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FIXED MINDSET, ACHIEVEMENT GOALS, RECONCEPTUALIZED L2
MOTIVATIONAL SELF SYSTEM, ACADEMIC BUOYANCY, RESILIENCE
AND SUCCESS OF ENGLISH PREPARATORY PROGRAM STUDENTS AT
TURKISH EMI UNIVERSITIES: A STRUCTURAL EQUATION MODELING
STUDY

A DOCTORAL DISSERTATION

BY

SİNEM MADEN TUNA

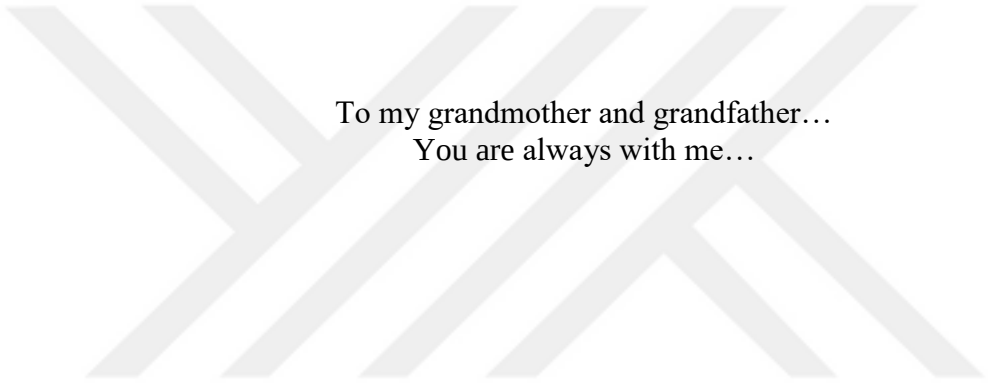
THE PROGRAM OF CURRICULUM AND INSTRUCTION

İHSAN DOĞRAMACI BILKENT UNIVERSITY

ANKARA

SEPTEMBER 2024

2024



To my grandmother and grandfather...
You are always with me...

Fixed Mindset, Achievement Goals, Reconceptualized L2 Motivational Self System,
Academic Buoyancy, Resilience and Success of English Preparatory Program
Students at Turkish EMI Universities: A Structural Equation Modeling Study

A Dissertation

Submitted in Partial Fulfilment of the Requirements

for the Degree of Doctor of Philosophy

in

Curriculum and Instruction

by

Sinem Maden Tuna

The Graduate School of Education

of

İhsan Doğramacı Bilkent University

Ankara

September 2024

İHSAN DOĞRAMACI BILKENT UNIVERSITY

GRADUATE SCHOOL OF EDUCATION

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Students at Turkish EMI Universities: A Structural Equation Modeling Study

Sinem Maden Tuna

September 2024

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ABSTRACT

Fixed Mindset, Achievement Goals, Reconceptualized L2 Motivational Self System, Academic Buoyancy, Resilience and Success of English Preparatory Program Students at Turkish EMI Universities: A Structural Equation Modeling Study

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Motivation has not yet been fully explored as an integrative construct comprising complementary aspects from various motivational theories that, together, can more effectively predict student success in learning English as a foreign language (EFL). This gap in the literature limits our understanding of what drives English learners to be resilient, buoyant, and ultimately succeed. In this correlational study, I used Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine the relationship between a fixed mindset and academic success, mediated either by achievement goals (Model 1) or L2 motivational selves (Model 2), along with academic resilience and buoyancy, in English Preparatory Programs (EPPs). Data were collected from 343 students enrolled in EPPs at four English-Medium Instruction (EMI) universities in Türkiye. The findings revealed fixed mindset was positively related to mastery avoidance and performance avoidance goals similar to ought-to L2 self and feared L2 self. On the other hand, the relation among fixed mindset, ideal L2 self, and academic resilience was negative. Moreover, academic success has a positive relation with academic buoyancy, but negative relation with feared L2 self. Additionally, while students' ideal L2 selves were similar to their approach goals, their feared L2 selves were similar to avoidance goals in terms of relations to resilience and buoyancy. The implications are provided in light of the newly developed models.

Keywords: Fixed mindset, Achievement Goals, Academic Resilience, Academic Buoyancy, Reconceptualized L2 Motivational Self System.

ÖZET

Türkiye’de EMI Üniversitelerindeki İngilizce Hazırlık Programı Öğrencilerinin Sabit Zihniyet, Başarı Hedefleri, Yeniden Kavramsallaştırılmış İkinci Dil Motivasyonel Benlik Sistemi, Akademik Dayanıklılık, Direnç Ve Başarısı: Bir Yapısal Denklem Modelleme Çalışması

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Motivasyon henüz çeşitli motivasyon teorilerinin farklı yönlerini içeren bütünleştirici bir yapı olarak tam olarak araştırılmamıştır. Literatürde İngilizceyi yabancı dil olarak öğrenenlerin başarısını daha etkili bir şekilde açıklamayı sağlayabilecek bu eksiklik, İngilizce öğrenenleri daha dayanıklı, dirençli, canlı ve nihayetinde başarılı olmaya iten şeyin ne olduğu konusunu anlamamızı kısıtlamaktadır. İlişkisel analiz yapılan bu çalışmada, İngilizce Hazırlık Okullarındaki öğrencilerin sabit zihniyeti ve akademik başarıları arasındaki ilişkiyi incelemek için Kısmi En Küçük Kareler Yapısal Eşitlik Modellemesi (PLS-SEM) kullanılmıştır. Ayrıca başarı hedefleri (Model 1) veya ikinci dil motivasyonel benlikleri (Model 2) ile akademik dayanıklılık ve direncin etkileşimi incelenmiştir. Veriler, Türkiye'deki eğitim dili İngilizce olan dört üniversitede İngilizce Hazırlık Okullarındaki 343 öğrenciden toplanmıştır. Bulgular, sabit zihniyetin, ustalık kaçınma ve performans kaçınma hedeflerine benzer şekilde, zorunlu ikinci dil benliği ve korkulan ikinci dil benliği ile pozitif ilişkili olduğunu ortaya koymuştur. Sabit zihniyet, ideal ikinci dil benliği ve akademik dayanıklılık arasında ise negative ilişki bulunmaktadır. Akademik başarının akademik direnç ile pozitif, fakat korkulan yabancı dil benliği ile negatif bir ilişkisi vardır. Öğrencilerin ideal yabancı dil benlikleri yaklaşma hedeflerine, korkulan yabancı dil benlikleri ise akademik dayanıklılık ve dirençle ilişkileri açısından kaçınma hedeflerine benzerdir. Çalışma son olarak yeni geliştirilen modeller ışığında tavsiyeler içermektedir.

Anahtar kelimeler: Sabit zihniyet, Başarı Hedefleri, Akademik Dayanıklılık, Akademik Zorluklarla Mücadele Gücü, Yeniden Kavramsallaştırılmış L2 Motivasyonel Benlik Sistemi.

ACKNOWLEDGEMENTS

At the conclusion of my long Ph.D. journey, my deepest gratitude goes first to my Ph.D. Advisory Committee and especially my advisor, Asst. Prof. Dr. İlker Kalender, for their invaluable guidance, contributions, and support in my research. I am honored to have been supported by TÜBİTAK (Bilim İnsanı Destek Programları Başkanlığı [BİDEB] 2211-Yurt İçi Lisansüstü Burs Programı) for this project, and it will always be appreciated.

Thank you very, very much Assoc. Prof. Dr. Hilal Peker for inspiring me, believing in my potential, and supporting me every step of the way. Without you, I would not have this story. I am grateful!

I would like to thank Asst. Prof. Dr. Aikaterini Michou for your valuable insights and contributions to my dissertation and journal article. I feel fortunate to have crossed paths with you during this journey!

I am deeply thankful to Asst. Prof. Dr. Nuray Lük Grove for encouraging me to apply for the program and for being a supportive head throughout the years we worked together.

Thank you very much Asst. Prof. Dr. Mustafa Güneş, his wife Ayşe Güneş, and my office-mate Gülçin Güleç Yıldırım for all their efforts in helping me attend Ph.D. classes while working full-time at the same time. I am incredibly grateful for your support!

I must also express my immense gratitude to my dear friends, who became like sisters to me throughout this process. Thank you, Nilüfer Akın Tazegüney, Deniz Bilgiç, and Nurgül Gülmez, for always being there and holding my hand.

I would like to thank my Ph.D. colleagues, Sinem Orallı, Seçil Canbaz, and Ebru Atakurt, for sharing their ideas and support over the years. It's your turn, ladies!

My deepest thanks go to my elder sister, Didar Güzey, for always being there to listen to my frustrations and help me to survive. You are truly the most precious, always!

I am incredibly grateful to Prof. Dr. Aneta Rogalska-Marasińska for your constant support during my research career. You have been more than a professor to me, and I cherish every conversation we had, as it felt like I was talking to my mother. You are amazing!

I also want to thank my entire family, especially my senior, Prof. Dr. Sevinç Sakarya Maden, and my junior, Selin Maden, for enduring these years with me and pushing me to keep going. We are strong together!

Finally, thank you very much Fırat Meriç Tuna, for being such a wonderful boy and giving me strength through every challenge. I know my dissertation took away our time together, but I promise to make it up to you. You are my world, annecim!

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CHAPTER 1: INTRODUCTION

Background

In today's globalizing world, learning foreign languages, specifically English, has become important for young people to meet the requirements of the modern world. In accordance with Common European Framework Reference for Languages (CEFR) by Council of Europe (2001), 21st century skills such as creativity, communication, teamwork, and critical thinking are strongly emphasized as today's norms in 2023 Vision of Education report (Ministry of National Education [MoNE], 2019). The report also emphasized the need to be a part of globalized and competitive world by developing diversely advanced skills. In this respect, foreign language education has been revised in terms of course content, course level and materials and techniques that teachers use in order to improve communication skills of students.

In this transforming atmosphere of basic education, foreign learning language in higher education revealed as a field for further investigation in terms of students success to develop the required skills. Especially for the English-mediated universities, language education in English Preparatory Programs (EPPs) and in undergraduate courses of English for academic purposes (EAP) need to support students' motivation to acquire and develop their English communication skills. There is a number of research demonstrating the role of self-efficacy (Chao et al., 2019; Roshandel et al., 2018; Shi, 2018; Shih, 2019) and motivation (Altiner, 2018; Gonzalez-Becerra, 2019; Wichadee & Pattanapichet, 2018) on students' language learning behaviors. However, high level of motivation does not always guarantee the

success of students (Akhter et al., 2016; Grenfell & Harris, 2013; Incirci et al., 2018; Munoz, 2014). This is because motivation is a multi-faceted concept consisted of more adaptive of less adaptive forms which has been investigated through the lenses of different motivational theories (Linnenbrink & Pintrich, 2002; Pintrich, 2000). In this respect, different motivational construct has been proposed to be linked with students' outcomes such as their learning strategies, academic resilience, engagement and academic performance in the educational context. Some of these motivational concepts are overlapping while others are complementary (Pekrun, 2024). In order to fully understand what motivate students to succeed in EPP or EAP programs, complementary motivational constructs from different motivational theories need to be considered as contributing factors.

Complementary Motivation Types

One important motivational theory with considerable implications for EFL is Dweck's Mindset Theory (Dweck, 1999). According to Mindset Theory, there are two types of mindsets which relate to learning behaviors. In terms of success, fixed minded students who believe in their inborn capabilities or limits of their intelligence are different from the growth minded ones who believe that they have the chance to improve their intelligence and skills in a field through effort (Dweck, 1999; 2000a, Dweck et al., 2014). Specifically, fixed minded students have low scores compared to the growth minded ones (Corradi et al., 2019). Prior research also shows that EFL learners' success is positively and negatively related to growth and fixed mindset, respectively (Ellis, 2017; Papi et al., 2019).

From a different perspective, Achievement Goal Theory (Elliot, 1999) explains learning behaviors and students' success through their achievement goals which are considered as another motivational construct. According to Achievement

Goal Theory, students might have mastery goals by focusing on improvement of their knowledge and skills compared to their previous levels or performance goals by focusing more on performing better compared to their classmates. In terms of the valence of achievement goals, students might have approach goals when they intend to approach success or avoidance goals when they intend to avoid failure (Elliot, 1999; Korn & Elliot, 2016; Elliot & Murayama, 2008; Ryan & Shim, 2006). Specifically in EFL, there is a number of research finding out the relation of students' achievement goals with their success (Macayan et al., 2018).

Another theory of motivation is related to Possible Selves Theory proposed by Markus and Nurius (1986) indicating two main future selves. In this theory, the ideal self is what somebody would like to be in the future, while the feared self is what somebody would like to avoid becoming. On the other hand, Markus and Nurius (1986) also mentioned a third self, the ought self, referring to what somebody would like to be in the future based on the expectations of other people. Furthermore, Higgins (1987) also suggested Self-discrepancy Theory indicating three types of selves, the actual, ideal and ought self. Here the actual self is the attributions that someone believes to possess currently, while the ideal self is the attributions that someone would like to possess, and the ought self is the attributions that someone believes as necessary to possess as a result of their duties, obligations or responsibilities. Since the ideal self and the ought self represent more future-related goals of someone compared to the actual self, Dörnyei (2005, 2009) used Self-Discrepancy Theory to suggest motivational behaviors of L2 students, under the Second Language Motivational Self-system (L2MSS).

According to L2MSS theory, students might have developed an Ideal L2 self (IL2S) which was described as the future ideals of an individual (i.e. career targets)

as a reason to learn English. On the other hand, it is possible for students to prioritize social norms or expectations from others to improve their English skills, which is called as the Ought-to L2 self (OL2S). Lastly, students might be motivated to learn English through their L2 Learning Experiences such as their classroom environment and teachers' attitude (Dörnyei, 2009). Recently, there have been a number of studies proving positive relation of students' success in EFL with their IL2S (Fathi & Hejazi, 2024; Li & Zhang, 2021; Martinovic, 2018) while OL2S might be negatively related to their achievement (Zhao et al., 2022);

Recently, Peker (2016, 2020) has expanded the framework of L2MSS by proposing a Feared L2 self (FL2S) as a distinct motivational self which pertains to future worries surrounding potential failure in achieving English proficiency. In language learning environment, students might be bullied or humiliated because of their low level of English or their way of speaking/accents, which can act as a significant driver of avoidance motivation, contrasting with the traditional focus on promotion or prevention-based motivations. Therefore, the FL2S diverges from the OL2S by representing what individuals seek to avoid, whereas the OL2S reflects what individuals believe they ought to achieve or how they are expected to use English. In a recent study, Toprak-Çelen (2020) found out FL2S was not related to the grades of EFL students.

All the aforementioned motivational constructs indicate a different aspect of students' motivation. The relation of some of these forms of motivation has been extensively investigated in the literature of education. For example, many studies have explored the relationship between mindsets and achievement goals (Cho et al., 2019; Lou et al., 2021; Papi et al., 2021). The types of L2 selves, however, which are considered important predictors of EFL learning (Li & Zhang, 2021; Martinovic,

2018; Zhao et al., 2022), have not been investigated in relation with complementary motivational characteristics such as students' mindset in the prediction of EFL students' success. As Pekrun (2024) suggested, research in students motivation need to integrate multiple motivational complementary constructs to better depict what make students to succeed or fail.

Students Success in EFL

In learning environment, there are some other important characteristics of students related to their success apart from their motivation. For example, academic resilience and academic buoyancy are significant characteristics of learners. Martin and Marsh (2008a, 2009) defined academic resilience as an individual response to chronic underachievement and feelings of anxiety in educational context, while academic buoyancy is individual response given to daily pressures causing typical stress levels. Both of these characteristics of students have been correlated to students' success in many fields (Collie et al., 2015; Kim et al., 2018; Oades-Sese & Li, 2011) including the area of EFL (Aydın & Michou, 2020; Danesh & Shahnazari, 2020; Toprak-Çelen, 2020; Yun et al., 2018). In those studies carried out in the EFL context, success has been defined as improving language skills or meeting expected learning outcomes and operationalized as getting high grades or showing satisfactory performance. More importantly, success in EFL context has been investigated as the outcome of specific types of students' motivation. To better understand how various constructs of motivation contribute to success in EFL, it is helpful to not only focus on the motivational constructs of a single theory, but to consider the synergistic role of complementary constructs from multiple theories (Pekrun, 2024). This approach allows for a deeper exploration of their relationship to success-related outcomes, such as academic resilience, buoyancy, and overall success.

Problem

Recently, there have been a number of studies focusing on the relations between different motivational constructs such as students' mindset and their achievement goals (DeBacker et al., 2018; Cho et al., 2019; Papi et al., 2021; Song et al., 2020), academic resilience (Jankay, 2020; Kustritz, 2017; Mosanya, 2020; Xu & Feng, 2024), and academic buoyancy (Anderson et al., 2020; Suharsono & Fatimah, 2024). Moreover, achievement goals of the students were found to be correlated to their academic buoyancy (Aydın & Michou, 2020; Yu & Martin, 2014) and academic resilience (Çakır & Gazioğlu, 2021; Splan et al., 2011). Specifically academic buoyancy is also related to students' L2MSS (Toprak-Çelen, 2020; Yun et al., 2018) and academic resilience (Martin, 2013). Despite researchers' interest in the relationship between types of motivation and success-related students' outcomes, there are fewer related studies in the EPP and EAP context. Moreover, there is a scarce of studies in this context that integrate multiple motivational constructs as predictors of students' success. Specifically in EMI contexts, students' success has been related to their general English proficiency (i.e. vocabulary knowledge) (Altay et al., 2022; ELbashir, 2024; Masrai et al., 2022) and even their overall academic success in their native languages (Altay et al., 2022). Given the importance of English language learning in the globalization world, it is imperative to understand what factors make EFL learners to acquire knowledge of the English language and skills for effective communication. Such an understanding will facilitate teachers and other stakeholders to accommodate students' needs.

To this direction, I argue that mindset beliefs, which have been considered as students' dispositional characteristics (Dweck, 1999; 2000), can be predictors of situational types of motivations such as the types of students achievement goals (Lou

et al., 2021; Lou & Noels, 2017; Papi et al., 2021; Yu & McLellan, 2020) and their L2 selves (Cacalı, 2018). Evidence from the literature (see Cacalı, 2018; Lou et al., 2021) supports such an integration. I also argue that, students' dispositional characteristics such as their fixed mindset can be manifested on their success through the situational motivational constructs (i.e., achievement goals and R-L2MSS) and students' success-related outcomes (i.e., academic resilience and academic buoyancy) in EPPs.

Specifically, students with a fixed mindset believe that ability cannot be improved through effort, which may lead them to have more prevention-based motivation for learning English, such as OL2S and FL2S, where they aim to avoid the negative consequences of not knowing a foreign language. These students are also likely to have less resilience against academic challenges, meaning they might lack academic buoyancy and resilience, leading to exam failures. This means in EFL programs of many EMI universities, there may be a need to have interventions to change fixed mindset of students into growth mindset. Moreover, according to Lou and Noels' (2017) second language motivational self system, mindset types are related to other motivational constructs, through which they have an effect on student success. As a result, identifying the relation between mindset types and success through L2MSS more comprehensively is necessary as that may help teachers and curriculum developers to focus on these to revise EFL curriculum and to increase success in language courses. Furthermore, while the individual roles of L2MSS and academic buoyancy in academic success have been extensively studied in EFL contexts, their roles as mediators between a fixed mindset and success have not been explored before. Therefore, this study is crucial for understanding the factors behind

failure and success in EFL settings, focusing on aspects like L2MSS and academic buoyancy to explain why students might struggle in English classes.

Just as individuals have different achievement goals, their motivation for learning a language varies across contexts, and concepts like Ideal Self, Ought-to Self, and Feared Self differ for each person in different situations. Comparison of two different motivational factors (achievement goals and second language motivational self) in terms of their role to explain students' success in learning English might be beneficial to understand the issue of success in foreign language classes, as the goals for learning a language (Achievement Goals) and the underlying motivational factors (R-L2MSS: IL2S, OL2S, FL2S) driving these goals can predict each other. Thus, in the original model, while testing the link between mindsets and outcomes like academic buoyancy, resilience, and success, Achievement Goals could be replaced by R-L2MSS in language learning context. This substitution could allow for a comparison of the influence of Achievement Goals and R-L2MSS on student behavior.

Purpose

The main purpose of this correlational cross-sectional design study was to find out whether there is a relationship between students' dispositional characteristics such as their fixed mindset about their ability to learn English and situational motivational characteristics such as students' achievement goals and L2 selves in EPPs. According to Dweck (2000), mindset is a bipolar concept, which means fixed minded students can not be growth minded at the same time. Therefore, by measuring English students' fixed mindset, I am also informed about the relationship of growth mindset with the motivational and success-related constructs by reversing the findings. For this reason, I focused on only fixed mindset to see its relation with

academic success through achievement goals or L2 selves and academic resilience and buoyancy.

Research questions

This study addressed the following main research questions:

1. Does students' Fixed Mindset (Dweck, 2000b) relate directly or indirectly through Achievement Goals (Elliot & Murayama, 2008) to students' Academic Resilience (Cassidy, 2016) and Academic Buoyancy (Martin & Marsh, 2008a), and through them student success in EMI universities EPPs?

2. Does students' Fixed Mindset (Dweck, 2000b) relate directly or indirectly through Reconceptualized L2 Motivational Self System (Peker, 2016) to students' Academic Resilience (Cassidy, 2016) and Academic Buoyancy (Martin & Marsh, 2008a), and through them student success in EMI universities EPPs?

Significance

In EMI universities, it is obligatory to complete EPPs successfully to be a freshman in undergraduate programs in case of not having at least B1 level based on CEFR (2001) standards (Dil Eğitimi Değerlendirme ve Akreditasyon Kurulu [DEDAK], 2024). This study aims to identify EPP students' motivation through three different lenses (fixed mindset, achievement goals, R-L2MSS) for the first time in literature. Moreover, the relation among these motivational constructs and students' resilience, buoyancy and success will be explained specifically in EPP context. The power of types of achievement goals and second language motivational self system was also compared in terms of explaining student behaviors of academic resilience, academic buoyancy and academic success.

As Peker (2016, 2020) improved the scale of Dörnyei (2009) by adding FL2S and recategorizing some of the OL2S items as FL2S because of their reference to

avoidance type of motivation, the current study was the one of the first studies utilizing the new version of the scale in an empirical research study. Moreover, some of these subscales were tested on the same sample for the first time, which helped to explain one of these concepts through the other ones in terms of increasing or decreasing their effects.

Limitations

This study was conducted with students from EMI universities (EPPs). The survey was sent to the universities' EPPs' administrators who approved the content of the survey and sent the link for the online form of the survey to their students. The researcher did not directly contact the participants but instead EMI universities' English program directors (administration staff) reached out to participant candidates. Thus, not being able to contact the participants directly may have impacted the sample size. One of the methods used in the current study to compensate this limitation was to use rewards. To obtain more participation in the survey, the researcher offered a reward of 200TL for five random participants of the survey through a raffle as incentive.

Definition of key terms

Academic Buoyancy: The ability of students to successfully deal with academic setbacks and challenges as the typical of the ordinary course of school, which are everyday experiences of students (Martin & Marsh, 2008a, 2009).

Academic Resilience: The capacity of specific groups of disadvantaged students for dealing with or adapting into overwhelming feelings and conditions that they face in educational contexts (Cassidy, 2016; Martin & Marsh, 2008a).

Achievement Goal: The targets of individuals in order to develop competence in specific tasks (mastery goals) or to demonstrate skills and outperform other people (performance goals) (Elliot & Murayama, 2008; Korn & Elliot, 2016).

English as the Medium of Instruction (EMI): Teaching of academic subjects through the medium of English in non-Anglophone countries as a part of increasing globalization and internationalization of higher education (Healey, 2008; Macaro et al., 2016).

Feared self: The fear of individuals about how or what they don't want to be in the future (Markus & Nurius, 1986).

Feared L2 self (FL2S): The feared L2 self is the possible self that a person desires to refrain from or tend to avoid (Dörnyei, 2009; Peker, 2016, 2020).

Fixed mindset: The belief of individuals about their intelligence and talents to be inborn and fixed quantity, which is either possessed or not possessed and can't be changed (Dweck, 2000b; Dweck et al., 2014).

Growth mindset: The belief of individuals accepting their intelligence and talents as something possible to increase with effort and learning (Dweck, 2000b; Dweck et al., 2014).

Ideal self: The idea of individuals about how or what they want to become in the future (Markus & Nurius, 1986).

Ideal L2 self (IL2S): Ideal L2 self is the self that a person wants to become. It helps reduce the differences between what a person really is and what s/he wants to become (Dörnyei, 2009; Peker, 2016, 2020).

L2 learning experience: The experiences of individuals through which they evaluate the environmental conditions and relatedly shape their motivation (Dörnyei, 2009).

Ought-to self: The belief of individuals about how or what they should be in the future (Markus & Nurius, 1986).

Ought-to L2 self (OL2S): Ought-to L2 self is the self a person thinks that s/he should possess because the other people expect him/her to have these characteristics. It also includes performing certain actions to fulfil the expectations of the people around them (Dörnyei, 2009; Peker, 2016, 2020).

Possible selves theory: Theory explaining how individuals think about their potential and their possible future (Markus & Nurius, 1986).

Reconceptualized L2 Motivational Self System (R-L2MSS): A model of motivation including three components of the self system, including FL2S, IL2S, and OL2S. These also imply the various reasons of learning an L2 in a more balanced way (i.e., FL2S self is balanced by IL2S) (Peker, 2016, 2020).

