A. S., Martin, R. E., Duckworth, A. L., Gabrieli, C. F. O. & Gabrieli, J. D. E. (2016). Promise and Paradox: Measuring Students' Non-Cognitive Skills and the Impact of Schooling. *Educational Evaluation and Policy Analysis*, 38(1): 148–170. <https://doi.org/10.3102/0162373715597298>
- Wood, R. & Bandura, A. (1989). Impact of Conceptions of Ability on Self-Regulatory Mechanisms and Complex Decision Making. *Journal of Personality and Social Psychology*, 56(3): 407-415.
- Yeager, D. S. & Walton, G. M. (2011). Social-Psychological Interventions in Education: They're Not Magic. *Review of Educational Research*, 81(2): 267–301. <https://doi.org/10.3102/0034654311405999>
- Yeager, D. S., Hanselman, P., Walton, G. M., Murray, J. S., Crosnoe, R., Muller, C., ... Dweck, C. S. (2019). A National Experiment Reveals Where A Growth Mindset Improves Achievement. *Nature*, 573(7774): 364–369. <https://doi.org/10.1038/s41586-019-1466-y>
- Yılmaz, E. (2004). *The Relationship Between Novice and Experienced Teachers' Self-Efficacy for Classroom Management and Students' Perceptions of Their Teachers' Classroom Management* (MA Dissertation). Bilkent University, Ankara, Turkey.

## APPENDICES

### A) QUESTIONNAIRE

Dear colleagues,

My name is Aslihan Yılmaz and I am a student at Istanbul Sabahattin Zaim University working on a master's degree in English Language Teaching. The purpose of the research study is to investigate the relationship between teacher perceptions of self-efficacy and teacher mindset in English Language teachers. Your participation will involve answering a short survey that will ask questions regarding your beliefs, attitudes, and perceptions related to these concepts. You can decide whether you want to participate in this study or not- this survey is entirely voluntary on your part. Although there may be no direct benefit to you for participation, a possible benefit from your being part of this study is furthering the understanding of teacher's perceptions of self-efficacy and mindset and how that can be used to better impact the teaching strategies and profession more generally. The results of the research study may be published but your information will be kept confidential and data collected from this study will be kept secure by the researcher for up to three years before being deleted. This survey takes approximately 10 – 15 minutes to complete.

If you have any questions or concerns regarding this study, you can contact the researcher, Aslihan Yılmaz, at 0546 – 646 – 18 -20 or at [aslihanyilmaz368@gmail.com](mailto:aslihanyilmaz368@gmail.com)

In addition, you can reach the research supervisor, Asc. Prof. Abdul Kasim Varlı at [kasim.varli@izu.edu.tr](mailto:kasim.varli@izu.edu.tr)

Thank you for your valuable time.

- **Do you agree to the above terms? By clicking Yes, you consent that you are willing to answer the questions in the survey.**

A) Yes

B) No

## PART I: DEMOGRAPHIC INFORMATION

- **Do you teach English classes at a university in Turkey?**
  - A) Yes
  - B) No
- **Where do you teach?**
  - A) State University
  - B) Foundation University
- **How old are you?**  
\_\_\_\_\_
- **What is your graduate department at the BA level?**
  - A) English Language Teaching
  - B) English Translation and Interpreting
  - C) Linguistics
  - D) English Language and Literature
  - E) American Culture and Literature
- **What is your highest level of degree completed?**
  - A) Bachelor's Degree (B.A)
  - B) Master's Degree (M.A)
  - C) Doctor of Philosophy (Ph.D.)
- **Have you completed any other teacher training programs or certificates?**
  - A) Yes
  - B) No
- **Which teacher training program have you completed? (If any)**  
\_\_\_\_\_
- **What is your gender?**
  - A) Male
  - B) Female

• **How many years have you been teaching?**

- A) Less than 1 year
- B) 1 to 2 years
- C) 2 to 5 years
- D) 5 to 10 years
- E) 10 to 20 years
- F) 20 or more years

**PART II: TEACHERS' SENSE OF EFFICACY SCALE**

Please indicate your opinion about each of the questions below by marking any one of the nine responses ranging from (1) “None at all” to (9) “A Great Deal” as each represents a degree on the continuum. Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position. This questionnaire is designed to help the researcher obtain a better understanding of the kinds of things that constitute challenges for educators in their school activities.

Please indicate your opinion about each of the statements below. Your answers are confidential.

**(1) None at All (3) Very little (5) Some Influence (7) Quite a Bit (9) A Great Deal**

1. How much can you do control disruptive behavior in the classroom?
2. How much can you do to motivate students who Show low interest in school work?
3. How much can you do to get students to believe they can do well in schoolwork?
4. How much can you do to help your students value learning?
5. To what extent can you craft good questions for your students?
6. How much can you do to get students to follow classroom rules?
7. How much can you do to calm a student who is disruptive or noisy?
8. How well can you establish a classroom management system with each group of students?
9. How much can you use a variety of assessment strategies?
10. To what extent can you provide an alternative explanation or example when students are confused?
11. How much can you assist families in helping their children do well in school?

12. How well can you implement alternatives strategies in your classroom?

### **PART III: TEACHER MINDSET SCALE**

The following items will investigate your ideas about ability and intelligence.

Please indicate your opinion about each of the statements below. Your answers are confidential.

**(1) Strongly Disagree (2) Disagree (3) Mostly Disagree (4) Mostly Agree (5) Agree (6) Strongly Agree**

13. The kind of teacher someone is, is something very basic about them and can't be changed very much.
14. Some teachers really don't benefit from Professional learning because they have a natural ability.
15. Teachers can change the way they teach in the classroom, but they can't really change their teaching ability.
16. Some teachers will be ineffective no matter how hard they try to improve.
17. No matter how much natural ability you have, you can always find important ways to improve.
18. Every teacher, no matter who they are, can significantly improve their teaching ability.
19. Teachers can contribute to improving their practice throughout their careers.

## CV

### PERSONAL INFORMATION

**Name:** Aslıhan

**Last Name:** Yılmaz

**Contact Number:** +905466461820

**E-mail:** aslihan.yilmaz368@gmail.com

**Skype:** asliylmz1

**ORCID ID:** <https://orcid.org/0000-0003-3832-2518>

### WORK EXPERIENCE

**25/01/2015–06/08/2015** Executive Assistant / Berk Foreign Trade, Istanbul (Turkey)

**12/10/2015–24/10/2015** Translator / UNCCD COP 12, Ankara (Turkey)

**20/07/2016–27/09/2016** Certified Translator / Okeanos Translation, Istanbul (Turkey)

**26/09/2016–05/09/2017** Lecturer / Istanbul Yeni Yuzyil University, Istanbul (Turkey)

**05/09/2017–Present** Lecturer / Beykent University, Istanbul (Turkey)

### EDUCATION AND TRAINING

**2000–2008** Primary School / FMV Nisantasi Isik, Istanbul (Turkey)

**2008–2012** High School / Sehremeni Anatolian, Istanbul (Turkey)

**2012–2016** Bachelor of Arts (BA) / English Translation and Interpretation, Hacettepe University, Ankara (Turkey)

**2016–2016** CELTA / Cambridge University / British Side, Istanbul (Turkey)

**2017–2018** Pedagogical Formation / Yıldız Technical University, Istanbul (Turkey)

**2018-2020** Master's Degree / English Language Teaching, Istanbul Sabahattin Zaim University, Istanbul (Turkey)