The L2 Motivational Self System (L2MSS): A model of motivation including three components, IL2S, OL2S, L2 learning experience stating the various reasons of learning second language (Dörnyei, 2009).

CHAPTER 2: REVIEW OF RELATED LITERATURE

Introduction

The aim of this chapter is to introduce and review the literature related to this research study examining the relation between individual factors such as fixed mindset and EPPs' student success through achievement goals, academic buoyancy, academic resilience, re-conceptualized L2 motivational self-system in in EMI universities. After suggesting the definitions and details of these factors, literature review part continues with a discussion on the related empirical studies which explored these factors in various language learning contexts.

English as the Medium of Instruction (EMI)

English as the medium of instruction provides some advantages such as providing students to do academic research in English, facilitating international research and international academic mobility for students and attracting international staff (British Council & TEPAV, 2015). Civan and Coşkun (2016) and Yuan et al. (2022) also argue that university education in English might improve students' English skills, which may have direct and indirect effects on their professional and personal lives such as having higher chance of employability at international companies (Kök, 2023). In addition, students prefer EMI programs for the practical value of English for their academic development such as providing them to be active in academic research communities through publishing and attending conferences (Al-Muqarshi et al., 2024). On the other hand, providing world-wide knowledge transfer, recruiting academic staff with higher professional qualifications, and

transferring higher number of foreign students are also the reasons of universities to use English as the language of education and to suggest EMI (Al-Muqarshi et al., 2024; Griffiths, 2023). One of the comprehensive studies on EMI phenomenon (Dearden, 2014) shows that there is a fast-shift from teaching EFL to using English in academic subjects. Although this changing trend is global, there are various challenges of EMI for both students and teachers (Griffiths, 2023; Kök, 2023).

In a similar vein, Huang (2015) conducted a survey to identify students' perceptions on English as a medium of instruction in a university in Taiwan and concluded that these students have a moderate level of learning motivation for EMI courses, as they think these courses are beneficial. In the same study, it is suggested that it is necessary for universities to support their students' English language learning so that the quality of student learning in EMI courses could be better. The need to gather more information about EMI students' English learning motivation and learning anxiety is also emphasized in the same study (Huang, 2015).

Yuan et al. (2022) also investigated university teachers' beliefs and practice in EMI programs in China. After collecting reflective writings of teachers and conducting interviews with them, the researchers identified various types of beliefs about the roles of English and EMI, EMI teaching and learning, and about policies on EMI. First, most of the teachers agreed that learning English is necessary for the students for their professional life and to provide the chance of academic research and learning. Moreover, some teachers stated that using English for classes are helping students to improve their English to get ready to use in real life circumstances. On the other hand, there was a big emphasis by teachers on the need for more systematic design and organization of EMI programs as they experience problems in implementation of the curricula. That means although EMI programs,

provides many benefits for the students, there are still issues need to be reconsidered about their implementation.

In another study, Al-Muqarshi et al. (2024) conducted a case study to analyse the existing literature to see the effects of EMI on increasing knowledge, information and intellectual products. By focusing on the research related to Omani context, they found out 39 articles in total identifying both positive and negative influences of EMI programs. Students mostly get benefit from EMI programs as they have more chance to reach world-wide sources about their field and to be employed in international companies. Similarly, faculties have the advantages of employing better-qualified and more international academic staff in addition to be preferred more by both local and foreign students. On the other hand, EMI programs also cause a few negative issues such as dependency of students and universities on international language qualification exams (i.e. IELTS and TOEFL) and causing failure of students in their courses when they have problems in English proficiency. This shows that EMI programs may be both advantageous and disadvantageous from some aspects.

Related to the perceptions of students in EMI universities in Turkey, Özer and Bayram (2019) also conducted a study through focus group interviews and concluded that students believe that earning a degree from an EMI program would provide more job opportunities to them after they graduate. The students also support EMI programs as they have the chance to access primary sources in English. On the other hand, the same study also identified a decrease in academic performance, the need for more time to understand the course content, difficulties in knowledge acquisition and loss of self-confidence. There are also some students experiencing lack of proficiency in English, which may be a problem for their success.

In order to reach the required English proficiency level for EMI programs, most of the EMI universities in Turkey suggest one-year-long intensive “English Preparatory Programs.” Based on that information, Atli and Özal (2017) conducted a study to find out whether EMI programs have positive effect on student motivation and English language proficiency. They also aimed to discover if there is a positive correlation between student motivation and academic achievement. Based on the replies for the questionnaires and EPP students’ end-of-the-year test scores, there was no correlation between these students’ achievement scores and their motivational intensity. In addition, when they compared data from students of EMI programs, partially EMI programs and TMI (Turkish mediated instruction) programs, there was no statistically significant difference between the motivation levels of the groups.

Similarly, Kırkgöz (2014) investigated the perceptions of higher education students of Turkey by grouping them based on whether they are in EMI or TMI programs. The questionnaire responses collected from final-year undergraduate students and focus-group interviews showed the discrepancy between higher education institutions’ aims and the reality in-practice. As a result of the research, it was claimed that while EMI classrooms are seen as opportunities to strengthen their mastery of English through content learning, students also have problems in acquiring disciplinary knowledge and to become successful. As a result, the researcher emphasized the need to replicate similar studies with students from different universities to provide context-free findings.

EMI in Türkiye

In Türkiye, EMI was first applied in Boğaziçi University in 1912, and this was followed by Middle East Technical University in 1953 (Kırkgöz, 2005). Then,

Bilkent University, the first private, non-profit university, was established in 1984 with a 100% EMI purpose. The main aim was to offer English programs in universities, and it was stated in Official Gazette (1984) as the chance of students “to access scientific and technological information published in English in their related disciplines” (p. 4). After 2000s, the number of universities using English for academic purposes has increased rapidly.

Dearden (2014) identified that one of the reasons of EMI in Türkiye was the increasing number of international students. In addition, Macaro et al. (2016) argued that, in Türkiye, the universities with EMI are considered more prestigious than those that do not. In other studies, students in Türkiye preferred EMI universities with the motivation of gaining jobs with better salaries (Kırkgöz, 2005), earning respect in the community or just improving their English level (Akşit & Kahvecioğlu, 2022). As a result, in 2014, 110 out of 178 higher education institutions had some kind of EMI provision (Dearden, 2014), and these universities offered EPPs for new students so that they could improve their English.

Nowadays, at tertiary level in Türkiye, institutions are free to determine the extent of EMI, and there are two different types of strategy followed by universities in order to include English in their undergraduate programs. In some of the universities, there are both Turkish and English undergraduate programs. In these universities, only the students choosing EMI for their undergraduate education are obliged to be proficient in English to study in these programs. They need to complete a one-year EPP if they cannot pass English Proficiency Exams before becoming freshmen (Official Gazette, 2016).

The second type of universities in Türkiye offer EMI in all their undergraduate programs except for the ones which are contextually acceptable to be

studied in the first language of the country such as the studies of law and medicine. The students of these universities also need to be proficient in English before taking courses from their undergraduate programs. Although there are many universities suggesting both Turkish and EMI in their programs at the same time, currently there are 21 universities offering EMI in all their programs except the studies of law and medicine (ÖSYM, 2019).

Related to EMI universities in Türkiye, Karakaş (2018) explored the academic English language policies and practices of three top-ranking ones: Bogazici University in Istanbul, Middle East Technical University in Ankara, and Bilkent University in Ankara. The materials related to language policies and practices gathered from the universities' websites and relevant webpages were analyzed qualitatively to identify what kind of English was referred to or implied in their policy documents. It was also aimed to evaluate their language ideologies guiding the existing policies and practices on academic English. The analysis of the data showed that although English was pronounced as the official language of the institutions, the kind of English required (e.g. standard (native) English or American English) was not clear. In addition, the analysis of policy documents in Karakas' (2018) study showed that each university tried to orient a particular standard form of English, which needed revisions later.

EMI universities have a long history in Türkiye, which were preferable by students, teachers, and universities. The financial and academic advantages of having EMI programs are important not only for the current conditions but also for the future of each stakeholder. Before studying at the faculties, students with low level of English need to develop their English level at the preparatory programs of the universities. In these EPPs of EMI universities, students need to complete B1 level

based on CEFR (2001) standards so that they could become successful (Dil Eğitimi Değerlendirme ve Akreditasyon Kurulu [DEDAK], 2024). As a result, these programs suggest courses based on the levels of the students to improve their English language skills.

English Preparatory Programs and Their Challenges in Türkiye

EPPs of universities in Türkiye need careful organization for their language programs, which may bring various problems to the table. According to British Council and TEPAV's 2015 report on English education within Turkish higher education institutions, preparatory schools face several challenges. These include overcrowded classes, inadequate provision of speaking and listening activities, insufficient alignment with students' needs in curriculum design, and an excessive focus on examination-based teaching methods. At the outset of their preparatory education, students typically exhibit low proficiency in English and lack motivation. The report also highlights a significant issue where students perceive English not as a means of communication but merely as a subject of study. Despite the qualification of English instructors in preparatory schools, they may encounter difficulties in structuring and facilitating classroom discussions akin to those in EMI faculties. Furthermore, within EMI universities, some instructors reportedly resort to using Turkish in their lectures, which is perceived as a deterrent to students' motivation to learn and utilize English (British Council & TEPAV, 2015).

Related to the lack of speaking and listening activities in EPPs in Turkey, Tekin (2015) found out the need to have more communicative activities rather than traditional lecturing of their instructors. By collecting data from students and instructors of EPPs in one of the state universities in Türkiye, he demonstrated that while students saw themselves competent in receptive skills such as grammar and

reading, they claimed to be incompetent in productive skills such as speaking and writing. The students argued that there should be more focus on improving productive skills within the program by increasing the number of materials and useful activities. In addition, both students and instructors stated that using authentic materials was necessary as they would help to observe students' performance more effectively. Similarly, through evaluating an A1 level program at an EPP at a foundation university in Türkiye, Öner and Mede (2015) identified students' needs to focus more on speaking skills in the program while feeling competent in reading, writing and listening skills, they reported. Students also suggested using enjoyable activities for speaking in addition to increasing the time allocated for speaking activities as a part of the program.

Very similarly, Uysal (2019) identified the problem of the lack of clear objectives and language production, which were followed by the issue of intense content. By conducting a study with 50 ELT instructors working at School of Foreign Languages of a state university, she grouped the findings under the headings of objectives of the program, teaching materials, assessment and evaluation, and general structure. For teaching materials, insufficient amount of vocabulary and activity types, having short readings with insufficient number of texts and question types, lack of production-oriented grammar activities, repetitive themes and activity types, not interesting or not user-friendly materials were mentioned. In terms of assessment, incompatibility between various types of assessment tools, inadequacy of the assessment tools and question types without any focus on language use were the main problems stated by the instructors. Lastly, they listed the physical problems such as crowded, non-homogenous classes in terms of language level or bad sound system by adding their high course load.

Related to the grammar-based curriculum of EPPs, Demirtaş and Sert (2010) identified traditional grammar teaching as dominant in preparatory program through examining investigated the perceptions of 1200 EPP students of a private university. Two years later, Paker (2012) also found out that grammar-based and mechanical exercises focusing on finding the correct answer demotivated students. In both of these studies, in-class activities and examinations had the problem not being able to develop autonomous language skills, which would become an issue for practical applicability of these skills to real-life contexts.

In another study, İnal and Aksoy (2014) analyzed EPP of a private, non-profit university of Türkiye by applying questionnaires to the students and instructors of the program. In that study, students stated that the content and skills obtained in the preparatory program as inconsistent with their needs while studying in their undergraduate programs. Similarly, in Mede and Uygun's (2014) study, students stated their need for more listening practices with note-taking and doing oral summary as they would be necessary in their undergraduate courses. The results also indicated that students need more extensive reading, which would be useful for them in their undergraduate studies. The study by Macaro et al. (2016) also indicated that while students achieved success in the preparatory year, this did not necessarily translate into readiness for EMI departments. The study highlighted a necessity for EMI instructors to enhance their proficiency in identifying students' language challenges rather than assuming students are prepared for EMI based solely on their preparatory year outcomes.

The case study conducted by Karcı-Aktaş and Gündoğdu (2020) also aimed to evaluate EPP of a state university in Türkiye. The study results indicated that the program did not have a clear statement of the program specifications and objectives.

There was also no role of students and lecturers in decision making process.

Although differentiation was not allowed in classes as a part of the standardization of the program, in-class observations revealed some kind of differentiation in materials and activities within lessons. In addition to inconsistency between the program objectives and course materials and students' needs for undergraduate programs, some feasibility problems were identified such as crowded classes and no chance for lecturers to give individual feedback to students similar to a previous study (İnal & Aksoy, 2014). The lessons were mostly teacher-centered and focused on teaching grammar while underestimating speaking and listening skills. The problems of having high number of students with limited number of instructors were also listed in report of the official meeting of EPP administrators in 2018.

In another study, Aydın (2017) showed that in preparatory schools, the curricula and in-class materials were not designed based on students' needs. The issues of language assessment such as lack of qualified instructors in exam writing were also emphasized as problems in preparatory schools in Türkiye. The yearly meeting of Administrators of EPP in Türkiye (YDYO-TR Yöneticiler Platformu, 2017) focused on the accreditation process of preparatory programs in which instructors from some accredited programs shared their experiences. The discussion during the meeting also addressed challenges related to the insufficient availability of adequately qualified instructors meeting specific requirements. A dedicated session during the meeting focused on diverse student profiles and their varying educational needs within universities. Recommendations were made for English for Academic Purposes classes to tailor content and materials according to the specific requirements of students in their respective academic disciplines and future professional contexts. Furthermore, emphasis was placed on instructors assuming

responsibility for classes within particular departments, thereby allowing them to concentrate on and specialize in the subject matter prior to teaching.

More recently, Kır (2024) explored the experiences of students who dropped out of a Turkish EMI university. By conducting semi-structured interviews with five participants, the researchers tried to identify individual and surrounding conditions of them which might have impacted on their drop out behavior. Interestingly, all of the participants stated that they spent a lot of time, effort and money for learning English, but they could not provide any progress. Moreover, all of them mentioned about the significant disparity between the level of English instruction in their high schools and the expected standards at the university. Some of them could take private lessons which could not improve their level either. As a result, the study shows that students' success in EMI universities of Türkiye is related to not only their social or economic status, but also English level offered in high schools.

Student Motivation in the English Preparatory Programs of Türkiye

Related to students' motivation in the EPP of Türkiye, Çakıcı (2016) examined the relation among test anxiety, foreign language anxiety and language achievement of university preparatory students learning EFL. After implementing a survey in one of the public universities in Türkiye, the results of the study showed that there was no relation between students' test anxiety and their language achievement. On the other hand, students with foreign language anxiety became less successful. Similarly, Uysal and Güven (2018) found out the main student-oriented problems hindering EFL learning were not believing in the need to use English in the future, believing in their disability to learn English, not being interested in learning English and feeling bored during lesson. In Aydın's (2017) study, one of the

obstacles for students' motivation was their feeling to be incapable of learning English as a result of learning process of nearly 10 years.

More recently, Erdoğan and Mede (2021) investigated the motivational beliefs of EPP students in one of the Turkish state universities. Sampling consisted of 54 A1 level students and 33 A1 level English instructors, who filled in the selected questionnaires, which were followed by semi-structured interviews with 10 students and 5 instructors. The results of the study showed that although students found the program satisfying in terms of their needs, materials and improvement of reading and writing skills, the amount of speaking and listening activities in the program was insufficient, which was also found out by Uysal and Güven (2018). From the other perspective, the instructors also mentioned about the insufficient allocated time for completing the levels, less focus on speaking and lack of students' motivation.

Another study conducted by Çıtıl and Yurdakul (2020) focused on the effects of a university preparatory school's English curriculum on its students' self-efficacy beliefs. The results of the questionnaire data demonstrated that preparatory class practices helped students to increase their self-efficacy beliefs. The fear of making mistakes, losing face, and not being able to express their opinions affected students' self-efficacy beliefs negatively. On the other hand, students' self-efficacy beliefs were positively affected by applying language in productive activities, showing effort to use English in daily life and taking responsibility within the context of the English curriculum, modelling after positive behavior of the teachers and friends, and encouraging expressions by the teachers.

Similarly, Paker and Özkardeş-Döğüş (2017) investigated the achievement attributions of preparatory class learners in one of the universities in Türkiye, in which 223 university EPP students filled in a questionnaire and 50 of them were also

interviewed. The participants were grouped according to their language proficiency levels based on a placement test to compare the perspectives of successful and unsuccessful students. The study illustrated that successful learners attributed their achievements primarily to effective teaching, self-confidence, enjoyment in learning English, and a genuine interest in the language. In contrast, unsuccessful students identified reasons for their lack of success as insufficient vocabulary, challenging exam formats, inadequate time within the academic year to acquire English proficiency, and limited prior educational background in the subject. The study also showed that males and females have different attributions of their success. While males found learning English easier than the females, females attributed success to studying English adequately, listening to the teacher carefully. Females seemed to be reading more books and getting more help from others when necessary, compared to the males.

Türkiye is a country with universities with fully EMI programs, which require students to be proficient in English. In order to improve English level of the students, each of these universities has one-year EPP as an extra period before starting undergraduate programs. In addition to identified challenges of EPPs, there are also motivation related issues that students face during their study in these programs.

The Social Cognitive Approach to Motivation

Social Cognitive Theory was originally developed by Albert Bandura (1986) in which learning is explained through observations, modeling and self-efficacy. According to Bandura (1986), a person shapes his/her behaviors through observing other people's behaviors and seeing them as a model to reshape his/her original behaviors. Individuals' beliefs in their own self-efficacy have a role in whether they

will reproduce an observed behavior or not. This kind of observational learning might be facilitated through rewarding the behavior, which provides motivation for individual to reproduce it later. On the other hand, models of the behavior might support or destroy the observer's belief in their own self-efficacy, which influence their goals and their perseverance in case of obstacles or struggles (Bandura, 1986). As a result, there are various factors behind individuals' motivation.

Fixed Mindset and Growth Mindset

Regarding intelligence, Dweck (1999) proposed the Mindset Theory which suggests two different aspects. The first one is fixed mindset, in which people see intelligence as something fixed and not possible to change. People with the idea of fixed mindset do not believe in the importance to feedback as they see their failure because of the problems in their intelligence. Another framework is growth mindset, which means intelligence is something that can be cultivated through learning. People supporting the framework of growth mindset accept failure as a chance to learn and grow their intelligence more. As a result, they give importance to feedback, which helps their improvement (Dweck, 2000a).

In case of failures, there are two patterns followed by students to react to these failures. If students follow the helpless pattern, in case of a failure, people lose their faith in their learning ability, and they doubt their intelligence. When students from the group of the helpless pattern face difficult problems, they accept themselves as incapable to solve these and they feel depressed. As a result, students following helpless pattern have negative ideas about their self-capabilities and they destroy their ability to use their mind to solve these problems. On the other hand, the group with mastery-oriented response does not blame anyone or anything for their failure. In case of difficult problems, they try to find ways to solve it, and even to improve

their performance. Mastery-oriented students remain confident about their potential, and they love challenges which help them to develop their intelligence (Dweck, 2000a).

There are also two different tendencies of people while determining their goals. The first way to follow is having performance goals. These goals are focused on competences, which help to get positive reactions from the people and to avoid the negative ones. People with performance goals want to be seen successful and smart through showing their abilities. On the other hand, learning goals are based on increasing knowledge and ability in the related field. Students with these goals work hard and they want to master in the tasks in order to become smarter. Dweck (2000a) argues that students with performance goals mostly have helplessness-pattern of intelligence, while students with learning goals use mastery-oriented pattern of intelligence.

Dweck (2000a) also proposed that students may have different theories of intelligence: entity theory and incremental theory. In the entity theory, intelligence is seen as fixed, which provokes students to have more performance goals. In incremental theory, however, intelligence has the possibility to change when the surrounding factors allow that. In order to identify what kind of intelligence the participants in her study had, Dweck (2000b) suggested a 6-item questionnaire called Theories of Intelligence Scale – Self Form for Adults (TIS). Three of the items are statements related to entity theory and the other three are incremental theory statements.

TIS by Dweck (2000b) was used by a group of researchers (Smiley et al., 2016) in an empirical study on college students in the United States in order to test how achievement goals, attributions and emotions mediate intelligence and planning

and withdrawal following failure. Data were collected from 261 students through an online survey by presenting a hypothetical failure scenario. The survey included measures for learning goals, ability goals, effort attributions, ability attributions, planning, withdrawal, loss of interest and shame in addition to TIS of Dweck (2000b). As a result of the study, it was shown that it is possible to predict engagement and disengagement following an achievement setback. In addition, learning goals seemed to be protecting participants against blaming and losing interest. Students with ability goals also appeared to be withdrawing from challenges as they accept their lack of ability as the reason of failure. Enrichment of sample and data collection tools is suggested by the researchers for the next studies in that field.

Achievement Goal

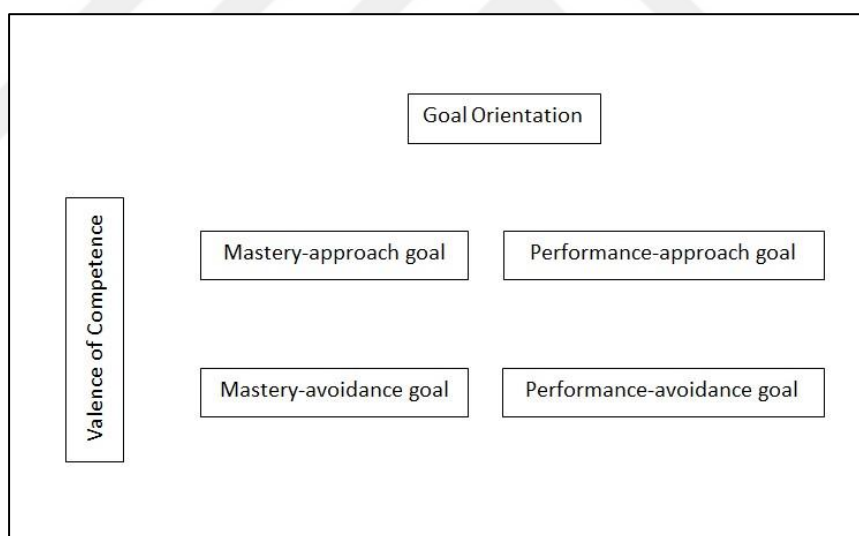
The initial model of achievement goals was proposed in the 1980s, which separated two types of goals based on the focus of competence: mastery goals and performance goals. Mastery goals focus on developing competence and becoming master in tasks. As a result, these are also called as task goals. On the other hand, performance goals are also expressed as ego goals, which are focusing on demonstrating the competence and outperforming others (Dweck, 1986). In 1990s, Elliot (1999) suggested a 2x2 model, in which he matched both mastery and performance goals with approach and avoidance. In 2x2 model, mastery goals focused on attaining success or avoiding failure for the demands of the task or for one's own performance. In addition, performance goals focused on attaining success or avoiding failure relative to others.

Similar to the previous attempts, achievement goal approach appeared as one of the frameworks explaining achievement motivation, which focuses on competence in two different ways: in terms of standpoints on competence (mastery vs.

performance) and in terms of valence of competence (approach vs. avoidance) (Elliot, 1999; Korn & Elliot, 2016). Approach goals are based on individuals' willing to be at the same level with other (i.e. their classmates), while avoidance goals are motivating individuals so that they do not have negative outcomes of their possible failure in the future. When standpoints of competence match with the valence of competence, there appear four types of motivation in achievement goal framework: mastery-approach goals, mastery-avoidance goals, performance-approach goals and performance-avoidance goals.

Figure 1

Overview of the components and subcomponents of competence in achievement goal models



As it is seen in Figure 1, a mastery-approach goal means that the individuals may need to change their behaviors so that the society could accept them. On the other hand, a mastery-avoidance behavior refers to the individuals to develop new skills in order to avoid negative feedback of other people. On the second column of the figure, a performance-approach goal is suggested which includes the socially desired behaviors of individuals, which helps them to approach peers. This kind of

behavior change aims these individuals to improve their social status. Lastly, performance-avoidance goals include the individuals to display desired behaviors in order to avoid the negative judgements of other people.

Another researcher, Dörnyei (2005) also focused on the motivation disposition of learners and pragmatic factors related to them. Accordingly, he used the term, instrumentality, to show the utilitarian value of language learning, which is an important factor in English language learning motivation. He made a suggestion about the categories of instrumentality: (1) promotion focused motives related to increasing success and (2) prevention focused motives related to avoiding failure. By using Higgins' (1987, 1998) ideas of selves, Dörnyei also described instrumentality-promotion motives as a part of IL2S, while instrumentality-prevention motives are related to OL2S.

In order to assess these goals, Elliot and McGregor (2001) developed The Achievement Goal Questionnaire (AGSQ), which used three items for each type of achievement goals after piloting work. The researchers applied this questionnaire, in which they all seemed to represent empirically separable and internally consistent achievement goal constructs. The study by Elliot and McGregor (2001) showed that mastery-avoidance goals are related to the fear of failure, low self-determination, perceived classroom engagement and some other antecedents. These results are consistent with the main idea of mastery-avoidance goals and support their hypothesis that mastery-avoidance goals have a more negative pattern of consequences than mastery-approach goals. It also shows mastery-avoidance goals have more positive pattern than performance-avoidance goals. Application of the questionnaire in that study provided strong support for the new framework which is an improved version of mastery-performance dichotomy. Face validity, reliability

and internal consistency of the items were checked in the same study and they were constructed. Distinction of the constructs in 2x2 framework was also provided as they are linked to a set of distinct variables. In 2008, Elliot and Murayama improved the original 2x2 framework by keeping the number of items same, but by revising the statements in a new way. After that, this new version of the framework called as Achievement Goal Questionnaire – Revised (AGQR) was also used in the studies.

Korn and Elliot (2016) also tested 2x2 standpoints model of achievement goals by applying the 2x2 Development-Demonstration Achievement Goal Questionnaire (AGSQ). Their study resulted that development-approach goals are positive predictor of intrinsic motivation. However, they are not significant predictors for the exam performances. On the contrary, demonstration-avoidance goals are negative predictors of both intrinsic motivation and exam performance. Development-avoidance goals are positive predictors of intrinsic motivation, but they are not significant predictors of exam performance. Demonstration-approach goals appear as insignificant predictors of intrinsic motivation, but they positively predicted exam performance.

Specifically writing achievement goals were also analyzed in another context in order to assess students' intentions for writing (Soylu et al., 2017). Both middle school and high school students were participants of the study, and the scale was adapted from Elliot and Murayama's AGSQ (2008). At the end of the study, it was concluded that achievement goals are differentially related to self-efficacy dimensions while performance goals predicted all dimensions of self-efficacy. Goal types also predicted self-efficacy for self-regulation more strongly. In addition, all the self-efficacy dimensions correlated with how much students like writing while only self-efficacy for conventions correlated with writing performance. Through the

end of the study, the need for integrating different motivational constructs was shown as a need in order to develop a more complete understanding of motivation.

More recently, Chou (2023) investigated achievement goal orientations in EMI classrooms. Accordingly, he collected data from 595 university students who were taking EMI courses in social science and humanity domains in Taiwan. As a result of the survey, there was a significantly positive correlation between performance-approach and performance-avoidance goals, while neither of them was related to students' English proficiency. This means students who are more focused to their performance in foreign language classes rather than becoming proficient in that language do not experience any difference in their achievement.

Academic Buoyancy and Resilience

Academic resilience is the individual response to chronic underachievement and feelings of anxiety in educational context. It is the power of management with continuous problems, which requires high level of achievement motivation to deal with these conditions (Martin & Marsh, 2009). Individuals need to deal with the overwhelming problems, which may cause anxiety and depression and also alienation or opposition to teachers.

On the other hand, academic buoyancy is the response given to daily pressures causing typical stress levels. It is relevant to threats to confidence as a result of everyday academic stressors such as poor grades. While buoyancy is applicable for all groups of people, resilience is related to more specific groups (Martin & Marsh, 2008a). Students achieving success despite significant disadvantages are called as “resilient” while successful individuals despite minor disadvantages are “buoyant” (Martin & Marsh, 2009).

In an article by Martin and Marsh (2008a), they define academic buoyancy and academic resilience to show the difference between them. They focus on whether there are significant predictors of academic buoyancy in different times. This is the first study exploring the concept of buoyancy and it showed that anxiety, self-efficacy, academic achievement, teacher-student relationships are the key components predicting academic buoyancy. Researchers also suggest that academic buoyancy is a necessary but not sufficient condition for academic resilience (Martin & Marsh, 2008a).

In a study by Martin and Marsh (2006), they try to examine a measure of academic resilience. As a result of the analysis of the sets of measures, they proposed a 5-C model of academic resilience. 5-C model includes confidence (self-efficacy), coordination (planning), control, composure (low anxiety) and commitment (persistence). This is a study focusing on individual-level academic resilience and individual-level psychological and educational factors, and it suggested exploring class and schooling climates for aggregate-level academic resilience (Martin & Marsh, 2006). Based on that model of resilience, Cassidy (2016) developed an Academic Resilience Scale of 30 items (ARS-30) for university students.

Person-focused approach to academic buoyancy and academic resilience is also applied on buoyant and resilient students in order to identify the factors influencing them. Academic Buoyancy Scale used by Martin and Marsh (2008b) help to identify students with and without the ability to deal with the ordinary struggles of academic life. They suggest that there has been little work in academic resilience and academic buoyancy, which requires researchers to focus more on these topics (Martin & Marsh, 2009).

Martin and Marsh (2009) also argue that academic buoyancy and academic resilience are two important factors affecting students' positive connection to school and their strength to cope with major or minor academic difficulties. Studies dealing with resilience are focusing on ethnic groups in extreme conditions and chronic underachievers while the studies on buoyancy are on students with everyday pressures.

Similarly, a research study by Collie et al. (2015) focused on identification of constructs linked to academic buoyancy. They conducted a survey including The Academic Buoyancy Scale (ABS) by Martin and Marsh (2008a) on 2971 Australian high school students. The researchers also collected data about the literacy and numeracy scores of the students through their grades from a nationwide, standardized exam. There were also follow-up analyses after a period of time in order to see how the factors on buoyancy may change over time. The findings indicated a strong correlation between control and academic achievement, whereas the relationship between buoyancy and achievement was initially found to be weak. The potential influence of other factors in explaining how buoyancy facilitates achievement was subsequently investigated. It was observed that control played a mediating role in the relationship between buoyancy and achievement during this phase of analysis. Specifically, positive experiences such as achieving high scores were linked to perceptions of control over future academic outcomes. This sense of control, in turn, bolstered individuals' confidence in achieving higher academic goals. Consequently, control emerged as a critical factor in bridging the gap between buoyancy and academic achievement by shaping individuals' actions. These findings suggest that educators could foster a positive cycle of buoyancy, achievement, and control among students. The study recommended further exploration into academic buoyancy by

proposing future research to assess buoyancy and achievement concurrently within the same educational context.

Yun et al. (2018) also used the model by Martin and Marsh (2008a) and the IL2S from Dörnyei's (2009) study to analyze the buoyancy profiles of second language learners in university contexts. They used a questionnaire to assess academic buoyancy along with six hypothesized predictors from the literature: persistence, self-efficacy, self-regulation, IL2S, anxiety and teacher-student relationship. Although persistence did not provide discriminant validity at the presence of buoyancy, self-efficacy, self-regulation and the IL2S were found to be significant predictors of buoyancy. However, teacher-student relationship and anxiety were not significant predictors of buoyancy. As a result, this study showed that academic buoyancy enables L2 learners to be motivated, which showed its importance in the context of language learning (Yun et al., 2018).

Regarding academic resilience, 367 sixth-grade students completed a questionnaire, through which the researchers tried to identify the influence of resilience on motivation and second language proficiency of these students (Kim et al., 2018). The researchers implied the questionnaire they developed based on the related literature. As a result of the study, resilience appeared to be effective in EFL proficiency, which had a great impact on EFL learning motivation compared to EFL learning demotivation. In addition, there appeared five factors, competitive motivation, IL2S, OL2S, instrumentality-promotion and instrumentality-prevention, under the title of resilience. In that study, EFL learning motivation and EFL learning demotivation also seemed to have an influence on EFL proficiency and as a result, the researchers suggested helping students enhance their motivation by improving their resilience.

For academic resilience, Cassidy (2015) collected data from 435 British undergraduate students by using ARS-30 and another scale for academic self-efficacy (ASE) in order to see the relationship between them. After anonymous data collection, the study resulted in significant positive correlations between ASE and academic resilience. Both lower and higher ASE groups scored higher academic resilience while gender and year of study did not show any significant differences in academic resilience. As a result of the study, the researcher concluded that ASE is associated with and a predictor of academic resilience. Specifically, higher self-efficacy students reported significantly higher academic resilience in that study. To sum up, academic buoyancy is a construct related to academic resilience of the students.

The Relation between Mindset and Achievement Goals

In a longitudinal study, DeBacker et al. (2018) examined the growth mindset intervention on ninth-graders' beliefs about intelligence and related achievement goals in two schools. The researchers measured the beliefs and achievement goals of students through surveys before the intervention and for several times after the intervention in English language arts class. The study consisted of three parts: a lesson, a comprehension check, and a self-persuasion task. The researchers identified a significant difference between the intervention and comparison groups in both schools in terms of belief scores. For achievement goals, while there was no significant difference between the achievement goal scores of the intervention and comparison groups in the first school, in the second one, mastery goal scores differed significantly. Longitudinally, in the first school, there was a statistically significant mean difference on incremental beliefs while in the second school, there was not statistically significant mean difference. In terms of the mastery goals, while there

was no significant change in School 1 over time, significant changes were observed in School 2. This study showed that incremental belief scores of the participants were positively related to mastery goals and negatively related to performance-avoidance goals, which was similar to the findings in Lou and Noels' (2017) study in a second language learning context.

Cho et al. (2019) examined the relation among mindset, achievement goals and reading comprehension of primary school students through two distinct tests for reading skills and mindset and achievement goal measurement instruments. The study findings indicate that students with a fixed mindset are less inclined to adopt mastery goals but are more predisposed to embrace performance-avoidance goals. This finding was similar to the study by Papi et al. (2021) in a foreign language context, in which fixed minded students try to perform better in order to avoid from the failure, while growth minded students have more motivation to improve themselves for their future ideals.

Another research study conducted by Yu and McLellan (2020) also focused on how mindsets and associated constructs worked together to affect EFL students achievement. The scores were collected from English students in their English and Math classes in addition to their perspectives on the concepts like their mindsets and achievement goals. As a result, one of the student groups presented a positive correlation between their growth mindset and mastery goals, while the other group had the correlation of fixed mindset and performance goals positively. This finding was consistent with Lou et al.'s (2021) results in that fixed minded students have mostly performance goals to avoid negative consequences of failure while not giving priority to competence. Specifically, in EFL context, Sadeghi et al. (2020) conducted a study to focus on the relationship between mindset and goal orientations. In this

study, Goal Orientation Scale, Failure Appraisal Inventory, and another questionnaire on the beliefs about fixedness of language ability were completed by 100 university-level learners in Iran. As a result, there was no correlation identified between fixed mindset and learning goal orientation of the participants. However, there was a positive relationship between growth mindset and learning goals, specifically for the goals to perform better in order to avoid failures.

The Relation between Mindset and Academic Resilience

Kustritz (2017) conducted surveys with veterinary students to understand if there were any correlations between their mindsets and academic success and resilience in case of failure or stress. Most of the participants were identified to have strong growth mindset while there was no correlation between their mindset and GPA scores or perceived stress level. According to Kustritz, the students might not have been stressed out and they might have been good at managing stress. Also, it might be possible for them not to address other aspects of their lives as stressful while trying to have high academic performance.

Calo et al. (2019) also investigated the role of resilience, grit, and mindset type together on health professional students' struggles in challenging situations. One group of final-year physiotherapy students participated in the surveys about their grit (Short Grit Scale), resilience (Brief Resilience Scale), academic resilience (Academic Resilience Scale) and mindset types (Dweck Mindset Instrument). The study resulted in that a significant proportion of students had low levels of grit and resilience, which affected their learning and ability to cope with the pressures. In addition, there was no statistically significant correlation between students' scores of academic resilience and mindset types similar to the findings of Kustritz (2017).

Similarly, Mosanya (2020) explored the role of grit and growth mindset to cope with academic stress during COVID-19 restrictions. For that aim, a group of international students in a British university filled in a questionnaire including items from The Academic Stress Scale (Burge, 2009), The Implicit Theories of Intelligence Scale (Dweck, 1999), The Grit Scale (Duckworth & Quinn, 2009), The Perceived Stress Scale (Cohen & Williamson, 1988), and Loneliness Scale-Short (Ditommaso & Spinner, 1993). As a result, growth mindset appeared as the negative predictor of academic stress, which meant growth mindset helped to cope with academic stress. In addition, students with moderate and high levels of grit were less affected by the loneliness during COVID-19 period, and they had less helplessness-related stress. As a result, growth mindset and grit helped students to show resistance against stress and loneliness during COVID-19 pandemic, showing a positive correlation between growth mindset and academic resilience.

Similarly, Bettinger et al. (2018) investigated the effects of schools to increase students' perseverance in math by shaping their mindsets. In this study, researchers conducted an experiment, and manipulated students' beliefs in their ability to learn. After the treatment, there was an increase in growth mindset scores of students, and students with fixed mindset had lower GPA scores. In addition, growth mindset correlated with students' subsequent perseverance positively while these beliefs of students about their ability to learn were malleable. Similarly, in the field of foreign language education, Jankay (2020) aimed to show the role of growth mindset on students' perseverance in writing. The researcher analyzed the journal entries of the kindergarten students after the interventions, and it was concluded that growth mindset interventions had a positive effect on students' perseverance in writing. As a result, growth mindset correlated with perseverance of students

positively. More recently, Xu and Feng (2024) explored the relationship between mindsets and resilience of L2 students, which might take a role in their achievement. For that purpose, they collected data through surveying 479 Chinese first-year college students learning English. As a result of the analysis, the researchers found out growth and fixed mindsets and also resilience were related with an influence on L2 achievement. It became clear that while fixed mindset had a negative effect on students' L2 success, both growth mindset and resilience had a positive effect on it. This means academically resilient foreign language learners tend to be academically more successful.

The Relation between Mindset and Academic Buoyancy

Anderson et al. (2020) argued that academic buoyancy to deal with the minor challenges in daily life and academic resilience to cope with major and chronic experiences are both related to stress and pressure management. In this sense, in order to assess academic resilience, it is also necessary to focus on the academic buoyancy of the learners. Anderson et al. (2020) also referred to Martin (2013) who found the direct and positive effect of academic buoyancy on minor academic issues such as anxiety in academic performance. On the other hand, students' academic resilience was the key for the major academic issues such as disengagement in school in Martin's research (2013). After suggesting various studies showing the relationship between academic buoyancy and student success, Anderson et al. (2020) argued that academic buoyancy is a new concept related to the student mindset, which should be investigated more.

More recently, Suharsono and Fatimah (2024) investigated the effects of growth of mindset and academic buoyancy on academic engagement and psychological well-being of students. Accordingly, they collected data from 314

psychology students from a private university in Indonesia, through a number of surveys. The results of the study showed that growth mindset is positively correlated with academic buoyancy, which means growth minded students become more buoyant in their academic life. As a result, types of mindsets might be related to the academic buoyancy of the students.

The Relation between Achievement Goals and Academic Buoyancy

Yu and Martin (2014) conducted the only study identifying the relation between achievement goals and academic buoyancy. The researchers collected data from middle school students in China through a survey, and then they identified whether students' motivation, engagement and academic buoyancy may assess their personal best goals and achievement goals. The results showed a positive correlation between buoyancy and both mastery and performance goals. In addition, mastery goals and personal best goals significantly predicted buoyancy. Therefore, students with mastery goals or personal best goals are suggested to be more buoyant.

The Relation between Achievement Goals and Academic Resilience

To examine high school students' achievement goal orientations and academic resilience, Jowkar et al. (2014) conducted a study in which 606 students answered the Achievement Goals Questionnaire by Elliot and McGregor (2001). As a result, students with high level of mastery-approach goals presented higher values for academic resilience, which meant there was a positive relation between mastery-approach goal orientations and academic resilience. In case of academic failures and problems, mastery-oriented students saw that situation as an opportunity to learn and grow from their mistakes. In addition, performance-approach and performance-avoidance goals were also significant positive predictors of academic resilience. On the other hand, in this study, goal orientation could not predict academic resilience of

the participants, which may show there is no relationship between achievement goals and academic resilience.

In another study (Splan et al., 2011), the researchers examined the role of resilience and achievement goal orientations in academic achievement with the participation of 107 undergraduate students who completed goal orientation and resiliency instruments. Splan et al. found that there was a positive correlation between resilience and mastery-approach goal orientation while there was no significant negative relation between resiliency and either mastery-avoidance, performance-approach and performance-avoidance orientations. This shows that resilient students are more eager to become successful for their individual future goals. All of these research points out those types of achievement goal may have a relation with academic resilience behaviors of students.

In another study, Çakır and Gazioğlu (2020) examined the role of academic and psychological variables in predicting test achievement of students, specifically in a national exam in Türkiye. By applying questionnaires to eight-grade students and obtaining test scores of the participants, the study showed that mastery-approach, mastery avoidance, performance-approach, and resilience were significantly positive predictors of exam scores of the students, performance-avoidance goal scores were in a negative correlation with their success. In addition, there were positive correlations between resilience of students and achievement goal types, except from the one between resilience and performance-avoidance goals which had a negative value. This study suggested that there is an association between achievement goals and resilience of students, which might be positive or negative based on the type of the goals.

The Relation and the Difference between Academic Resilience and Academic Buoyancy

In academic environment, resilience is the ability of students to deal with chronic or long-term struggles, while buoyancy is the capacity to overcome daily academic issues. Although they may be thought as similar constructs, Martin (2013) demonstrated the difference between them through a survey with 918 high school students. The survey included items related to academic buoyancy, academic resilience as predictors while anxiety, failure avoidance, uncertain control, self-handicapping, and disengagement were the outcomes. As a result of the data analysis, it became clear that academic buoyancy was related to isolated poor grades and performances for specific tasks or assignments, which predicted lower level negative outcomes (i.e. anxiety, failure avoidance). On the other hand, academic resilience as the capacity to overcome long-term underachievement was more related to major negative outcomes (i.e. self-handicapping disengagement from school)

The Relation between Academic Resilience and Student Success

With the purpose of investigating the relation between academic resilience and success level of the students, Calo et al. (2022) conducted a study with university students in Australia. The researchers aimed to identify the relationship between grit, resilience, mindset types, academic success and clinical performance of physical therapist students, through surveys and obtained transcripts of these students. The results revealed that while grit was a significant predictor of academic success and clinical performance of the students, there is no significant correlation between academic success and either students' mindset types or academic resilience. Similarly, Sukup and Clayton (2021) examined the effects of resilience on stress and

academic performance of undergraduate students and could not identify any significant relationship between resilience and academic performance of the participants. In other words, being academically resilient may not provide an advantage for the students in terms of their academic success.

Fallon (2010) also conducted research to identify the relationship between the academic optimism of schools and academic resilience. In this study, 150 Latino high school students with low socio-economic status (SES) participated in the survey including items on parental involvement, school engagement, resiliency, and academic achievement. GPA, achievement test scores, attendance, and discipline records of these students were also used in the study in order to understand possible correlations. As a result of the study, it was found that there was a positive relationship between academic achievement and resilience of these students. On the contrary to Sukup and Clayton's (2021) and Calo et al.'s (2022) findings, Fallon (2010) could present that academically resilient students tend to be more successful.

In Turkish context, Yılmaz-Fındık (2016) examined how resilience is related to student success. By using PISA 2012 Mathematics performance and resilience scores of the students, they found similar results. Specifically, they indicated that being academically resilient may help students to be more successful in their academic life.

Bester and Kuyper (2020) also investigated the relationship between adolescents' resilience and academic performance. In this study, 117 students of Grade 9 and 10 from two different schools participated in the research by completing the questionnaires. The researchers developed a new questionnaire to measure resilience to obtain data about teacher-learner relationships and parental involvement. They also aimed to assess study orientation of the participants.

Students' first term academic results in language class were also used in order to get information about their success. The results indicated that resilience was positively related to academic performance and some other performance-related factors such as teacher-learner relationships, parental involvement, and participants' study methods. In addition to the study with secondary school students by Trigueros et al. (2019), Fuente et al. (2017) also found out academically resilient university students have more chance to become successful in their academic lives. All of these studies proved that when students are academically resilient, that affects their life positively in many aspects one of which is getting higher grades.

Regarding English language learning, Kwek et al. (2013) examined the impacts of self-esteem and resilience on academic performance of domestic and international hospitality and tourism undergraduate students. After the analysis of resilience scores and grades of assignments, the researchers identified a weak positive relationship between resilience and academic performance of students. On the other hand, in Kim and Kim's (2011) study in Korea, the resilience of secondary school students was positively associated with their academic performance in English learning. Similarly, Danesh and Shahnazari (2020) found out intermediate and advanced level of English language learners are becoming more successful when they are academically resilient, while this is not the case for the beginners. To conclude, academic resilience behaviors of students might have various roles in predicting their success.

The Relation between Academic Buoyancy and Student Success

On the relation between buoyancy and success of students, Hirvonen et al. (2020) examined the role of academic buoyancy to predict Finnish middle school students' failure expectations, avoidance behavior, task-oriented planning in learning

situations and academic behaviors such as GPA scores. After collecting data, the analysis results indicated that there was not a significant correlation between students' academic buoyancy and academic success. Similarly, Collie et al.'s (2015) study with Australian high school students through a survey. The analysis results showed that there was no direct significant relation between buoyancy and achievement of the students, while control is an operator of the relationship between buoyancy on achievement over time. These findings mean that becoming academically buoyant may not guarantee students to become more successful.

In language learning context, Yun et al. (2018) tested how buoyancy was relevant to students' second language learning experiences and success. Data were collected from 787 college-level L2 learners in South Korea by implementing a questionnaire. The main aim of the study was to analyze the links among six hypothesized predictors (self-efficacy, self-regulation, persistence, L2 anxiety, teacher-student relationships, IL2S), buoyancy, and L2 achievement. At the end of the study, buoyancy was found to be a significant predictor of L2 achievement and GPA results of the participants. In other words, being academically buoyant helped students to become more successful in foreign language learning.

Specifically in Turkey, Aydın and Michou (2020) investigated the role of self-determined motivation and academic buoyancy in the context of EPP, as predictors of achievement of students. The data collected through a questionnaire from 267 university students of Turkey demonstrated that there was a positive association between students' academic buoyancy and their final grades. This finding is very similar to the findings of another study in Turkish context, in which Toprak-Çelen (2020) examined the relations among academic buoyancy, academic resilience, R-L2MSS and success of EPP students and identified academic buoyancy

as an important factor for students to study more and have higher points at EPP. As a result, academic buoyancy appears to have an important role in determining students' success, especially by mediating self-determined motivation and grades.

The Indirect Relation of Mindset to Student Success

In order to investigate the role of various factors between the mindsets and success of the students, Corradi et al. (2019) specifically focused on the role of context in the relationship between growth mindset and academic achievement. They collected surveys from the students of a Belgian university to investigate the role of growth mindset as a mediator between the contextual factors of minority background and academic success. The results indicated that there was a negative effect of mindset on academic outcomes among minority students, which was interpreted as there were more important factors than mindset shaping the academic success of students.

In regard to language education, Bai and Wang (2020) investigated the role of growth mindset, self-efficacy and intrinsic value in self-regulated learning (SRL) and English language learning achievement. The study was conducted in a primary school in Hong Kong with 690 4th graders by applying a survey with the items from Dweck's (2006) growth mindset instrument and Pintrich and DeGroot's (1990) self-efficacy and intrinsic value instrument. For English language learning achievement, students' scores in a standardized English test were included in the study. The results of the analysis showed that the level of SRL strategy use was affected by students' motivational beliefs such as growth mindset, self-efficacy and intrinsic value. While monitoring and effort regulation became effective in English learning achievement, goal setting and planning did not predict the achievement of the students. In addition, growth mindset appeared as a stronger predictor of SRL compared to self-efficacy

and intrinsic value, which were the mediators between the growth mindset and achievement scores.

In order to identify the direction of the relation between types of mindset and student success, Brougham and Kashubeck-West (2018) conducted a study with 69 urban high school students with poor grades, poor attendance and poor graduation rates were selected for the intervention of a number of learning activities and writing exercises. The study showed that the treatment improved the students' mindset scores; however, there was a negative relationship between growth mindset intervention and GPA scores in contrast to the outcomes of the previous studies from the literature. That means even if students are encouraged to develop their growth mindset, it may not help them to become more successful because of the role of some other factors.

In Turkish context, Çağatay and Erten (2020) applied a questionnaire about IL2S and attributions of EFL students in a state university to identify the relation between learners' causal attributions and their future L2 achievement. The results indicated that the students with effort as a part of growth mindset became more successful in their exams and were more persistent during learning process. This finding was also approved by a more recent study by Kaya et al. (2023), who found out fixed minded students are less successful in foreign language learning context compared to the growth minded ones in EMI university. All in all, type of mindset might have a role in success level of the students.

The Indirect Relation between Achievement Goals and Student Success

Mouratidis et al. (2018) investigated the relations between achievement goals and academic success, particularly within the domain of mathematics. This study is also the only study that focused on the relation between achievement goals and

academic success so far. To this end, the researchers administered questionnaires to high school students and gathered data on their mathematics grades. The results indicated that both mastery-approach and performance-approach goals positively influenced students' academic performance. Specifically, performance-approach goals demonstrated a direct positive relationship with academic success. In contrast, both mastery-approach and performance-avoidance goals indirectly predicted student success through the mediator of challenge-seeking behavior. Additionally, performance-avoidance goals were found to have a negative association with challenge-seeking. These findings suggest that achievement goals can be either directly or indirectly related to academic success. That means there are some other factors effective between the achievement goals and success of the students, which needs more investigation to expand findings of this study.

L2 Motivational Self System

Self-Discrepancy Theory

Self-Discrepancy Theory is related to different (internal and external) types of motivations shaping individuals' behaviors. Higgins (1998) mentions the hedonic principle as the basic motivational principle for people, which argues that people feel the need to approach pleasure and to avoid pain while they are shaping their behaviors. Based on hedonic principle, Higgins (1987) also suggested self-discrepancy theory, in which he distinguished *ideal self-guides* and *ought self-guides*. In self-discrepancy theory, *ideal self regulation* means the tendency of people to approach the behaviors with positive outcomes and *ought self regulation* means the effort by people to avoid from the behaviors with possible negative outcomes. There is a difference between behaviors in terms of focusing on promotion or prevention. While some people motivate more through expecting positive results, some others

feel motivational power through escaping from possible negative outcomes. The dichotomy between sources of motivation is shaped by regulatory focus which means the ability of regulating behaviors based on individual's needs. As needs and expectations of people for each situation differ, these conditions cause regulatory focus of each person to use different motivational tools to behave (Higgins, 1998).

In self-discrepancy theory of Higgins (1998), there are three basic domains of the self: *the actual self*, *the ideal self* and *the ought self*. The *actual self* means the representation of characteristics individuals believe they actually possess. The *ideal self* is the representation of characteristics individuals believe they would like to possess. These are the ideal attributes such as hopes and wishes about oneself. Lastly, the *ought self* is the representation of characteristics that individuals believe that they should possess such as sense of duty or responsibilities. Higgins (1987) used Selves Questionnaire to analyze the effects of these selves on high achiever and low achiever people. As a result of this study, he suggested that if there is a difference between somebody's actual self and ought self, this difference may cause a person to feel disappointment about themselves. On the other hand, if there is a huge difference between actual self and individual goals as a part of the ideal self, this difference causes the person to feel fear and restlessness. There is also a difference between low achievers and high achievers in terms of judging their performances. Low achievers saw their performance as a failure by comparing their results with *ought-self* based expectations. However, high achievers compared their results with *ideal-self* standards and accepted their performance as a success in addition to being dissatisfied by not fulfilling personal targets as *ought-selves* (Higgins, 1987).

Similar to Higgins, Markus and Nurius (1986) also suggested the concept of possible selves which means individual's self-knowledge related to how the person views himself/herself. Self-concept is important as it shapes the behaviors of individuals in the future, and it helps to evaluate and interpret the current self. All people have possible selves with three types, which are ideal selves which individuals would like to become, selves individuals could become and selves they are afraid of becoming. These perceptions create the "future self-guides" as people shape their behaviors based on their perception about their own possible selves. Decisions of individuals are also influenced by possible selves, which suggest a link between self-concept and motivation for action. The main difference between Higgins and Markus and Nurius is that while Higgins suggests just a single ideal and single ought self for each individual, others mention the possibility of multiple possible selves such as more than one ideal self.

Another concept suggested by Higgins (2005) is *regulatory fit*, which means the value people have to "feel right" about their actions and so influencing their decisions and behaviors widely. Although people have the same goal, they may have different orientations for that. Some people have promotion-focus orientation to become successful, which means they have the goal as their hope and ideal. However, others have prevention-focus orientation for the same aim, which is the condition to feel safe and it is called as "ought." Based on these, before acting, people think about the possible outcomes of their action and shape their behavior, which creates our regulatory fit.

Lockwood et al. (2002) analyzed how promotion or prevention goals influence the impact of positive and negative models on motivation. Based on their results, promotion-primed participants were motivated only by positive role models,

and prevention-primed participants were motivated only by negative role models. In another study, they analyzed whether people with role models with different goals, may be discouraged or not. This study showed that the participants became more motivated when they had role models with similar goals. On the other hand, some participants lost their motivation when they had role models with different goals. In their last study, they suggested that people choose role models for themselves based on the similarity in their promotion and prevention goals. Based on all these studies analyzing motivational tendency of people, it was concluded that promotion-focused people follow positive role models and prevention-focused people follow negative role models in order to be motivated for success (Lockwood et al., 2002). To sum up, possible outcomes of the behaviors may have a role in individuals' decisions and actions.

L2 Motivational Self System

Regarding second language learning motivation, Dörnyei (2005) analyzed the arguments of Higgins (1987) and Markus and Nurius (1986), and he suggested L2 Motivational Self System (L2MSS) framework. L2MSS framework has three components: IL2S, OL2S, L2 Learning Experience. The first one is the internal desire of learners to learn second language. OL2S, on the other hand, is the term for the characteristics that learners believe that they ought to possess to learn language and to avoid possible negative outcomes. L2 learning experience is the learning environment and experience creating the executive motives for the learners. L2MSS framework was validated through several quantitative studies (Kim & Kim, 2021; Yun et al., 2018; Zarrinabadi et al., 2022), and the IL2S was argued to be confirmed as the strongest contributor to the whole model by these studies (Dörnyei, 2009).

The Relation between L2MSS and Social Cognitive Approach to Motivation

Based on the social cognitive theory (Dweck & Leggett, 1988), individuals have two types of self-concepts related to their intelligence, entity or incremental. However, although there are two types of behaviors that individuals may perform, these are not fixed for each situation. Whether an individual follows entity or incremental theory of intelligence is related to many factors such as the context, conditions and situations. That means individuals may have different goals and theories of intelligence, bringing no behavioral consistency across situations. As a result, underlying personality variables can become dynamic motivational processes affected through the social contexts. In addition, mindsets may also affect the outcomes such as behaviors or academic success of students through achievement goals.

Relatedly, Yang and Chanyoo (2022) tried to identify the relationship between eight motivational predictors including the constructs of IL2S, OL2S, instrumentality-promotion and instrumentality-prevention. Questionnaires with the items for each construct were applied to 95 undergraduate students learning Chinese, Japanese, or Korean as foreign languages. As a result of the study, both IL2S and instrumentality-promotion goals of students positively correlated with their learning effort for all groups of students. This finding approved the idea of Dörnyei (2005) about showing instrumentality-promotion goals as a part of IL2S.

In another study, Yang and Liang-Itsara (2024) focused on the correlation between different elements of L2MSS and goals of instrumentality-promotion and instrumentality-prevention, for which they collected data from university students from Thailand, who were learning Chinese, French, Japanese or Korean as foreign languages. The data analysis results revealed that IL2S of the students were

positively correlated with instrumentality-promotion goals in all of the groups, while OL2S of them were in a positive correlation with their instrumentality-prevention goals, except for the learners of French as a foreign language. That means when students learn foreign language for their future ideals, they are focused on using the target language successfully. On the other hand, when students learn foreign language as a result of the necessities of obligations for their future, their main purpose is not experiencing failure in the following years.

The Relation between Mindset and L2MSS

Although currently there are no studies on the relationship between types of mindset and R-L2MSS, Cacalı (2018) worked on the relationship between Mindset and L2MSS. In this study, Cacalı (2018) assessed university students' mindsets and their motivation including three aspects of Dörnyei's L2 Motivational Self System. Result indicated that there was a significantly positive correlation between growth mindset and IL2S, while the correlation between growth mindset and OL2S or L2 learning experience was not significant. These results may mean that growth minded people were more likely to have future ideals to be competent in EFL.

The Relation among L2MSS, Academic Buoyancy, and Academic Resilience

In order to analyze the relationship between L2MSS and Academic Buoyancy, Yun et al. (2018) used the model developed by Martin and Marsh (2008a) and IL2S from Dörnyei (2009) to analyze the buoyancy profiles of second language learners, and IL2S turned out to be one of the significant elements to develop academic buoyancy. That means learning second language through future ideals help students to become academically more buoyant.

Related to that issue, Kim and Kim (2021) conducted a research study with 152 undergraduate students to identify the relationship between the constructs of

L2MSS and resilience. Learners of English from South Korea filled in questionnaires related to their resilience and L2 learning motivation. The analysis of the data demonstrated that resilience was positively related to IL2S of students while it is negatively correlated with their OL2S. That shows that if students learn language for their future ideals, they become more resilient for the difficulties they face while they may not be able to show resistance if they are learning language because of the future necessities. Similarly, Zarrinabadi et al. (2022) investigated the providers and the consequences of resilience in EFL context in an Iranian university. The results also indicated that IL2S predicted resilience of students, which supports the previous findings that when students learn foreign language in order to become successful in the future, they demonstrate more resilience in case of the academic difficulties they face.

In Turkish context, Toprak-Çelen (2020) investigated the relationship among academic buoyancy, academic resilience, re-conceptualized L2 motivational self system, and students' success. For this purpose, she collected data from 436 EFL students at a public university through an adopted survey. The results showed that there was a significant relationship between academic buoyancy and IL2S of the participants, which meant that students with personal ideals to become successful (IL2S) in learning language are more buoyant.

The Relation between L2MSS and Student Success

Kim and Kim (2011) used a questionnaire to identify visual, auditory, and kinesthetic preferences, IL2S, motivated L2 behavior and English proficiency of secondary school students. The results of the data from 495 Korean students showed that IL2S was found to be a strong predictor of L2 motivation, but it was not a significant predictor of the grades of the participants.

Similarly, Moskovsky et al. (2016) investigated the correlation between L2MSS and L2 proficiency level of English language learners in Saudi Arabia. The results indicated that the components of L2MSS did not correlate with individuals' L2 achievement, which means there might be no effect of language learning motivations of individuals on their success level. In the study of Almesaar (2024), there was also no relationship between any of the L2MSS subscales and English language performance of Saudi students from respective colleges. That means although students become more motivated when they learn a foreign language for their own future ideals, this does not guarantee them to become successful.

On the contrary to these findings, Li and Zhang (2021) could identify a positive relation between IL2S and foreign language success of Tibetan students. In that study, 198 Tibetan students learning Chinese as a foreign language filled in questionnaires to show their L2MSS profile, which was followed by a language achievement test. Similarly, in Martinovic's (2018) study with English learners in a Croatian university, students with the higher grades were the group with the higher levels of L2 motivation and a stronger IL2S. In another study, Fathi and Hejazi (2024) also identified a direct positive relation between foreign language success and IL2S of Iranian students. As a result, students with their own ideals to learn foreign language became more successful in language learning process. All of these findings show that students from different backgrounds are becoming more successful in language learning in case of having future ideals.

In Chinese context, Zhao et al. (2022) applied questionnaires to 156 university students who were learning EFL. The instruments of the study were including items related to L2MSS, international posture and L2 proficiency of the participants. The analysis of the data revealed that language proficiency of the

students was negatively affected by their OL2S while there was no significant correlation between IL2S and success of the students on the contrary to the other studies. In other words, success in a foreign language may be affected negatively if somebody is learning it only because of his/her future-related worries, while other types of self-motivations may not have any effect.

Specifically related to L2MSS in Turkish context, Öz and Bursalı (2018) conducted a study with 105 university students who were enrolled in an EPP. They completed a questionnaire including items from two different scales about the IL2S, OL2S and the willingness to communicate inside the classroom. The study results showed that IL2S and L2 WTC had statistically significant relationship in contrast to the non-significant relationship between OL2S and L2 WTC. In other words, in Turkish context, learning a foreign language for our own future ideals might be more effective than learning it for future-related worries.

Re-conceptualized L2 Motivational Self System (R-L2MSS)

Re-Conceptualized L2 Motivational Self System (R-L2MSS) is a theory suggested by Peker (2016) to explain the motivational factors behind language learning by restructuring Dörnyei's (2009) L2MSS. In this new conceptualized model, Peker (2016, 2020) suggested that the aspect of prevention in L2MSS includes learners' tendency to smoothen ego concerns instigated both by a fear of exclusion and by social pressure to comply with social norms. As a result, she operationalized OL2S as a prevention tendency due to social norms and introduced a new motivational aspect of the L2MSS (i.e., the Feared L2 Self [FL2S]) representing the L2 learners' avoidance tendency due to fear of exclusion.

The R-L2MSS has four components: the IL2S, the OL2S, the FL2S and the L2 learning experience. Although the act of avoidance was emphasized in relation to

the concept of *OL2S* in Dörnyei's (2005) L2MSS model, some *OL2S* items referred to individuals' tendency to avoid behaviors with possible negative future outcomes due to fear, not social norms and pressure. She, therefore, distinguished the concept of avoidance due to fear (i.e., *FL2S*) from the concept of prevention due to social pressure/norms (i.e., *OL2S*) when *FL2S* emerged as a separate concept which was originally and partially considered as *OL2S* in the L2MSS. In other words, in the new model, the items referring to prevention aspect due to social pressure and/or promotion aspect due to social norms were moved to *OL2S* (i.e., the rest of the items in the *OL2S* in L2MSS). Accordingly, some of the fear-based avoidance items of *OL2S* were moved into *FL2S* construct, and also some of the *IL2S* items referring to social pressure or norms were moved into the *OL2S* construct. As a result, this new model (R-L2MSS) expanded the original model by including a fourth aspect of L2 selves, which is *FL2S* in addition to revising the aspects of *IL2S* and *OL2S*.

Fryer and Roger (2018) investigated short-term and long-term changes in the R-L2MSS of eight Japanese university students longitudinally during their study abroad program. Another aim of this research study was also displaying the effects of these changes on motivation, study goals, and learning behaviors. At the end of the study, three distinct patterns of motivation emerged, all of which had a significant effect on motivation and study behaviors in the short-term and long-term. The first group of students experienced a sense of getting closer to the *IL2S* through their positive L2 experiences as these experiences helped them to identify the discrepancies between their current and desired states in L2 level. In the second group, individuals had self-images with the combination of their ideal self and ought-to self. The last group had feared self with the description of their perceived inability to communicate with the target community in the ways they hoped. This shows types

of second language learning motivations may influence students' learning experiences and self-perceptions.

Similarly, in Toprak-Çelen's (2020) study about the relationship among academic buoyancy, academic resilience, R-L2MSS and students' success, the data was collected from 436 EFL students at a public university in Türkiye. There was no significant relationship identified between the participants' IL2S and their midterm averages. However, there was an indirect effect of IL2S on midterm averages via academic buoyancy and academic resilience in the model, which showed an indirect effect of IL2S on learners' scores indirectly. In addition, in this study, there was no direct relationship between OL2S and midterm averages of the participants while OL2S had a significant relationship with the intended efforts to learn. For FL2S, there was no significant relationship of it with the midterm averages of the participants. This means students learning foreign languages for their own future ideals might be more successful if they are also academically resilient and buoyant.

As fixed minded students have the belief that ability does not change through effort, they might be expected to have more prevention-based motivation for learning English such as OL2S and FL2S, which is learning English in order to avoid the bad consequences of not knowing a foreign language. These students are also more likely to feel less power of resistance against academic setbacks, which means they might have less academic buoyancy and academic resilience, bringing failure in exams. Although there are no direct relations between fixed mindset and academic success, Lou and Noels suggest the entity of some constructs as mediators in this relation (2017). In addition, the individual roles of L2MSS and academic buoyancy in academic success has been widely investigated in EFL while their roles as mediators between fixed mindset and success have not been investigated before. As a result,

this study is important to understand the issues of failure and success in EFL context. There would be an attempt to explain why English students fail in English class by focusing on the factors that can be related such as L2MSS and academic buoyancy.

Similar to the variety in achievement goals of individuals, motivation for learning language may vary in different contexts and the concepts (Ideal self, ought-to self and feared self) also vary for each individual across situations. As a result, the goals of learning language (Achievement Goals) and the motivation behind language learning (R-L2MSS: IL2S, OL2S, FL2S) may be predictive for each other. Although people have achievement goals, the motivational factors determining these goals should be questioned. Specifically for language learning, R-L2MSS may help to explain the factors behind the achievement goals. As a result, in the original model testing the link between mindsets and outcomes of academic buoyancy, academic resilience and academic success of students, the concept of Achievement Goals may be replaced by R-L2MSS. By this way, it may be possible to compare the power of Achievement Goals and R-L2MSS to explain student behaviors.

CHAPTER 3: METHOD

Research Design

This study is conceptualized as a correlational cross-sectional design study which is a form of descriptive research conducted to show an existing relation between variables (Fraenkel et al., 2012). While describing a relation between variables, correlational research also describes the degree of the relation between variables by using a correlation coefficient. For instance, existence of a correlation between two variables refers to a relation between these variables. This relation indicates a positive correlation when there is an association between two variables with high scores. A negative correlation is also possible if high scores on one variable are associated with low scores on the other variable (Fraenkel et al., 2012). According to the research questions of the current study, fixed mindset is the independent variable while academic success of EPP students in EMI universities is the dependent variable. In order to identify the correlations between these variables through the mediators of achievement goals, reconceptualized second language motivational selves, academic resilience and academic buoyancy, this study has been designed as a quantitative study, for which data were collected through an online survey. Student success was operationalized as a bipolar scale referring to whether students completed their current level in EPP successfully or not (i.e., failing and repeating the same level). This study does not include qualitative data as the main focus of the current research is on the relations among variables, but not the subjective views of the participants, and the research questions of the current study require a quantitative study design.

Context

In Türkiye, universities have language preparatory programs for students with the need to learn a foreign language for their university education, mainly English. In these programs, the main aims are to teach the basic rules of the target language, and to improve vocabulary knowledge and language skills of students. These programs may or may not be obligatory for the new students before taking their undergraduate courses (Official Gazette, 2016). In order to be successful, these students should get a satisfactory grade from their exams. In English medium universities, it is necessary for students to complete preparatory programs successfully in order to be a freshman in their departments (Official Gazette, 2016). On the other hand, language education, implementation, and research centres in universities have the aim to teach various languages by organizing language courses, and to introduce Turkish language and culture. These centres are responsible to provide certificates to the course attendants at the end of the periods, and these courses may also be in foreign languages while mostly focusing on teaching Turkish (Official Gazette, 2016).

The current study took place at four of the EMI universities' EPPs. In Türkiye, there are 21 universities with the departments of completely EMI except from some departments which are contextually acceptable to have the first language of the country as medium of instruction such as in law and medical studies. These universities that offer full EMI require one-year obligatory English preparatory school education to new students of these departments. As a result, all of these 21 EMI universities with obligatory EPPs are the population for the current study (ÖSYM, 2019).

Participants

Population consists of all students taking courses in EPPs in four out of 21 EMI universities (with the departments whose instructional language is 100% English) in Türkiye during the fall semester of 2019 - 2020 academic year as other 17 universities did not accept the implementation of the research procedures. Most of the participants (77.56%) were studying in the Central Anatolia region of Türkiye (at either two private or one state university). The rest of the participants (22.44%) were studying at a private university in the Western part of Türkiye. There are several recommendations regarding the sample size. Barclay et al. (1995) suggested the 10-times rule, which requires the sample size to be ten times of the each construct in the hypothesized models. Hair et al. (2022) also stated the number of participants should be more than ten times of the number of constructs. Based on the aforementioned information, as there are 11 constructs in the models, the minimum sample size in this study was required to be ten times of these constructs, which could be provided in that study.

For the main study, the researcher reached out to 343 students from 4 out of 21 sample universities, 57.1% of whom were female and 42.6% of whom were male while 0.3% of the participants did not prefer to specify their gender. Most of the participants (99.7%) were between the ages of 18-24 and 0.3% of them were between 35-44. Only 0.3% of the participants were Bulgarian, and the rest of them were Turkish. All of these participants were treated as one group as they completed the survey in Turkish. In addition, 27.4% of the participants were repeating their current level. According to CEFR (2001) standards, 2.62% of the participants were studying at A1 level, 8.74% of them were at A2 level, 13.70% of them were at B1 level, 27.11% were at B2- level and 47.81% of them were studying at B2 level.

The criteria to participate in this study were listed in the consent form as a) being over 18, and b) being a student in EPPs in one of the 21 EMI universities during the fall semester of 2019 - 2020 academic year. The participants who would like to participate in this study were expected to read and understand these pre-conditions. As passing grades may differ from institution to institution, the grouping criterion is based on whether students pass or fail their current level in preparatory schools. Forced response procedure was implemented in the survey that was provided to the participants. Participants were to respond each item in the survey to view the next items; thus, using this strategy resulted in having no missing data in the complete surveys.

Instrumentation

In order to identify the dependency between the behaviors of fixed minded students, the survey instrument included items to measure various constructs such as achievement goals, R-L2MSS, academic buoyancy, and academic resilience. Therefore, the survey instrument for the study was compiled from the following surveys: a) 6-item Implicit Theories of Intelligence Scale for Children (TIS; Dweck, 2000), b) 12-item Achievement Goal Questionnaire-Revised (ACQR; Elliot & Murayama, 2008), c) 4-item Academic Buoyancy Scale (ABS; Martin & Marsh, 2008), d) 30-item Academic Resilience Scale (ARS-30; Cassidy, 2016) and e) 16-item Re-conceptualized version of Second Language Motivational Self Scale (R-L2MSS; Peker, 2016) as suggested in Table 1. The final survey of the current study (Appendices A and B) consisted of 68 items on a 5-point-Likert Scale and it was conducted online. A five-point Likert-type scale (Strongly disagree, disagree, neither agree nor disagree, agree, strongly agree respectively) was used to provide

Table 1*Survey Constructs and Item Numbers in the Current Study*

Previous Studies	Name of Construct	Item Numbers/Indicators	Item Codes
Cassidy (2016)	Negative affect and emotional response	6, 7, 12, 14, 19, 23, 28	Neg1_R, Neg2_R, Neg3_R, Neg4_R, Neg5_R, Neg6, Neg7_R
	Reflecting and Adaptive Help-seeking	18, 20, 21, 22, 24, 25, 26, 27, 29	Ref1, Ref2, Ref3, Ref4, Ref5, Ref6, Ref7, Ref8, Ref9
	Perseverance	1, 2, 3, 4, 5, 8, 9, 10, 11, 13, 15, 16, 17, 30	Per1_R, Per2, Per3_R, Per4, Per5_R, Per6, Per7, Per8, Per9, Per10, Per11_R, Per12, Per13, Per14
Dweck (2007)	Fixed Mindset	31,32,38,39, 45, 51	FM1, FM2, FM3, FM4, FM5, FM6
Martin and Marsh (2008)	Academic Buoyancy	33, 40, 46, 52	AB1, AB2, AB3, AB4

Previous Studies	Name of Construct	Item Numbers/Indicators	Item Codes
Elliot and Murayama (2008)	Achievement Goals	34, 35, 41, 42, 47, 48, 53, 54, 57, 58, 61, 62	PerfApp1, PerfApp2, PerfApp3, MastAvoid1, MastAvoid2, MastAvoid3, MastApp1, MastApp2, MastApp3, PerfAvoid1, PerfAvoid2, PerfAvoid3
Peker (2016)	IL2S	55, 56, 59, 60, 63	Ideal1, Ideal2, Ideal3, Ideal4, Ideal5
	OL2S	64, 65, 66, 67, 68	Ought1, Ought2, Ought3, Ought4, Ought5
	FL2S	36, 37, 43, 44, 49, 50	Feared1, Feared2, Feared3, Feared4, Feared5, Feared6

consistency through the whole survey in addition to the advantage of collecting neutral responses from the participants (Nadler et al., 2015).

In order to measure Fixed Mindset, 6-item Implicit Theories of Intelligence Scale (TIS; Dweck, 2000) was used with 6-point Likert scale (Cronbach's $\alpha = .78$, Test-retest $r = .77$ in Blackwell et al. 2007). TIS by Dweck (2000) was also used by a group of researchers (Smiley et al., 2016) by using the same Likert scale (1= "strongly disagree" to 6= "strongly agree") and Cronbach's alpha for the sample of that study was .95.

In order to measure the achievement goals of participants and their goal types, 12-item Achievement Goal Questionnaire-Revised (ACQR) was designed and applied by Elliot and Murayama (2008) by using 5-point Likert scale (1 as strongly disagree and 5 as strongly agree). In that study, the Cronbach's alpha internal consistency reliability coefficients were .84 for mastery-approach goals, .88 for mastery-avoidance goals, .92 for performance-approach goals and .94 for performance-avoidance goals. These loadings meet the criteria to exceed .70 thresholds.

The instrument used for measuring buoyancy was 4-item Academic Buoyancy Scale (ABS) developed by Martin and Marsh (2008). The original instrument was 6-point Likert scale from strongly disagree (1) to strongly agree (6). The internal consistency reliability of that instrument was suggested through test-retest statistics (Time 1 Cronbach's $\alpha = .80$, Time 2 Cronbach's $\alpha = .82$, Test-retest $r = .67$) (Martin & Marsh, 2008). The scale was presented as having factor structure which is reliable, normally distributed and significant in terms of predicting academic outcomes among students (Martin & Marsh, 2006).

Cassidy (2016) created Academic Resilience Scale (ARS-30) including 30 items with 5-point Likert scale from likely (1) to unlikely (5). The item-scale analysis showed there was high internal consistency reliability (Cronbach's $\alpha = .90$) for the all items except two of them (Per1_R and Neg4_R). They did not exclude these items, as they would not change the overall Cronbach's alpha level. Through item clustering, there appeared three distinct factors which were (1) perseverance, (2) reflecting and adaptive help-seeking and (3) negative affect and emotional response. Cronbach's alpha was also acceptable for each factor: perseverance (.83); reflecting and adaptive help-seeking (.78), and negative affect and emotional response (.80). Item total correlations ranged between .41 and .63 for factor 1, between .37 and .65 for factor 2, and between .45 and .65 for factor 3. It was suggested that deleting item 1 (Per1_R) would increase the reliability of factors 1 and 2.

Related to language learning motivation, L2MSS was used in a study by Roshandel et al. (2018) through Persian validated version (Papi, 2010) of that scale and Cronbach's alpha values were listed for IL2S as .79 and for ought to-self as .75. In Islam et al.'s study (2013), Cronbach's alpha values were for .72, .73, and .84 for IL2S, OL2S and FL2S, respectively. The 16-item Re-conceptualized version of Second Language Motivational Self Scale (R-L2MSS; Peker, 2020) had the composite reliability values of .88, .84 and .83, and Cronbach's alpha values of .83, .76 and .70 for FL2S, IL2S and OL2S, respectively.

Translation Process

As the sample universities were EMI and there were a number of students with diverse backgrounds from different countries (i.e., Pakistan, India, and Nigeria) besides Turkish students, some of the students were English speakers or using English as a medium of communication. In addition, some students had low level of

English which might have not been enough to understand the items of the survey. Because of these needs of participants, the survey was designed in both English and Turkish. The original English versions of the items were revised, and the translation of the items into Turkish was done by the researcher. A colleague of the researcher, who is an English teacher in a college, checked the translated versions as well as back-translations. The back translations were also checked by a colleague with an MA degree in Teaching English as a Foreign Language.

Piloting of the Study

Before the main study, in order to test the reliability and validity of the newly developed survey, the researcher reached out to 164 students for the pilot study in the fall semester of 2019-2020 academic year, and the survey was completed by 124 participants from the sample group. The response rate of the study was 81%. Other 40 students either did not fill in the survey at all after reading the consent form or they did not provide response to most of the items. Descriptive statistics was used only to learn more about participants and this step was completed in SPSS. Then, for the rest of the data analysis, SmartPLS was used. As a result, some of the items (e.g. Per1, Per3) were decided to be reverse coded and necessary revisions were provided in the statements of the items in terms of meaning clarification to increase the quality of the final form of the survey. SmartPLS analysis results on the pilot study demonstrated that the final form of the survey did not have problems in terms of the reliability and validity.

Method of data collection

The combined survey instrument was conducted as an online survey through Qualtrics in 2019-2020 Spring semester. The link of the survey was sent to the target group through the university's email system. The participants were informed about

the types of questions (e.g. Likert-scale survey, demographic questions, etc.) and their names would not be used in the survey. The students were informed that their student numbers would be used to match their grades and their motivations, goals and academic resilience in learning English. However, all information including their ID numbers was kept strictly confidential and would be used just for research purposes, including conference presentations and publications. As there would be no right or wrong answer in the survey, the participants were informed that the items that would be asked in this survey would simply be about their opinions, and participants would not be evaluated on anything. They were also informed that they would have the chance to refuse to participate in the survey or withdraw from the study at any time and that would not create any problems regarding their relationships with their institution. The students were grouped as successful or unsuccessful based on whether they could pass or fail the end-of-course exams in EPPs.

Methods of data analysis

Before starting data analysis, some of the items (Per1, Per3, Per5, Per11, Neg1, Neg2, Neg3, Neg4, Neg5, Neg6, Neg7, FM3, FM5, FM6) were reverse coded to provide consistency. Participants' identified their success in accordance with whether they completed their current courses successfully or not (i.e., Fail/Pass) was coded as 1 and 2, respectively. The response rate for the survey was 77.15%. It is seen on Table 2 that except for ten items (Per1_R, Per3_R, Per10, Ref2, Ref8, MastApp1, MastApp3, Ideal1, Ideal2, Ought4), data was normally distributed based on Skewness-Kurtosis values.

Table 2*Survey Constructs and Descriptive Statistics*

Constructs	Items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Perseverance	Per1_R	4.35	0.83	-1.72	3.91
	Per2	4.43	0.63	-0.84	0.74
	Per3_R	1.65	0.75	1.35	3.07
	Per4	3.66	0.94	-0.44	-0.19
	Per5_R	1.70	0.82	1.15	1.21
	Per6	3.38	1.04	-0.74	-0.18
	Per7	3.99	0.82	-0.73	0.60
	Per8	4.00	0.76	-0.75	1.14
	Per9	4.16	0.78	-0.73	0.22
	Per10	4.13	0.67	-0.81	2.05
	Per11_R	1.84	0.86	0.76	-0.22
	Per12	4.29	0.58	-0.12	-0.54
	Per13	4.12	0.92	-1.02	0.83
	Per14	3.74	1.28	-0.80	-0.51

Constructs	Items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Negative Affect and emotional response	Neg1_R	2.81	1.14	-0.32	-0.82
	Neg2_R	3.51	1.13	-0.34	-0.83
	Neg3_R	2.99	1.14	0.16	-0.82
	Neg4_R	3.02	1.10	-0.04	-0.87
	Neg5_R	4.19	0.85	-0.96	0.56
	Neg6_R	3.43	0.96	0.44	0.11
	Neg7_R	4.05	0.91	-0.79	0.13
Reflecting and Adaptive Help-Seeking	Ref1	4.14	0.94	-1.15	0.93
	Ref2	4.13	0.66	-0.81	2.18
	Ref3	4.11	0.85	-1.01	1.15
	Ref4	4.06	0.84	-1.04	1.51
	Ref5	3.92	0.83	-0.67	0.32
	Ref6	4.20	0.67	-0.78	1.40
	Ref7	3.37	1.27	-0.33	-1.01
	Ref8	4.20	0.75	-1.12	2.43
	Ref9	2.89	1.24	0.06	-1.13
Fixed Mindset	FM1	2.12	1.07	0.86	-0.07
	FM2	2.33	1.09	0.61	-0.54

Constructs	Items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Academic Buoyancy	FM3	3.42	1.00	-0.28	-0.43
	FM4	2.60	1.03	0.28	-0.77
	FM5	3.41	1.05	-0.35	-0.54
	FM6	3.92	0.91	-0.88	0.68
	AB1	3.66	0.94	-0.55	-0.15
	AB2	3.28	1.08	-0.21	-0.46
	AB3	3.55	1.09	-0.65	-0.24
	AB4	3.38	1.08	-0.27	-0.72
Achievement Goal	PerfApp1	3.24	1.22	-0.23	-1.09
	PerfApp2	3.34	1.21	-0.35	-0.97
	PerfApp3	2.81	1.25	0.25	-1.11
	MastAvoid1	3.17	1.27	-0.24	-1.15
	MastAvoid2	3.51	1.20	-0.64	-0.69
	MastAvoid3	3.17	1.19	-0.13	-1.09
	MastApp1	4.48	0.67	-1.33	2.16
	MastApp2	4.53	0.58	-0.99	0.96
	MastApp3	4.53	0.64	-1.59	3.87
	PerfAvoid1	3.33	1.16	-0.44	-0.83

Constructs	Items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
IL2S	PerfAvoid2	3.27	1.13	-0.28	-0.96
	PerfAvoid3	2.29	1.02	0.71	-0.08
	Ideal1	4.35	0.95	-1.60	2.17
	Ideal2	4.42	0.75	-1.54	3.25
	Ideal3	4.34	0.74	-1.17	1.97
	Ideal4	3.94	1.01	-0.84	0.21
OL2S	Ideal5	4.23	0.83	-1.26	1.94
	Ought1	2.82	1.34	0.27	-1.20
	Ought2	3.01	1.34	0.01	-1.29
	Ought3	3.09	1.32	-0.14	-1.20
	Ought4	4.41	0.93	-1.86	3.21
FL2S	Ought5	3.41	1.26	-0.44	-0.94
	Feared1	3.06	1.25	-0.14	-1.15
	Feared2	2.29	1.28	0.74	-0.63
	Feared3	3.13	1.35	-0.08	-1.34
	Feared4	2.94	1.32	0.01	-1.28
	Feared5	2.89	1.38	0.06	-1.34
	Feared6	2.53	1.23	0.57	-0.75

Note. FM=Fixed Mindset; Per=Perseverance; Neg=Negative affect and emotional response; Ref=Reflecting and Adaptive Help-seeking as sub-constructs of Academic Resilience; Ideal=IL2S; Ought=OL2S; Feared=FL2S as sub-constructs of R-L2MSS; MastApp=Mastery-Approach Goals, MastAvoid=Mastery-Avoidance Goals, PerfApp=Performance-Approach Goals, PerfAvoid=Performance-Avoidance Goals as sub-constructs of Achievement Goals; AB =Academic Buoyancy.

The survey items were analysed through a statistical program (Structural Equation Modeling; SEM) which helps to investigate the relationship(s) between different variables by combining the features of factor analysis and regression (Tabachnick & Fidell, 2013). It allows identifying the relationships among the variables. SEM also allows retesting the data until finding the maximum significant results by eliminating the non-significant factors, which will be necessary for the newly suggested theory model in this study. One type of SEM is Partial Least Square SEM (PLS-SEM) which is used to develop new theories in exploratory research while another type, Co-variance Based SEM (CB-SEM) works for confirmation of the existent theories (Hair et al., 2016). As the new model of the theory was applied for the first time in this study, PLS-SEM was the most appropriate method for data analysis. The characteristics of PLS-SEM are presented in Table 3. Most importantly, PLS-SEM works with nonparametric data and the items with normality problem also did not have good outer loadings, and they were removed from the model as explained in the assessment of the measurement model.

Table 3*PLS-SEM Characteristics (Adapted from Peker, 2016)*

Aspect	Advantages	Disadvantages
Data	• Performs effectively with small sample sizes while maintaining high statistical power • Handles non-parametric data efficiently and manages missing data • Capable of working with metric, ordinal data, and binary-coded variables	• Some limitations with categorical data
Model	• Functions well with both single and multi-item constructs • Supports both formative and reflective measurement models • Capable of implementing complex models with numerous structural relations • Reduces bias by using a larger number of indicators	• Not applicable if there are causal loops in the structural model
Algorithm	• Minimizes unexplained variance and maximizes R^2 values • Estimates constructs as linear combinations of their indicators and predicts relations between them • Can serve as an input for further analyses • Data inadequacies do not affect the algorithm's performance • Provides consistency and maintains high statistical power	• Underestimation of structural model relationships usually • Overestimation of measurement model relationships generally

Aspect	Advantages	Disadvantages
Model Evaluation	• Allows for reliability and validity assessments in reflective measurement models • Assesses validity, significance, relevance of indicator weights, and checks for collinearity in formative measurement models • Calculates collinearity, significance of path coefficients, coefficient of determination, effect sizes, and predictive relevance • Conducts impact and performance matrix analysis • Hierarchical/second order component models with moderating and mediating effects • Supports multi-group analysis and addresses unobserved heterogeneity. • Ensures measurement invariance in composite models.	• Limited use for confirming theories as it does not have an established global goodness-of-fit criterion

As suggested in Table 3, in terms of data, PLS-SEM has the chance to work with small sample size and non-parametric data. It can also handle with missing values easily. In terms of model properties, PLS-SEM can handle with both single and multi-item constructs in complex models. In addition, PLS-SEM allows predicting relationships between constructs with high statistical power and consistency. By using PLS-SEM, it is also possible to do multi-group analysis by assessing reliability and validity.

There are, however, some limitations of PLS-SEM, one of which is the problem to apply it for categorical data. It is also not applicable for the models with causal loops. While PLS-SEM may underestimate the structural model relationship, it may also overestimate the measurement model relationship. Lastly, as there is not a global goodness-of-fit measure of PLS-SEM, it is limitedly used in theory testing and confirmation.

The characteristics of PLS-SEM (Table 3) make it the most appropriate statistical analysis method for this study and it is exploratory. The main purpose of this study was to expand the existing theory through additional variables; therefore, PLS-SEM may become advantageous. In addition, PLS-SEM uses the available data to complete path analysis by minimizing the error terms or the residuals of the target constructs, and it estimates the coefficients by maximizing the endogenous R^2 values. As a result, the collected data were analyzed by using PLS-SEM in the current study.

In Figure 2 and 3, PLS-SEM models are shown and the models include constructs or latent variables (i.e., Fixed Mindset, Academic Buoyancy, Academic Resilience, etc.). The constructs are not directly measured while the indicators are measured directly. In PLS-SEM, rectangles represent the survey items or indicators, and there are arrows pointing to them from the related constructs. In addition, Table

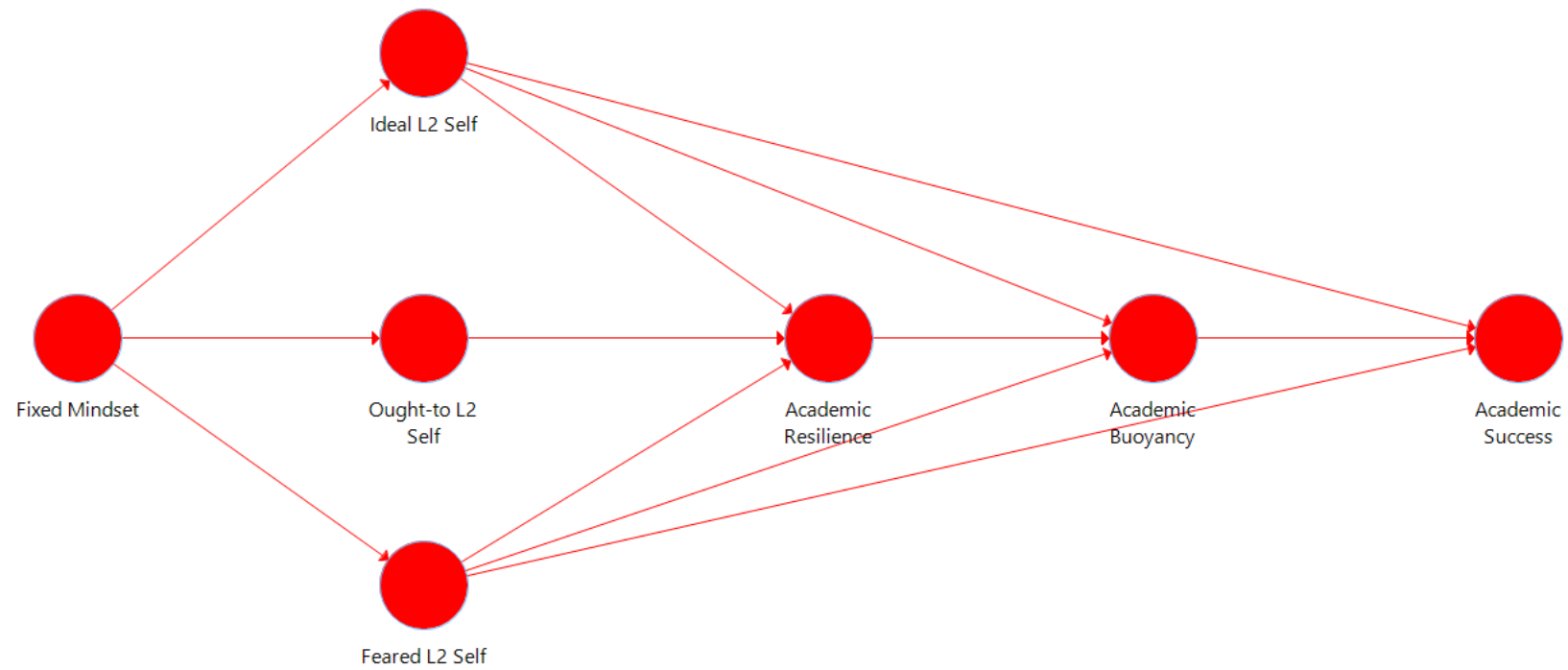
Figure 2

PLS-SEM Algorithm Calculation of the Preliminary Data Analysis of Hypothesized Model 1: Achievement Goals as Mediators



Figure 3

PLS-SEM Algorithm Calculation of the Preliminary Data Analysis of Hypothesized Model 2: The R-L2MSS as Mediator



1 shows which indicators refer to which constructs. The predictive relationship can be interpreted as a causal relationship if there is a strong theoretical support (Hair et al., 2022). Therefore, the model is considered as a reflective measurement model.

In reflective measurement models including the one used in this study, latent variables are labelled as exogenous latent variables if they serve as independent variables. On the other hand, latent variables are labelled as endogenous latent variables if they serve as dependent variables (Hair et al., 2016). While the exogenous latent variables serve as independent variables and they do not have error terms, the endogenous latent variables serve as dependent variables and they have error terms. The error terms can be obtained from the report created by SmartPLS software.

Partial Least Square Structural Equation Model (PLS-SEM) Estimation

This section describes PLS-SEM estimation of hypothesized relationships in the model. Model estimation provides empirical aspect of the relationships between the indicators and the constructs in the measurement model, as well as between the constructs in the structural model. In addition, model estimation provides information on theoretically established measurement and structural models through the sample data, and it shows how well the theory fits the data (Hair et al., 2016).

PLS-SEM maximizes the explained variance of the endogenous latent variables, and the metrics in the path model indicate the predictive capabilities of the model. This is done through the evaluation of the quality criteria of the measurement and structural models. The measurement model includes the evaluation of the reliability, convergent validity, and discriminant validity while the structural model includes evaluation metrics, including R^2 (explained variance), f^2 (effect size), Q^2 (predictive relevance) and the size and statistical significance of the structural path

coefficients (Hair et al., 2016). Therefore, assessment of the measurement model is followed by as assessment of the structural model in the following section.

Assessment of the Measurement Model

PLS-SEM analysis was conducted in SmartPLS (v.3. 2. 9) using the path weighting. The initial algorithm included 52 iterations. Figure 4 and Figure 5 are respectively the structural models overlaid with estimation parameters results from the PLS-SEM algorithm's output.



Figure 4

Structural Model Overlaid with Estimation Results from the PLS-SEM Algorithm of Model 1: Achievement Goals as Mediators

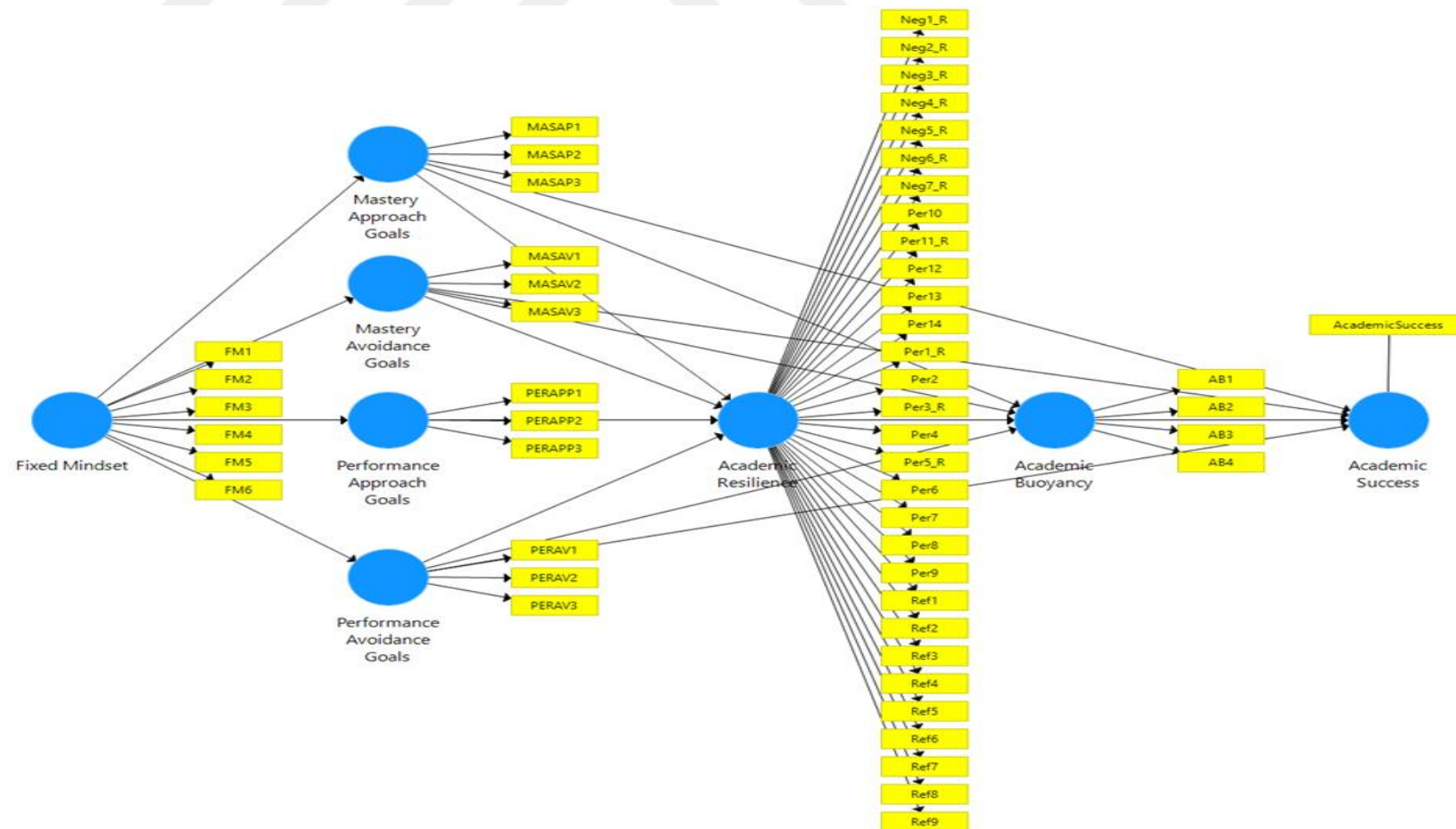
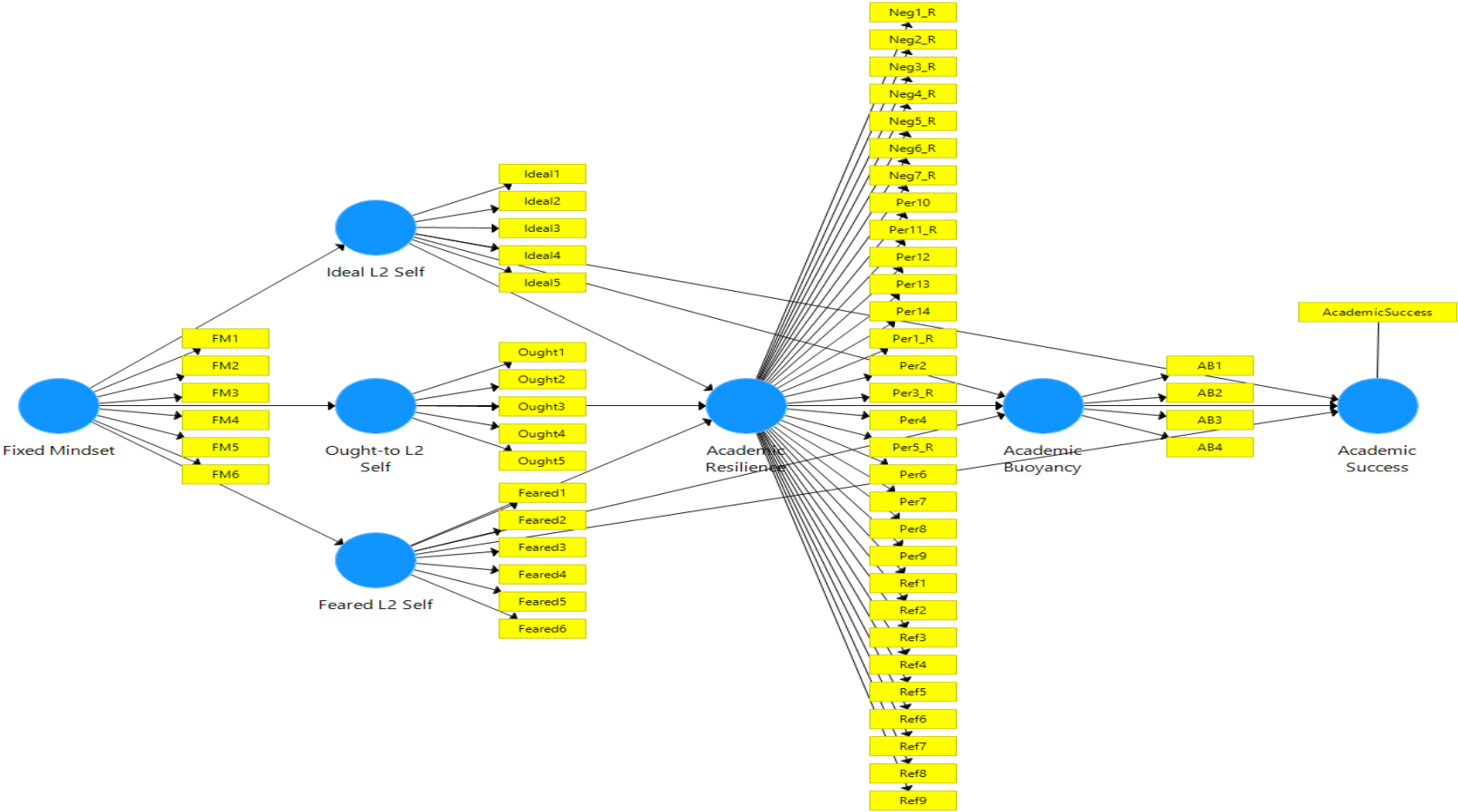


Figure 5

Structural Model Overlaid with Estimation Results from the PLS-SEM Algorithm of Model 2: Achievement Goals as Mediators



Assessment of the measurement model starts with analyzing a variety of validity and reliability values of indicators and constructs in the hypothesized model. In validity and reliability analysis step, it is necessary to examine the indicators carefully and removing the weaker indicators based on the criterion of outer loading. Hair et al. (2016) suggests that indicators with outer loading below .40 should always be removed from the scale of the associated construct. It is necessary to analyse the impact of the indicator deletion on Average Variance Extracted (AVE) if the outer loading is between .40 and .70. If AVE is satisfied, the items with the factor loadings between .60 and .70 can be retained (Hair et al., 2022).

Based on the criteria suggested by Hair et al. (2022), if the outer loading of an indicator is between .40 and .70 and if this indicator's deletion increases measures above the threshold value (.70), the reflective indicator cannot be retained. On the other hand, if deletion does not increase the measures above threshold, the reflective indicator should be retained (Hair et al., 2022). Yana et al. (2015) also demonstrated that in an exploratory research, loading factor 0.6-0.7 is still acceptable. Similarly, using cross loadings with a threshold value of .70 or slightly lower for exploratory studies was also suggested by Oredo and Njihia (2017).

As a result, removing indicators one by one starting from the item with lowest outer loadings factor continues until all indicators are above .60 while checking the measures at the same time (Hair et al., 2016). Under these considerations, an assessment of the measurement model required a couple of parameter verifications, including convergent validity, composite reliability, discriminant validity, and outer loading relevance test.

Latent Variable Correlations

In order to find out if the correlations fit in the theory, a latent variable (construct) correlations table is examined at the beginning. By doing that, the signs of the correlation of each construct were cross-checked with the other constructs to identify the variables that may have possible problematic items or indicators according to the literature. The items of the constructs with problems are checked again in order to find problems if there are any.

Convergent Validity (AVE)

Average Variance Extracted (AVE) is one of the quality criteria for evaluating the measurement model. Hair et al. (2022) defined AVE criterion as the “grand mean value of the squared loadings of the indicators associated with the construct” (p.103). AVE value of a construct is the communality of that construct. Hair et al. (2022) also argued that an AVE value of .50 or higher shows that the construct explains more than half of the variance of the indicators. On the other hand, an AVE value that is less than .50 shows that there is more error in the items than the variance explained by the construct.

Composite Reliability

Internal consistency reliability is the next step of evaluating the measurement model. Cronbach’s alpha helps to estimate the reliability based on the inter-correlations of the observed indicator variables with the assumption that all indicators have equal outer loadings (Hair et al., 2022). As a result, in PLS-SEM, indicators are examined according to their individual reliability and this process provides more reliable results to check internal consistency reliability. Moreover, it is possible for Cronbach’s alpha to underestimate the internal consistency reliability because it is sensitive to the number of items in scales (Hair et al., 2022). As a result

of these limitations, composite reliability was examined for internal consistency reliability.

Composite reliability is a criterion for internal consistency reliability, and it may have the score between 0 and 1. The higher values show higher levels of reliability, and it may be interpreted in a similar way to Cronbach's alpha interpretation. In exploratory research, composite reliability values of .60 to .70 are suggested by Hair et al. (2022). Based on these composite reliability threshold values, there is no construct with a lack of internal consistency reliability.

Discriminant Validity

Evaluation of discriminant validity is the next stage while assessing the measurement model. Discriminant validity is related to how much a construct is distinct from other constructs in the model. It is possible to examine discriminant validity in three ways; cross loadings of indicators, Fornell-Larcker criterion and Heterotrait-Monotrait Ratio (HTMT) (Hair et al., 2022).

When the cross loadings were examined after providing composite reliability and validity, it was found that each indicator of the constructs had the highest value for the loading with its corresponding construct (Table E.6).

In Fornell-Larcker criterion, the square root of the AVE values is compared with the latent variable correlations, and "the square root of each construct's AVE should be greater than its highest correlation with any other constructs" (Hair et al., 2022, p. 105). That means the Fornell-Larcker criterion shows whether a construct sharing more variance with its associated indicators compared to the other constructs (Hair et al., 2022). In the initial Fornell-Larcker criterion analysis after checking cross loadings, discriminant validity was provided for all the constructs (Table E.7).

Assessment of Structural Model

In the previous section, the measurement model met all the quality requirements for establishing the integrity of the scales in the constructs. As a result, in this section, the analysis continues with the assessment of the structural model.

The assessment includes the following stages (Hair et al., 2016):

1. Assessing Collinearity (VIF) through the evaluation of predictor variables in the model
2. Determining the significance of the standardized path coefficients obtained from the PLS-SEM bootstrapping procedure, indicating the relationships between constructs in the model
3. Evaluating the coefficients of determination (R^2)
4. Evaluating the effect size (f^2)

Collinearity Assessment

In structural model assessment, collinearity (VIF) values were assessed at the beginning. The VIF values of all combinations of endogenous and exogenous constructs are shown in Table E. 10. Standard value for collinearity assessment should be between .20 and 5 (Hair et al., 2016).

Structural Model Path Coefficients

In order to assess the path coefficients, PLS-SEM uses the bootstrapping technique to calculate the t statistics. For instance, in the initial bootstrapping analysis of Model 1, there were 10 non-significant and 12 significant path coefficients (Table E. 12). However, as this study was an exploratory research, non-significant paths were removed one by one starting from the item with the lowest outer loading, and path coefficients were assessed after each non-significant path removal in order to find the significant ones. In the final model, 2500 samples were

used for bootstrapping, and there were 12 significant path coefficients (See Appendix E.13) with acceptable values for reliability and validity.

Coefficient of Determination (R^2 Value)

Coefficient of determination is the most commonly used measure to evaluate the structural model's predictive power. Hair et al. (2016) stated, "the coefficient represents the amount of variance in the endogenous constructs explained by all of the exogenous constructs linked to it" (p. 198). Thus, coefficient represents the effects of the exogenous or prior constructs on the endogenous constructs. The coefficient of determination (R^2 Value) is mostly interpreted as follows: .75 and above as substantial, .50 as moderate, and .25 as weak (Hair et al., 2016).

Effect Size (f^2 Value)

Effect size or removal effect (f^2) refers to the impact of an exogenous or prior variable on an endogenous variable's R^2 value. Effect size is related to the change in R^2 and .02, .15, and .35 represent small, medium and large effect (Hair et al., 2016).

CHAPTER 4: RESULTS

Introduction

This study aims to investigate and compare the significance of the motivational factors that affect students' academic success in EMI universities EPPs. In addition, I examined whether there is a relationship between students' dispositional characteristics such as their fixed mindset about their ability to learn English and situational motivational characteristics such as students' achievement goals and L2 selves in EPPs. Therefore, two analysis models have been designed. In Model 1, the relation of fixed mindset to academic success through the paths of achievement goals, academic resilience, and academic buoyancy was investigated. In Model 2, association between fixed mindset and academic success via the mediators of R-L2MSS, academic resilience, and academic buoyancy was examined. The results of these two models are presented in this chapter.

Results for Model 1: The Model with Achievement Goals as Mediators

Assessment of the Measurement Model

Outer Loadings

According to the criteria related to the outer loadings, in Model 1, initially, there were 10 indicators lower than 0.40 (Neg1_R, Per1_R, Per3_R, Per5_R, Per6, Per11_R, Per14, Ref3, Ref7, Ref9), and there were 12 indicators with the outer loadings between .40 and .60 (Neg2_R, Neg4_R, Neg5_R, PerfAvoid2, PerfAvoid2, Per4, Per13, Ref1, Ref2, Ref5, Ref6, Ref8) (Table 4).

Table 4*Removed Items with Low Loadings in Model 1*

Removed Item	Outer Loading Before Removing
Per6	-.48
Per3_R	-.45
Per5_R	-.32
Per11_R	-.31
Ref7	-.12
Per14	.13
Per1_R	.21
Ref9	.23
Neg1_R	.28
Ref2	.43
Ref3	.35
Per2	.42
Ref1	.46
Ref8	.49
Ref5	.49
Per4	.56
Ref6	.58
Neg4_R	.59
PerfAvoid2	.59
PerfAvoid3	.58
Per13	.59
Neg5_R	.59

Note. Per=Perseverance; Neg=Negative affect and emotional response;

Ref=Reflecting and Adaptive Help-seeking as sub-constructs of Academic Resilience;

PerfAvoid=Performance-Avoidance Goals as sub-construct of Achievement Goals.

Based on the recommendations related to outer loadings (Hair et al., 2016), the first indicator removed from the scale was Per6 because it had an outer loading of -0.48, and other indicators were removed according to the outer loading criterion.

After the initial PLS algorithm calculation, measurement model and outer loadings were analyzed 21 more times to see if there were any improvements in the indicators and to decide whether to keep some indicators or remove them. In the initial analysis, some indicators (i.e. Neg1_R, Per1_R, Per4, Per13, Ref1 etc.) were found to have low loadings (Table 4). While some of the indicators improved after removing other indicators, some others kept being low loaded and they were also removed later. Overall, 22 indicators in total were removed from the scale because of their low outer loadings. Finally, there were 5 items with the outer loading higher than 0.60, and 22 items were with the loadings higher than 0.70. Content validity of all the items was checked through pilot testing in addition to expert reviews in order to ensure that they align with the content domain of each construct.

Latent Variable Correlations

In order to find out if the correlations fit in the theory, a latent variable (construct) correlations table (See Appendix E. 2) was examined at the beginning. For example, in Model 1, according to the literature academic success should correlate with mastery avoidance goals, while correlating with performance approach goals positively. Accordingly, the correlation table showed that there is a negative correlation between mastery avoidance and academic success (-.24), while there is a positive correlation between performance approach goals and academic success (.12).

Composite Reliability

Based on these composite reliability threshold values, in Model 1, there was no construct with a lack of internal consistency reliability (Table 5).

Table 5*Initial Summary of the Quality Criteria*

Construct	Cronbach's Alpha	ρ_A	Composite Reliability	Average Variance Extracted (AVE)
AB	.83	.84	.89	.66
AR	.87	.88	.90	.44
AS	.00	1.00	1.00	1.00
FM	.91	.92	.93	.69
MAPG	.73	.75	.85	.66
MAVG	.80	.83	.88	.71
PAPG	.90	.94	.94	.83
PAVG	.00	1.00	1.00	1.00

Note. FM=Fixed Mindset; MAPG=Mastery Approach Goals, MAVG=Mastery Avoidance Goals, PAPG=Performance Approach Goals, PAVG=Performance Avoidance Goals as sub-constructs of Avoidance Goals; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success.

Discriminant Validity

When the cross loadings were examined in Model 1, it was found all of the indicators had the highest value for the loading with its corresponding construct (See Appendix E.6). Overall, all of the constructs was providing necessary values for Fornell-Larcker and HTMT criteria analysis to have discriminant validity (See Appendix E.7 and Appendix E.8).

Summary of Measurement Model Evaluation

Figure 6 shows Model 1 after 22 indicators were removed from the measurement model because of their low loadings. Table 6 shows the resulting model quality criteria after running PLS-SEM estimation on the updated model. As it is seen in Table 6, there have been improvements in the items such as Neg7_R (.67),

Per7 (.75), Ref4 (.78). These improvements ensured composite reliability (> 0.60) and convergent validity (> 0.50) of all constructs in Model 1.

Table 6

Summary of the Reflective Measurement Model Results of Model 1

Construct	Indicators	Outer Loadings >.60	Composite Reliability .60 - .90	AVE >.50	Discriminant Validity	
					Cross Loadings	Fornell Larcker
AB	AB1	.80	.89	.66	Yes	Yes
	AB2	.78				
	AB3	.83				
	AB4	.84				
AR	Neg6_R	.68	.88	.51	Yes	Yes
	Neg7_R	.67				
	Per7	.75				
	Per9	.71				
	Per10	.69				
	Per12	.71				
FM	Ref4	.78	.93	.69	Yes	Yes
	FM1	.83				
	FM2	.89				
	FM3	.80				
	FM4	.86				
	FM5	.88				
MAPG	FM6	.70				
	MasAp1	.88	.85	.66	Yes	Yes
	MasAp2	.86				
MAVG	MasAp3	.68				
	MasAv1	.80	.88	.71	Yes	Yes
	MasAv2	.84				
PAPG	MasAv3	.89				
	PerAp1	.92	.94	.83	Yes	Yes
	PerAp2	.91				

Construct	Indicators	Outer	Composite	AVE >.50	Discriminant Validity	
		Loadings	Reliability		Cross	Fornell
		>.60	.60 - .90		Loadings	Larcker
	PerAp3	.91				
PAVG	PerAv1	1.00	1.00	1.00	Yes	Yes

Note. FM=Fixed Mindset; MAPG=Mastery Approach Goals, MAVG=Mastery Avoidance Goals, PAPG=Performance Approach Goals, PAVG=Performance Avoidance Goals as sub-constructs of Achievement Goals; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success.

Overall, Table 6 shows that all constructs in Model 1 could meet the quality criteria including convergent validity, composite reliability, outer loadings, and discriminant validity. After that, it is possible to move into the next phase of the PLS-SEM analysis (Hair et al., 2016). The next step is evaluating the structural model and it shows the underlying structural concepts of the path model. In the structural model analysis stage, the model's capability to predict one or more constructs is assessed.

Assessment of Structural Model

As explained in the previous sections, the measurement model met all the quality requirements for establishing the integrity of the scales in the constructs. In this section, the assessment of the structural model of Model 1 will be explained in detail.

Collinearity Assessment

In structural model assessment, collinearity (VIF) values were assessed at the beginning. The VIF values of all combinations of endogenous and exogenous constructs are shown in Appendix E.10. All the combinations were between these values and this information shows that there is no multicollinearity between the constructs and their items.

Structural Model Path Coefficients

In the initial bootstrapping analysis, there were 10 non-significant and 12 significant path coefficients (See Appendix E.12). However, as this study was an exploratory research, non-significant paths were removed one by one, and path coefficients were assessed after each non-significant path removal in order to find the significant ones. In the final model, 2500 samples were used for bootstrapping, and there were 12 significant path coefficients. Appendix E.13 is a summary of the structural model analysis determined through the bootstrapping process with 2500 samples.

Coefficient of Determination (R^2 Value)

Based on the criteria for the coefficient of determination, R^2 values of academic buoyancy (.51) have a moderate effect in the final structural model. On the other hand, academic resilience (.24), academic success (.07), mastery avoidance goals (.06) and performance avoidance goals (.02) were lower than 0.25 which means they were weak in the final structural model (Table 7).

Table 7

Bootstrapping Coefficient Values

Construct	R^2
AB	.51
AR	.24
MAVG	.06
PAVG	.02
AS	.07

Note. MAVG=Mastery Avoidance Goals; PAVG=Performance Avoidance Goals as sub-constructs of Achievement Goals; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success.

Effect Size (f^2 Value)

According to the criteria for effect size (f^2), academic resilience has a large effect on academic buoyancy ($f^2 = .71$). The rest of the effect sizes were either small or there was no effect size (see Table 8).

Table 8

Final Bootstrapping Effect Size Values for Model 1

Construct	AB	AR	FM	MAPG	MAVG	PAPG	PAVG	AS
AB								
AR	.71							
FM		.09			.07		.02	
MAPG		.06						
MAVG	.04	.05	.06					
PAPG		.02	.01					
PAVG	.02	.01						
AS								

Note. FM=Fixed Mindset; MAPG=Mastery Approach Goals, MAVG=Mastery Avoidance Goals, PAPG=Performance Approach Goals, PAVG=Performance Avoidance Goals as sub-constructs of Achievement Goals; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success.

Final PLS-SEM paths for the model with achievement goals as mediators after removing low outer loaded indicators and after the final bootstrapping are as follows (Figure 6 and 7).

Figure 6

PLS-SEM Path Model 1 (Achievement Goals as Mediators) After Removing Low Outer Loaded Indicators

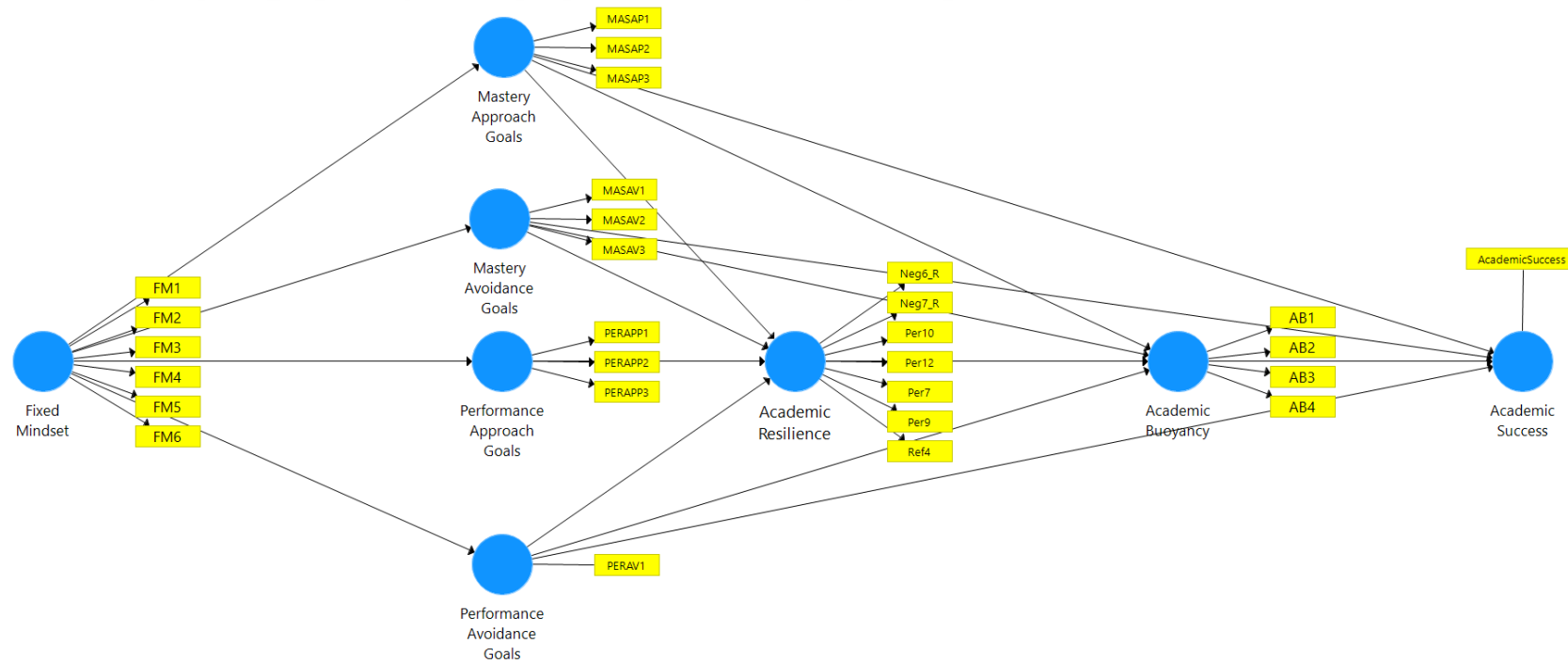
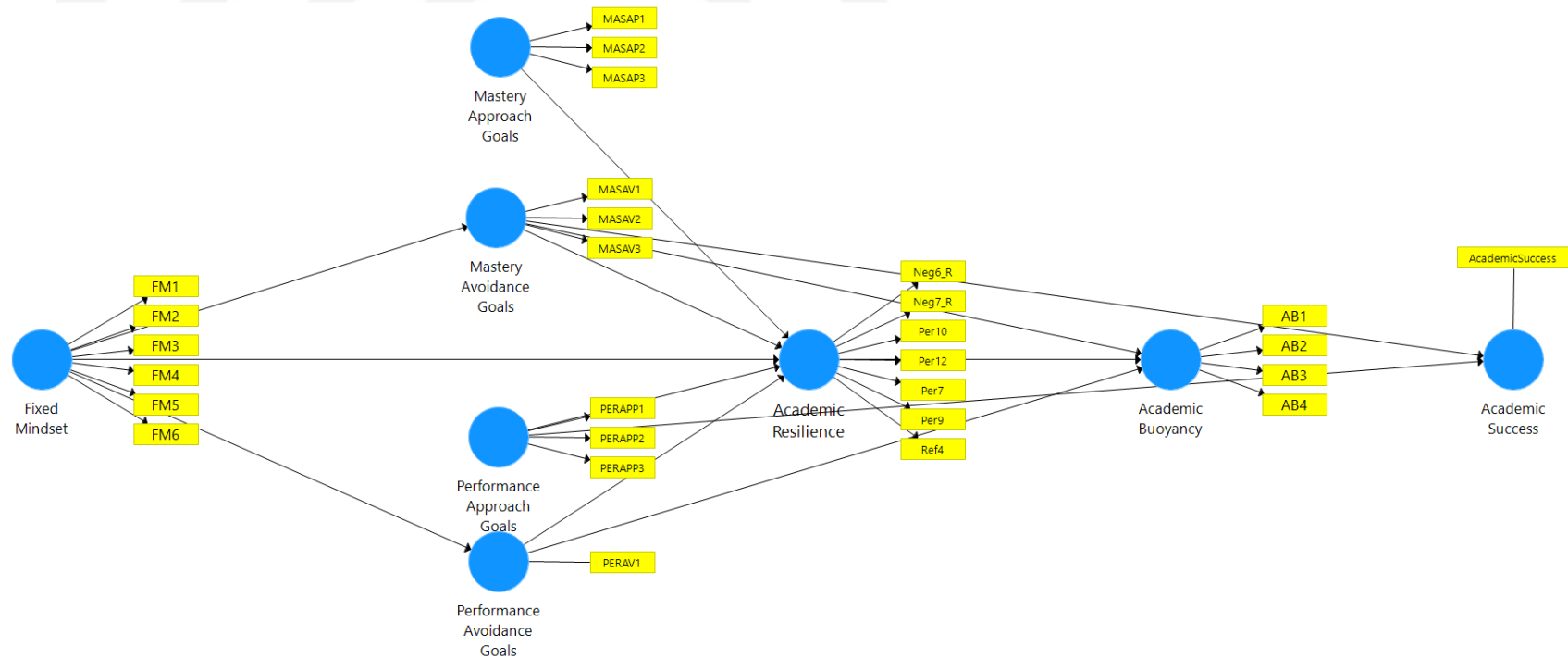


Figure 7

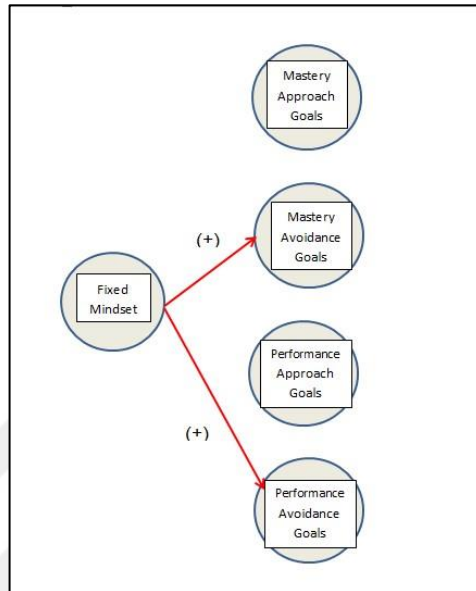
PLS-SEM Path Model 1 (Achievement Goals as Mediators) After Final Bootstrapping



What is the relation between Fixed Mindset and Achievement Goals?

Figure 8

Isolated Model of Fixed Mindset and Achievement Goals

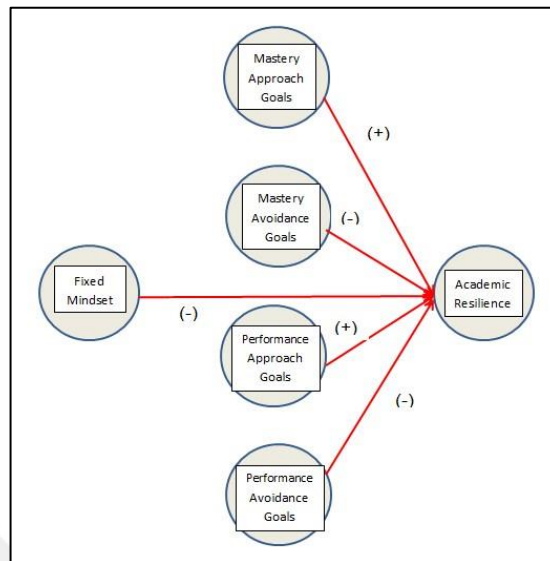


It is possible to see on Figure 8 that fixed mindset was positively related to mastery avoidance goals ($\beta = .26, t = 4.72, p < .01$) and also to performance avoidance goals ($\beta = .15, t = 2.74, p < .01$). The removal effect (f^2) of fixed mindset on mastery avoidance goals ($f^2 = .07$) and performance avoidance goals ($f^2 = .02$) indicated that fixed mindset had a small effect on the R^2 of mastery avoidance goals and performance avoidance goals.

What is their relation among Fixed Mindset, Achievement Goals and Academic Resilience?

Figure 9

Isolated Model of Academic Resilience with Fixed Mindset and Achievement Goals



As expected, fixed mindset was negatively related to academic resilience ($\beta = -.26, t = 5.26, p < .01$) and the removal effect (f^2) of this correlation was .09, indicating a small effect of fixed mindset on the R^2 of academic resilience. Related to the correlation between the sub-constructs of achievement goals and academic resilience, both mastery approach goals ($\beta = .21, t = 4.32, p < .01$) and performance approach goals ($\beta = .13, t = 2.83, p < .01$) have a positive correlation with academic resilience. The removal effect (f^2) of mastery approach goals on academic resilience (.06) and of performance approach goals on academic resilience (.02) demonstrate that they both have small effects on the R^2 of academic resilience (Figure 9).

On the other hand, academic resilience was negatively correlated with mastery avoidance goals ($\beta = -.21, t = 4.21, p < .01$) and performance avoidance goals ($\beta = -.10, t = 2.05, p < .05$) with the removal effect (f^2) values of (.05) and (.01), respectively (Table 9). These results indicate that both mastery avoidance goals and performance avoidance goals have small effects on the R^2 of academic resilience.

Table 9*Summary of the Structural Model Results of Model 1*

Construct	Paths	Path coefficient	<i>t</i>	97.5% CI		f^2	R^2
				Lower	Upper		
FM	FM → MAPG	-.09	1.29	-.22	.05		
	FM → MAVG	.25	4.71**	.14	.36	.07	
	FM → PAPG	-.06	0.94	-.18	.07		
	FM → PAVG	.15	2.74**	.04	.26	.02	
	FM → AR	-.26	5.26**	-.36	-.16	.08	
	FM → AB	-.05	1.00	-.14	.04		
	FM → AS	-.06	0.91	-.16	.07		
MAPG	MAPG → AR	.21	4.32**	.11	.30	.06	
	MAPG → AB	-.05	1.14	-.14	.03		
	MAPG → AS	.04	0.67	-.06	.15		
MAVG	MAVG → AR	-.21	4.21**	-.31	-.11	.05	.06
	MAVG → AB	-.15	3.36**	-.25	-.07	.04	
	MAVG → AS	-.24	5.21**	-.33	-.15	.06	
PAPG	PAPG → AR	.13	2.83**	.03	.22	.02	

Construct	Paths	Path coefficient	<i>t</i>	97.5% CI		<i>f</i> ²	<i>R</i> ²
				Lower	Upper		
PAVG	PAPG → AB	.01	0.17	-.07	.09		
	PAPG → AS	.12	2.18*	.01	.21	.01	
	PAVG → AR	-.10	2.05*	-.20	-.00	.01	.02
	PAVG → AB	-.10	2.48*	-.18	-.02	.02	
	PAVG → AS	-.01	0.10	-.12	.10		
AR	AR → AB	.62	15.87**	.54	.69	.71	.24
	AR → AS	-.04	0.44	-.20	.12		
AB	AB → AS	.09	1.41	-.04	.20		.51
AS							.07
Indirect Paths							
	FM → MAVG → AR	-.05	3.01**	-.09	-.02		
	FM → MAVG → AB	-.04	2.48*	-.08	-.02		
	FM → AR → AB	-.16	4.91**	-.23	-.10		
	FM → MAVG → AS	-.06	3.41**	-.10	-.03		
	MAPG → AR → AB	.13	4.20**	.07	.19		
	MAVG → AR → AB	-.13	4.13**	-.19	-.07		

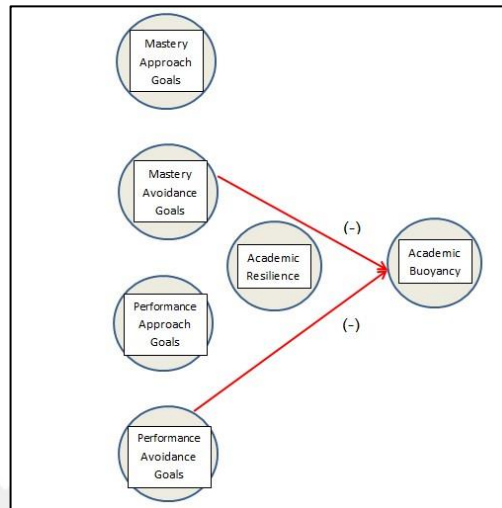
Construct	Paths	Path coefficient	<i>t</i>	97.5% CI		<i>f</i> ²	<i>R</i> ²
				Lower	Upper		
	PAPG → AR → AB	.08	2.72**	.02	.14		
	PAVG → AR → AB	-.07	2.03*	-.13	.00		
	FM → MAVG → AR → AB	-.03	2.98**	-.06	-.02		
	AR → AB → AS	.08	2.10*	.01	.16		

Note. FM=Fixed Mindset; MAPG=Mastery Approach Goals, MAVG=Mastery Avoidance Goals, PAPG=Performance Approach Goals, PAVG=Performance Avoidance Goals as sub-constructs of Achievement Goals; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success; * indicates $p < .05$, ** indicates $p < .01$, *** indicates $p < .001$

What is the relation between Achievement Goals and Academic Buoyancy?

Figure 10

Isolated Model of Achievement Goals and Academic Buoyancy

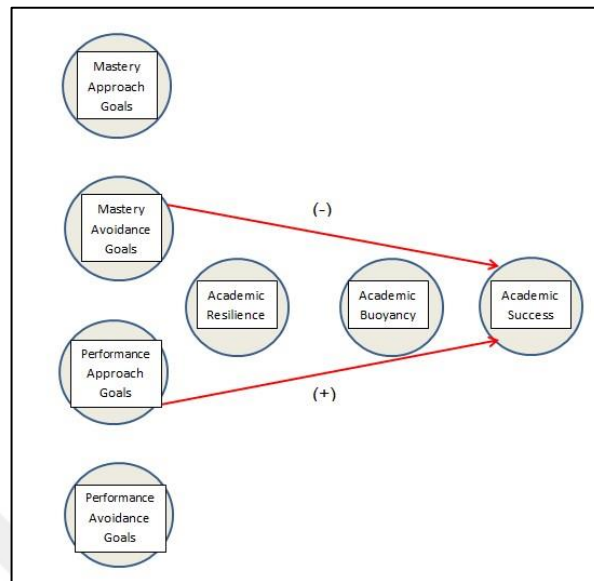


The relation among mastery avoidance goals, performance avoidance goals and academic buoyancy was statistically significant with the path coefficients of -.15 ($t = 3.36, p < .01$) and -.10 ($t = 2.48, p < .05$), respectively. The removal effect (f^2) for mastery avoidance goals and academic buoyancy was .04 and for performance avoidance goals and academic buoyancy was .02, indicating the small effect of mastery avoidance goals and performance avoidance goals on R^2 of academic buoyancy (Figure 10).

What is the relation between Achievement Goals and Academic Success?

Figure 11

Isolated Model of Achievement Goals and Academic Success

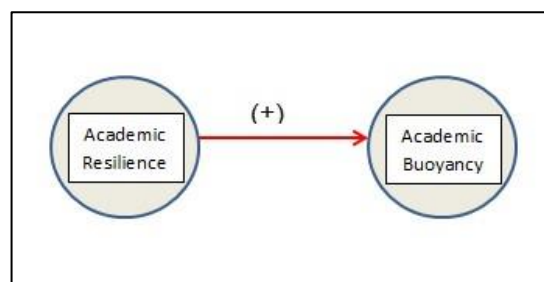


Related to the relationship between achievement goals and academic success, student success is negatively correlated with mastery avoidance goals ($\beta = -.24$, $t = 5.21$, $p < .01$) while it is positively correlated with performance approach goals ($\beta = .12$, $t = 2.18$, $p < .05$). The removal effects (f^2) were .06 and .01 respectively (Figure 11). This indicated that the role of mastery avoidance goals and performance approach goals on the R^2 of academic success was small.

What is the relation between Academic Resilience and Academic Buoyancy?

Figure 12

Isolated Model of Academic Resilience and Academic Buoyancy



The relationship between academic resilience and academic buoyancy was statistically significant with the path coefficient of .62 ($t = 15.87, p < .01$). The removal effect (f^2) of academic resilience on academic buoyancy was .71 (Figure 12). This indicated that academic resilience positively correlated with academic buoyancy and it had a large effect on the R^2 of academic buoyancy in the model.

Mediating Effects

The new version of SmartPLS software allows direct access to the mediating effects. At the analysis stage, it was found that the total negative indirect effect of fixed mindset on academic buoyancy was significant through mastery avoidance goals ($\beta = -.04, t = 2.48, p < .05$) and academic resilience ($\beta = -.16, t = 4.91, p < .01$). In addition, mastery avoidance goals was a mediator for the negative indirect effects of fixed mindset on both academic resilience ($\beta = -.05, t = 3.01, p < .01$) and academic success ($\beta = -.06, t = 3.41, p < .05$).

In addition, academic resilience was a significant mediator for the indirect effects of the sub-constructs of achievement goals on academic buoyancy. Specifically, academic resilience was a mediator for the indirect positive relations of mastery approach goals ($\beta = .13, t = 4.20, p < .01$) and performance approach goals ($\beta = .08, t = 2.72, p < .01$) to academic buoyancy. On the other hand, total indirect negative effect of mastery avoidance goals ($\beta = -.13, t = 4.13, p < .01$) and performance avoidance goals ($\beta = -.07, t = 2.03, p < .05$) to academic buoyancy are mediated through academic resilience.

The total negative indirect effect of fixed mindset on academic buoyancy through the mastery avoidance goals and academic resilience was also significant ($\beta = -.03, t = 2.98, p < .01$) and through the feared L2 self ($\beta = -.05, t = 2.54, p < .05$) were significant.

Results of Model 2: The R-L2MSS as a Mediator

Assessment of the Measurement Model

Outer Loadings

For the first step, for Model 2, indicators with outer loading below .40 were removed based on the suggestion by Hair et al. (2016) related to the outer loadings. In Model 2, initially, there were 11 indicators lower than .40 (Neg1_R, Ought4, Per1_R, Per3_R, Per5_R, Per6, Per11_R, Per14, Ref3, Ref7, Ref9), and there were 10 indicators with the outer loadings between .40 and .60 (Neg4_R, Neg5_R, Per2, Per4, Per13, Ref1, Ref2, Ref5, Ref6, Ref8) (Table 10). Based on the recommendations related to outer loadings (Hair et al., 2022), the first indicator removed from the Model 2 was Per6 because it had an outer loading of -.48, and then other indicators were removed according to the outer loading criterion.

Table 10

Removed Items with Low Loadings

Removed Item	Outer Loading Before Removing
Per6	-.48
Per3_R	-.45
Per5_R	-.32
Per11_R	-.31
Ref7	-.14
Per14	.10
Ought4	.10
Per1_R	.20
Ref9	.22
Neg1_R	.27
Ref3	.35
Per2	.42
Ref2	.42
Ref1	.46

Removed Item	Outer Loading Before Removing
Ref8	.49
Ref5	.49
Neg4_R	.57
Per4	.57
Ref6	.59
Per13	.59

Note. Per=Perseverance; Neg=Negative affect and emotional response; Ref=Reflecting and Adaptive Help-seeking as sub-constructs of Academic Resilience; Ought=OL2S; as a sub-construct of R-L2MSS.

After the initial PLS algorithm calculation, measurement model and outer loadings were analyzed 20 more times to see if there were any improvements in the indicators and to decide whether to keep some indicators or remove them. In the initial analysis, some indicators (i.e. Neg1_R, Per1_R, Per4, Per13, Ref1 etc.) were found to have low loadings (Table 10). While some of the indicators improved after removing other indicators, some others maintained their low-loaded status, and they were also removed later on due to their low loadings. Overall, 21 indicators in total were removed from the scale because of their low outer loadings. Finally, there were 12 items with the outer loading higher than .60 and 23 items were with the loadings higher than .70. Under these considerations, of the measurement model was assessed in terms of convergent validity, composite reliability, discriminant validity, and outer loading relevance test.

Latent Variable Correlations

In Model 2, the latent variable correlations table has values in accordance with the previous literature. For example, according to the literature, academic buoyancy should correlate positively with IL2S while correlating with feared L2 self negatively. The analysis of the model has similar results, demonstrating a positive

correlation (.28) between IL2S and academic buoyancy and a negative correlation (-.37) between feared L2 self and academic buoyancy.

Composite Reliability

In Model 2, the criterion of composite reliability (Hair et al., 2022) was met for all the constructs in the first path analysis.

Convergent Validity (AVE)

When AVE values of the constructs in the model were checked, only the initial AVE value of academic resilience (.46) was lower than the bottom threshold of .50 (Hair et al., 2022) (Table 11). From the construct of academic resilience, the items with the lower loadings, Neg5_R (.59), Neg2_R (.62), Neg3_R (.63) and Per8 (.66) were excluded from the model one by one and AVE value turned into a value within the acceptable range (.51).

Table 11

Initial Summary of the Quality Criteria

Construct	Cronbach's Alpha	<i>rho_A</i>	Composite Reliability	Average Variance Extracted (AVE)
AB	.83	.84	.89	.66
AR	.82	.92	.85	.46
AS	.00	1.00	1.00	1.00
FM	.91	.92	.93	.69
IL2S	.84	.92	.88	.60
OL2S	.74	.83	.81	.62
FL2S	.84	.86	.88	.56

Note. FM=Fixed Mindset; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success.

Discriminant Validity

When the cross loadings were examined for the discriminant validity, it was found that all of the indicators had the highest loadings with their corresponding constructs (Appendix F.6). Overall, all of the constructs was providing necessary values for Fornell-Larcker and HTMT criteria analysis to have discriminant validity (See Appendix F.7 and F.8).

Summary of Measurement Model Evaluation

Figure 7 displays the model after 21 indicators were removed from the measurement model because of their low loadings. Table 12 shows the resulting model quality criteria after running PLS-SEM estimation on the updated model. As it is seen in Table 12, there have been improvements in the items such as Neg7_R (.67) and Ref4 (.78). These improvements ensured composite reliability (>.60) and convergent validity (>.50) of all constructs.

Table 12

Summary of the Reflective Measurement Model Results of Model 2

Construct	Indicators	Outer Loadings >.60	Composite Reliability .60 - .90	AVE >.50	Discriminant Validity	
					Cross Loadings	Fornell Larcker
AB	AB1	.80				
	AB2	.78	.89			
	AB3	.84		.66	Yes	Yes
	AB4	.84				
AR	Neg6_R	.68				
	Neg7_R	.67				
	Per7	.75				
	Per9	.71	.88	.51	Yes	Yes
	Per10	.69				
	Per12	.71				

Construct	Indicators	Outer	Composite	AVE >.50	Discriminant Validity	
		Loadings >.60	Reliability .60 - .90		Cross Loadings	Fornell Larcker
FM	Ref4	.78				
	FM1	.84				
	FM2	.90				
	FM3	.79	.93	.69	Yes	Yes
	FM4	.86				
	FM5	.88				
	FM6	.69				
IL2S	Ideal1	.68				
	Ideal2	.74				
	Ideal3	.83	.88	.60	Yes	Yes
	Ideal4	.79				
	Ideal5	.83				
OL2S	Ought1	.82				
	Ought2	.83				
	Ought3	.84	.87	.62	Yes	Yes
	Ought5	.64				
FL2S	Feared1	.73				
	Feared2	.72				
	Feared3	.63				
	Feared4	.86	.88	.56	Yes	Yes
	Feared5	.73				
	Feared6	.82				

Note. FM=Fixed Mindset; Per=Perseverance; Neg=Negative affect and emotional response; Ref=Reflecting and Adaptive Help-seeking as sub-constructs of Academic Resilience; Ideal=IL2S; Ought=OL2S; Feared=FL2S as sub-constructs of R-L2MSS; AB =Academic Buoyancy.

Overall, Table 12 shows that all constructs in Model 2 could meet the quality criteria including convergent validity, composite reliability, outer loadings, and

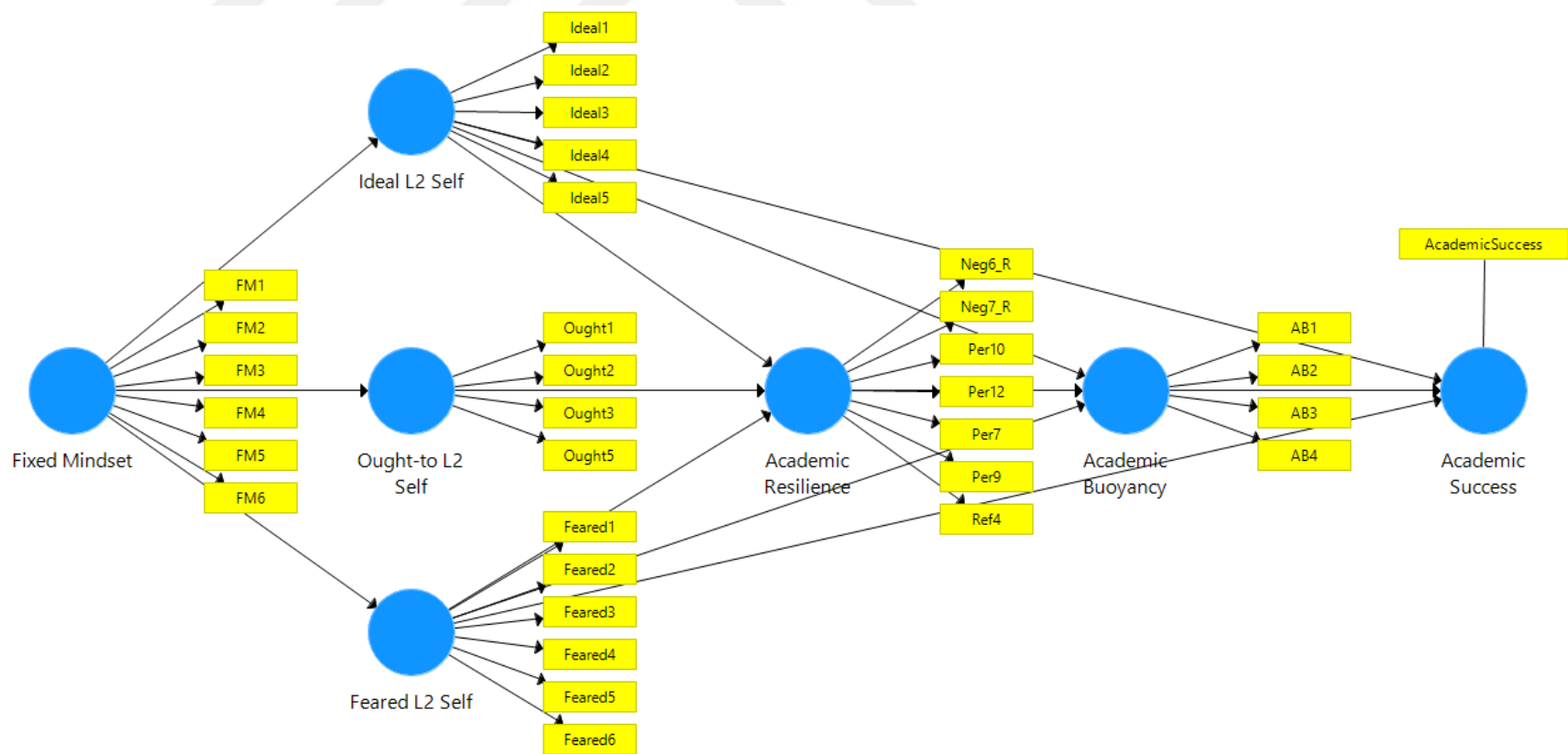
discriminant validity. After that, it is possible to move into the next phase of the PLS-SEM analysis (Hair et al., 2016), which is evaluating the structural model.

Final PLS-SEM path for the model with R-L2MSS as mediators after removing low outer loaded indicators is as follows (Figure 13).



Figure 13

PLS-SEM Path Model 2 (The R-L2MSS as a Mediator) After Removing Low Outer Loaded Indicators



Assessment of Structural Model

As explained in the previous sections, the measurement model met all the quality requirements for establishing the integrity of the scales in the constructs. In this section, the assessment of the structural model of Model 2 will be explained in detail.

Collinearity Assessment

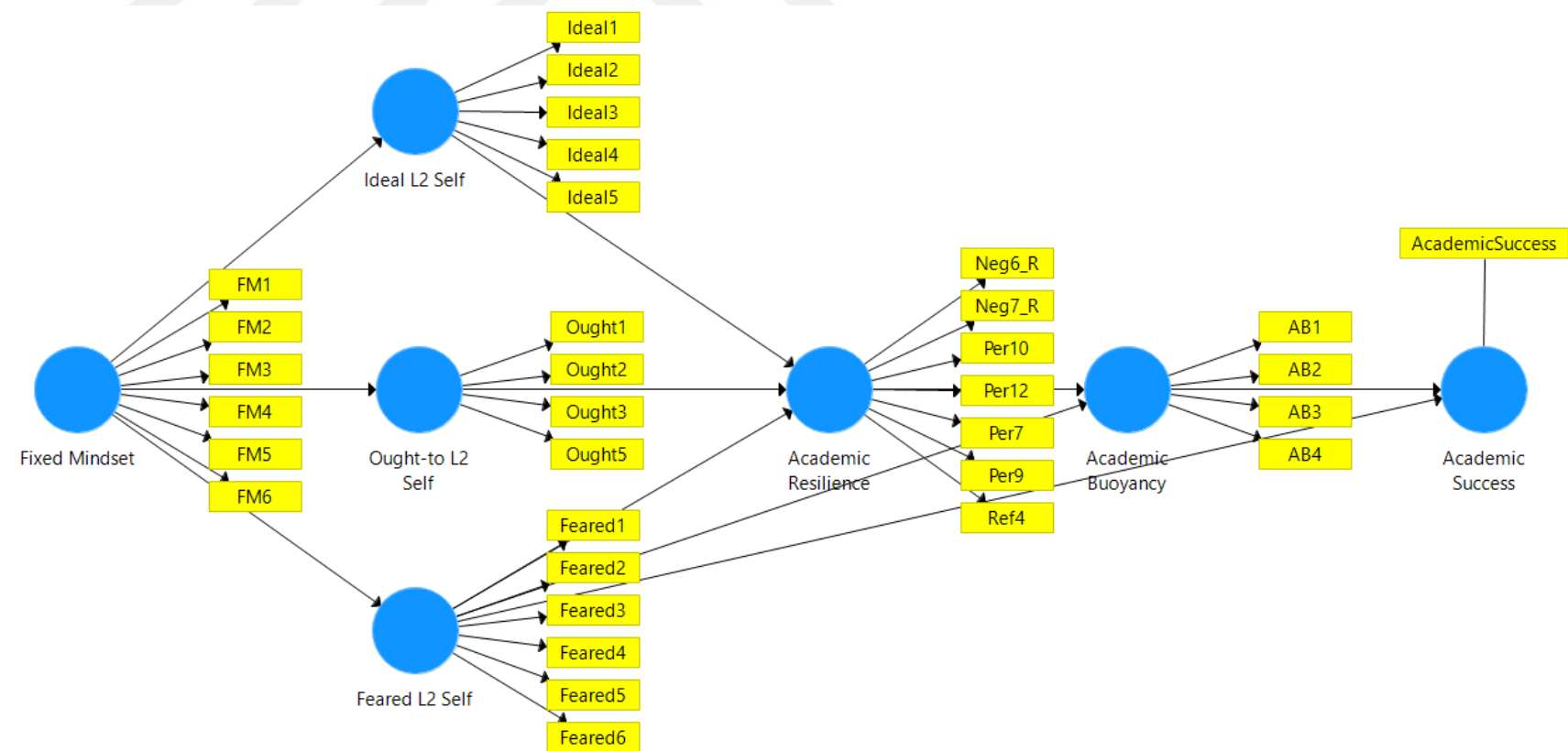
In structural model assessment, collinearity (VIF) values were assessed at the beginning and all the combinations were between these values in Model 2. This information shows that there is no multicollinearity between the constructs and their items in Model 2.

Structural Model Path Coefficients

In the initial bootstrapping analysis to assess path coefficients, there were 10 non-significant and 8 significant path coefficients (See Appendix F.12). After removing non-significant paths one by one, and assessing path coefficients after each non-significant path removal, the significant ones were identified in the final form of Model 2 (See Appendix F.13). Final PLS-SEM path for the model with R-L2MSS as mediators after the final bootstrapping is as follows (Figure 14).

Figure 14

PLS-SEM Path Model 2 (The R-L2MSS as a Mediator) After Final Bootstrapping



In the final model, 2500 samples were used for bootstrapping, and there were 10 significant path coefficients. Table 15 is a summary of the structural model analysis determined through the bootstrapping process with 2500 samples.

Coefficient of Determination (R^2 Value)

Based on Hair et al.'s (2016) criteria related to R^2 values, in Model 2, all the constructs, except for academic buoyancy (.49), have weak effect in the final structural model as they all were lower than .25 (Table 13).

Table 13

Bootstrapping Coefficient Values in Model 2

Construct	R^2
AB	.49
AR	.25
IL2S	.05
OL2S	.04
FL2S	.02

Note. AB =Academic Buoyancy; AR=Academic Resilience.

Effect Size (f^2 Value)

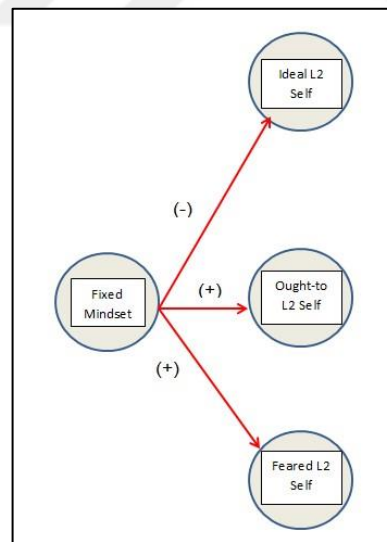
According to the criteria related to the effect size or removal effect (f^2), academic resilience has a large effect on academic buoyancy ($f^2=.72$) in Model 2. The rest of the effect sizes were either small or there was no effect size (see Table 14).

Table 14*Final Bootstrapping Effect Size Values for Model 2*

Construct	AB	AR	FM	IL2S	OL2S	FL2S	AS
AB							.02
AR	.72						
FM		.09		.06	.04	.03	
IL2S		.05					
OL2S							
FL2S	.04	.08					.01
AS							

Note. FM=Fixed Mindset; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success.

What is the relation between Fixed Mindset and R-L2MSS?

Figure 15*Isolated Model of Fixed Mindset and R-L2MSS*

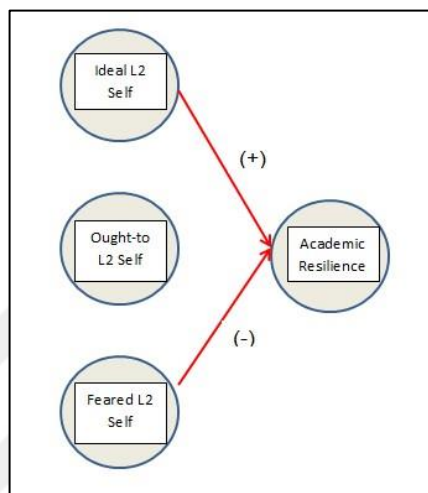
Based on the analysis results, both OL2S ($\beta = .19, t = 4.39, p < .01$) and FL2S ($\beta = .16, t = 2.85, p < .01$) have significantly positive correlations with fixed mindset. On the other hand, IL2S self has a negative correlation with fixed mindset ($\beta = -.24, t = 4.64, p < .01$). The removal effect (f^2) of fixed mindset on IL2S, OL2S and FL2S

are .06, .04 and .03, respectively, indicating small effect of fixed mindset on the R^2 of IL2S, OL2S and FL2S (Figure 15).

What is the relation between R-L2MSS and Academic Resilience?

Figure 16

Isolated Model of R-L2MSS and Academic Resilience

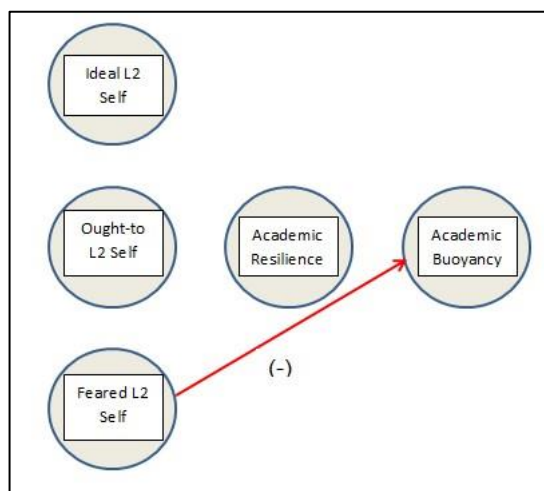


Related to the relationship between the sub-constructs of R-L2MSS and academic resilience, IL2S has a positive correlation ($\beta = .21, t = 3.76, p < .01$) while FL2S has a negative correlation ($\beta = -.26, t = 4.84, p < .01$). The removal effects of both IL2S (.05) and FL2S (.08) demonstrate their small role in the R^2 of academic resilience (Figure 16).

What is the relation between R-L2MSS and Academic Buoyancy?

Figure 17

Isolated Model of R-L2MSS and Academic Buoyancy

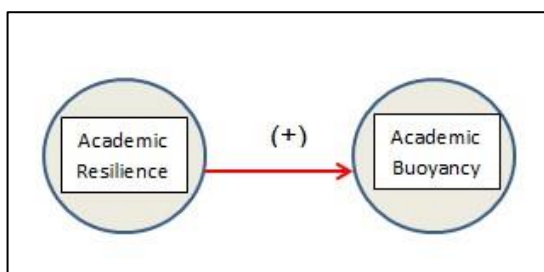


Among the elements of R-L2MSS, only FL2S had a significant negative correlation with academic buoyancy ($\beta = -.15$, $t = 3.79$, $p < .01$), and the effect size (f^2) was small (.03). FL2S also had a negative correlation with academic success ($\beta = -.13$, $t = 2.14$, $p < .05$) with the small effect size (f^2) of .01. That means FL2S has a small effect on the R^2 values of academic buoyancy and academic success (Figure 17).

What is the relation between Academic Resilience and Academic Buoyancy?

Figure 18

Isolated Model of Academic Resilience and Academic Buoyancy



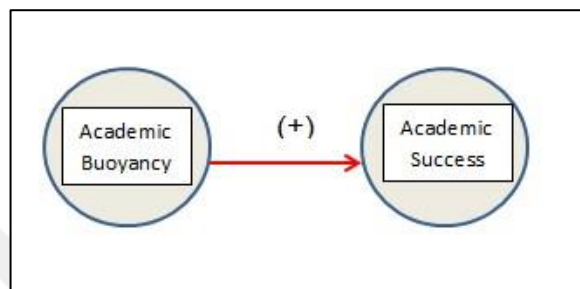
The relationship between academic resilience and academic buoyancy was statistically significant with the path coefficient of .64 ($t = 17.87$, $p < .01$). The

removal effect (f^2) of academic resilience on academic buoyancy was .72. This indicated that there was a large effect of academic resilience on the R^2 of academic buoyancy (Figure 18).

What is the relation between Academic Buoyancy and Academic Success?

Figure 19

Isolated Model of Academic Buoyancy and Academic Success



Lastly, the relationship between academic buoyancy and academic success was statistically significant with the path coefficient of .13 ($t = 2.14, p < .05$). The removal effect (f^2) of academic buoyancy on academic success was .02, which indicated that academic buoyancy and academic success were positively correlated and academic buoyancy has a small role in the R^2 value of academic success (Figure 19).

Mediating Effects

Related to the indirect effects in the model, it was found that the total negative indirect effects of fixed mindset on academic resilience through the IL2S ($\beta = -.05, t = 2.92, p < .01$) and through the FL2S ($\beta = -.04, t = 2.35, p < .05$) were significant. In addition, the total negative indirect effect of fixed mindset to academic buoyancy via FL2S ($\beta = -.02, t = 2.07, p < .05$) and via academic resilience ($\beta = -.17, t = 5.23, p < .01$) were also significant.

Moreover, the negative correlation between fixed mindset and academic buoyancy was mediated through not only IL2S and academic resilience ($\beta = -.03, t = 2.78, p < .01$), but also FL2S and academic resilience ($\beta = -.03, t = 2.39, p < .01$).

Regarding the R-L2MSS, academic resilience was a significant mediator for the relation of academic buoyancy with IL2S ($\beta = .13, t = 3.46, p < .01$) and FL2S ($\beta = -.17, t = 4.91, p < .01$).

Academic resilience and academic buoyancy were the mediators for the indirect effect of FL2S on academic success ($\beta = -.02, t = 1.98, p < .05$) and academic buoyancy was the mediator for the positive correlation between academic resilience and academic success ($\beta = .08, t = 2.10, p < .05$). All final statistical results about Model 2 are included in Table 15.

Table 15

Summary of the Structural Model Results of Model 2 (The R-L2MSS as a Mediator)

Construct	Paths	Path coefficient	t	97.5% CI		f^2	R^2
				Lower	Upper		
FM	FM → IL2S	-.24	4.64**	-.32	-.13	.06	
	FM → OL2S	.19	4.39**	.10	.27	.04	
	FM → FL2S	.16	2.85**	.04	.26	.03	
	FM → AR	-.27	5.51**	-.36	-.17	.09	
	FM → AB	-.07	1.57	-.16	.02		
	FM → AS	-.10	1.36	-.20	.04		
IL2S	IL2S → AR	.21	3.76**	.09	.31	.05	.05
	IL2S → AB	.02	0.40	-.08	.14		
	IL2S → AS	-.09	1.52	-.21	.03		
OL2S	OL2S → AR	-.05	0.68	-.17	.09		.04
	OL2S → AB	.03	0.61	-.07	.13		
	OL2S → AS	.01	0.08	-.12	.13		
FL2S	FL2S → AR	-.26	4.84**	-.36	-.15	.08	.02
	FL2S → AB	-.15	3.79**	-.22	-.07	.04	
	FL2S → AS	-.13	2.14*	-.24	-.01	.01	
AR	AR → AB	.64	17.87**	.56	.70	.72	.25
	AR → AS	.01	0.07	-.15	.17		
AB	AB → AS	.13	2.14*	.01	.25	.02	.49

Construct	Paths	Path coefficient	t	97.5% CI		f^2	R^2
				Lower	Upper		
AS							.04
	Indirect Paths						
	FM → IL2S → AR	-.05	2.92**	-.09	-.02		
	FM → FL2S → AR	-.04	2.35*	-.08	-.01		
	FM → FL2S → AB	-.02	2.07*	-.05	-.01		
	FM → AR → AB	-.17	5.23**	-.23	-.10		
	FM → IL2S → AR → AB	-.03	2.78**	-.06	-.01		
	FM → FL2S → AR → AB	-.03	2.39**	-.05	-.01		
	IL2S → AR → AB	.13	3.46**	.06	.21		
	FL2S → AR → AB	-.17	4.91**	-.23	.10		
	FL2S → AR → AB → AS	-.02	1.98*	-.05	-.00		
	AR → AB → AS	.08	2.10*	.01	.16		

Note. FM=Fixed Mindset; AB =Academic Buoyancy; AR=Academic Resilience; AS=Academic Success; * indicates $p < .05$, ** indicates $p < .01$, *** indicates $p < .001$.

CHAPTER 5: DISCUSSION

This study was designed to understand the role of various motivational factors in providing success for the students at EMI universities' EPP. As a result, I investigated the relationships between several variables, including fixed mindset, achievement goals, IL2S, OL2S, FL2S, academic resilience, academic buoyancy and success level of these students. Even though these constructs were examined separately in previous literature, the current study was the first study investigating the relation among these constructs, specifically related to the success level of preparatory year students. Therefore, it is important to evaluate the findings and interpret them so that they could provide implications for EPPs of EMI universities.

Summary and Interpretation of Major Findings

Direct Results of Model 1(Achievement Goals as Mediators)

In the current study, fixed mindset predicted performance avoidance goals, which was similar to the findings of a number of prior studies (Cho et al., 2019; Lou et al., 2021; Papi et al., 2021). On the other hand, in the current study, fixed mindset was significantly positively related to mastery avoidance goals, on the contrary to the relation between mastery goals and growth mindset in a previous study (Lou & Noels, 2017). As a result, these findings demonstrate the fact that fixed minded students have the tendency to learn and perform better in English so that they would not have problems in the future as a result of their lack of proficiency. In other words, the worries about their future are the encouraging factor for the students to become proficient in English. As this factor has a low role in the whole success-

related model, these students seem to have some other problems in learning English because of the lack of another internal motivation factor. That means they may be learning English not only because of their concerns about the obstacles they will experience in case of their incompetence in the language, but also because of other reasons. As a result, it is necessary to evaluate the role of other components in the models to have a better understanding about the issue.

Specifically related to fixed mindset, this study identified that being fixed minded has a small but negative effect on resilience of students. In other words, the ideas of students about their own intelligence limitations affected their academic resilience negatively. This meant that the students who did not believe their capability to improve their intelligence might similarly have less capacity to deal with the academic struggles they face. For example, fixed-minded English learners might be less able to cope with complicated skills that need more effort and time such as their fluency problems in speaking. This finding was definitely consistent with the other perspective of the issue, the positive relationship previously identified by Mosanya (2020) between growth mindset and academic resilience of students. Similarly, the current study has also aligned with the findings of another previous study by Dweck (2000), in which students with the belief to change their intelligence levels were also expected to be more resilient as they would have more consistent ambitions and achievement goals. Dweck (2000a) also found out that if students thought that they might not improve their intelligence by studying, they became less resilient, which is completely in line with the findings of the current study.

In terms of the achievement goals, the current study shows that mastery approach and performance approach goals are positively connected with academic resilience. That means if students learn and use English to develop their skills and to

become more qualified, they have more capacity to deal with the academic difficulties. That is to say that when students focus on developing and presenting their proficiency in English, they may struggle with their continuous problems in the language such as issues with pronunciation, which were also identified in some previous studies (Çakır & Gazioğlu, 2020; Jowkar et al., 2014; Span et al., 2011; Yu & Martin, 2014). On the other hand, the current study demonstrates that academic buoyancy has a negative relation with both mastery avoidance goals and performance avoidance goals. In other words, students who want to avoid from failure in English courses have less capacity to deal with daily academic issues even if they give more importance to their own performance or their success level compared to the others. Therefore, if students learn English only for their concerns about being incompetent in the future, they may have less chance to cope with temporary stressful situations they face such as making a presentation in English in one of the classes. This specific finding of the current study was contradictory to the prior study by Yu and Martin (2014) who had identified that students with avoidance-oriented goals might become more buoyant.

Related to avoidance oriented goals, there are prior studies suggesting students with mastery avoidance goals become academically more resilient (Çakır & Gazioğlu, 2020) in addition to the studies which could not identify any relationship between them (Jowkar et al., 2014; Span et al., 2011). However, in this study, not only mastery avoidance goals but also performance avoidance goals have negative correlations with academic buoyancy similar to the study by Aydın and Michou (2010). Both of these types of goals are also affecting academic resilience negatively. That means sometimes students may have the target of improving English language skills or performing better in English in order just to avoid negative experiences

caused by their incompetence in English. In this case, these students may not have the strength to deal with continuous or temporary academic difficulties they face during learning English. This lack of characteristics might cause these students to become more disadvantaged in language learning process compared to the buoyant and resilient students. At that point, these students may be shown some other benefits of learning EFL such as having more chance to interact with people from other countries (Firth, 1996; Mahu, 2012). This kind of reasoning might also be beneficial for the teachers in terms of providing more positive learning environment in the classrooms.

It is also not surprising to have the positive relation between academic resilience and academic buoyancy in current study because of their similarity. Guiding students to deal with daily problems they face in English classes (e.g. how to cope with the stress they have for a presentation task) may also help them to feel more secure about long-term difficulties (e.g. how to be more confident in speaking English). Moreover, the current study indicates that both academic resilience and academic buoyancy of the students are affected by their achievement goals. That means future goals of the students are affecting students' capacity to manage academic problems they face. Therefore, in student guidance process, teachers and psychological counsellors might focus on clarifying students' achievement goals in order support them to cope with short-term and long-term challenges of learning English.

In terms of academic success, the current research found out that students with performance approach goals are more successful in EPPs, similar to the prior studies (Çakır & Gazioğlu, 2020; Mouratidis et al., 2018). That means when students try to perform better in English language skills just to approach their peers, they

become more competent. As a result, teachers and student counsellors might encourage students to focus on possible future advantages of having well-developed skills in English to help them to become more successful. On the other hand, the current study suggested that mastery-avoidance goals affect success negatively, which is contradictory with the prior research (Çakır & Gazioğlu, 2020). That means if students focus to improve their English skills only because of avoiding from failure, they have less chance to become successful in English. Therefore, it might be beneficial to guide students to discover the future gains of being competent in English instead of thinking about the negative scenarios resulted from being incompetent.

Lastly, in the current study, success was not related to either mastery approach goals or performance avoidance goals. In other words, there is no difference in students' success if they either learn English to reach their future targets or try to perform better in order not to have problems in the future because of their incompetency in English. This finding of the study is completely on the contrary to the results of Çakır and Gazioğlu's (2020) prior research. Interestingly, that means success is not assured when students focus on improving themselves in English for their future ideals or when they are more interested in performing better compared to the others. This finding demonstrates the necessity for the students to find some other types of motivations to be more successful in English.

Indirect Results of Model 1 (Achievement Goals as Mediators)

One of the key findings of the current study is the indirect negative relationship between fixed mindset and academic resilience through mastery avoidance goals, on the contrary to the study by Calo et al. (2019). That means fixed minded students have less strength to deal with academic difficulties if they want to

become proficient in English just because of not having problems in the future. In other words, when students are focused on the negative consequences of becoming incompetent in English, that does not provide enough motivation to deal with their continuous academic problems.

By approving the study results of Corradi et al. (2018), in the current study, mastery avoidance goals became a mediator between negative indirect relationship between fixed mindset and academic success. In other words, when students believe their capacities to learn English are limited, they become less successful even if they are aware that they need to improve their English knowledge in order not to have problems in their future. That means even if teachers or counsellors focus on re-shaping fixed mindset of students, this attempt may not bring success to the English learners if they do not change their future goals. At that point, students believing in their limits in language learning need to discover some other positive motivations to learn English instead of focusing only on the possible troubles they will have without speaking English.

As a contribution to the literature, in Model 1, both mastery avoidance goals and academic resilience became mediators for the negative relations between fixed mindset and academic buoyancy. That means fixed minded students are less buoyant if they have mastery avoidance goals or if they are resilient. In other words, if students do not believe in their capacity to learn English, they cannot deal with daily academic problems during studying process such as getting bad exam results. This incapability of managing academic issues also appears in case they do not want to face problems in the future because of their incompetency in English. In addition, when fixed minded students are unable to cope with their consistent underachievement in English (e.g. difficulty in improving language level), they have

less strength to cope with daily stress factors in English courses (e.g. taking an exam). Accordingly, when fixed minded students have both mastery avoidance goals and academic resilience, they are becoming less buoyant.

Related to the role of achievement goals in the success of English learners, each type of achievement goals is indirectly related to academic buoyancy through academic resilience. This shows that students can or cannot cope with daily academic issues based on their language learning goals, even if they are able to deal with their chronic problems in language learning. According to the current findings, if students want to become proficient or perform better in English in order to avoid from the bad consequences of possible failure, they have more difficulty with daily academic issues even if they are they are able to deal with their consistent academic problems. On the other hand, if students focus on learning English or performing in English to have the same level with their peers, they have more capacity to struggle with daily academic stress factors in case they are able to show resistance to their chronic academic issues. Yu and Martin (2014) could also identify that students with performance goals are academically more buoyant, which were extended by this study by adding the role of academic resilience in the process.

Previously, there were a number of studies showing that academic resilience brings academic success (Fallon, 2010; Yılmaz-Fındık, 2016; Bester & Kuyper, 2020; Çakır & Gazioğlu, 2020). Although there is not such a direct correlation between academic resilience and academic success in the current study, in both Model 1 and Model 2, there are indirect positive correlations between them through academic buoyancy. This finding is consistent with the previous study by Yun et al. (2018) in terms of demonstrating buoyant English learners tend to be more successful. More recently, Toprak-Çelen (2020) and Aydın and Michou (2020) also

found out that buoyancy impacts success. That means although becoming resilient may not be enough to bring success to English learners, becoming buoyant and resilient at the same time might be helpful. In other words, academic buoyancy as the response for daily life pressures and stressful factors such as getting low grades helps students to become successful in English as their ability to cope with constant failure and persistent feelings of anxiety may not be enough in this educational process. Because academic resilience and academic buoyancy were closely linked in terms of their scope, the positive correlations identified in this study were not surprising.

Direct Results of Model 2 (The R-L2MSS as a Mediator)

According to the current study, fixed mindset has a negative relation with IL2S, similar to the previous findings from the literature (Cacalı, 2018). This may mean when students are not confident about their capacity to improve their level in foreign language, they do not develop future ideals to learn it. Moreover, fixed minded students were found to have both OL2S and FL2S. That means when students tend to learn English through external obligations or the fears about their future if they are fixed minded. There is only a small effect of fixed mindset on each sub-construct of R-L2MSS, showing that mindset does not have a big role in shaping language selves of students. Also, similar to Model 1, in Model 2, fixed mindset is negatively related with academic resilience, which proves the fact that students believing in their in-born limitations to learn English have less capacity to cope with their ongoing underachievement in the process.

Specifically related to language selves and resilience of students, the positive role of IL2S in academic resilience was approved in the current study. That means when preparatory program students have internal desires to learn English, they are able to show more resistance to the chronic problems they have. This finding is

completely consistent with the previous research findings by Kim et al. (2018) in terms of the role of academic resilience and the IL2S in increasing language learning motivation. On the other hand, in the current study, FL2S has a negative effect on academic resilience on the contrary to the previous study results (Toprak-Çelen, 2020). Therefore, when students are motivated to learn English only because of their fear of future failure in English, they present less resilient behaviors. At that point, the importance of the reasons behind learning foreign language becomes clearer, which might be enriched by the teachers and school counselors through guiding materials. This kind of reasoning might support students psychologically especially when students need to struggle with ongoing problems in their language learning process.

In the current study, FL2S was also found to be affecting academic success negatively on the contrary to some prior studies which could not identify any significant relationship between these two (Toprak-Çelen, 2020; Kim & Kim, 2011; Moskovsky et al., 2016). This finding means that if students learn English with the focus to save themselves from the possible bad experiences in the future, they might have problems in English success. That means learning English just because of the future concerns is not enough to provide success for students. Similarly, FL2S is in a negative relation with academic buoyancy, same student profile with the fear of becoming unsuccessful in English are less capable of finding solutions to the daily academic issues they face during learning English.

Finally, in terms of the positive relationship between academic resilience and academic buoyancy, Model 2 of the current study has similar finding with Model 1 and a few previous literature (Yun et al., 2018; Toprak-Çelen, 2020). The identified large effect of academic resilience on academic buoyancy means that when students

have the capacity to deal with chronic underachievement in English, they become more skilled to cope with daily academic pressure they face. As another similarity to Model 1 and previous literature (Aydın & Michou, 2020), academic buoyancy has a small direct effect on academic success, which shows that when English learners have the capability to find solutions to temporary academic issues in their lives (e.g. how to deal with a writing task), they are becoming more successful in the area.

Indirect Results of Model 2 (Achievement Goals as Mediators)

In addition to the direct negative correlation between fixed mindset and academic resilience, the current study also identified indirect negative relations between them through both IL2S and FL2S. In other words, fixed minded students are basically less capable to cope with their consistent problems in English courses. This problem also occurs even when they learn English out of their ideals or out of their fears. Moreover, the results of the current study demonstrated that fixed minded English learners are academically less buoyant through either FL2S or academic resilience. That means fixed minded English learners are not able to deal with daily stressful experiences during their learning process if they are learning English out of their future fears. These students also have problems in daily academic issues (e.g. completing a challenging assignment) although they are resilient for long-term problems (e.g. difficulty in grasping grammatical structures). This weak point of fixed minded students to cope with temporary academic difficulties is also observed when they learn English for their future ideals (IL2S) or concerns (FL2S) although they are resilient for long-term academic problems. In other words, having idealistic or worry oriented reasons to learn English do not help fixed minded students in the daily challenges they face.

Previously, both Yun et al. (2018) and Toprak-Çelen (2020) could suggest a direct positive link between IL2S and academic buoyancy, which could be provided in the current study only through resilience. That is students learning English in accordance with their future ideals become more buoyant only when they are also resilient. In other words, having future ideals to learn foreign language helps to cope with temporary academic problems in case the student has the strength against permanent problems. On the other hand, in the recent study (Toprak-Çelen, 2020), students with the fear of becoming unsuccessful in English in the future (FL2S) are less buoyant even if they are academically resilient. This finding shows that although students have the ability to deal with long-term academic problems in English learning process, they may not be strong against daily academic pressures if they are learning English only because of their future concerns.

As a contribution to the field, the current study could suggest direct and indirect negative correlations between FL2S and academic success. That is to say that when students learn English out of their fears, it is more probable for them to be unsuccessful. This finding was different from the previous study by Toprak-Çelen (2020), who could identify an indirect correlation between academic success and IL2S, but not FL2S or OL2S. Moreover, the current study showed that being academically resilient and buoyant is not making any difference in the success of these students.

As another contribution to the prior studies (Fallon, 2010; Yılmaz-Fındık, 2016; Bester & Kuyper, 2020; Çakır & Gazioğlu, 2020) which identified a direct positive relationship between academic resilience and student success, the current study also found out an indirect positive relation between them through academic buoyancy. That means EPP students who can deal with permanent problems in

learning language experiences might become more successful if they also have the ability to deal with temporary problems at the same time. Related to that issue, teachers and school counsellors might show the strategies to the students so that they can use their problem management skills also for the daily issues.

Comparison of the Models

As a result of evaluating the concept of motivation in two models, it is possible to compare the role of achievement goals and sub-constructs of the R-L2MSS on the relation between fixed mindset and academic success of EPP students. More specifically, there are some similarities between the sub-constructs of achievement goals and R-L2MSS. First, students have more academic resilience when they have mastery approach or performance approach goals. Similarly, students in EPPs are more resilient when they have high IL2S. That means students have more capability to deal with long-term or chronic academic difficulties during their preparatory program education either when they have personal ideals to learn English or when they aim to be at the same proficiency level with their peers.

On the other hand, EPP students learning English out of their fears are academically less resilient and buoyant. Similarly, the students with mastery-avoidance and performance-avoidance goals have less resilience and buoyancy. In other words, students cannot deal with daily or chronic academic difficulties while learning English at preparatory programs when they only focus on their future fears or avoiding from the negative consequences of possible incompetency in the future. These results demonstrate that in order to have academically more resilient or buoyant students, they may be encouraged to find future self-ideals to learn English in addition to having approach type of goals. On the contrary, future fears or concerns of the students might be eliminated through various trainings and

workshops in addition to prioritizing future ideals instead of the competition with their peers.

Implications for Practice

EPPs are one part of students' transition to university life. When students are enrolled in an EMI university, they are expected to become proficient in English before taking courses from their departments. As a result, students both need to deal with the adaptation issues into university life and feel pressure to become competent in English at the end of the one-year program. These students' proficiency scores at the end of that year are significant for a number of shareholders. First, the students need to accomplish preparatory program with a passing grade so that they could attend the courses of their faculties and to graduate without losing more time before starting their careers. Second, families of these students are also closely interested in end-of-term results because they are also worried about the career of their children. Another concern of the families might be related to financial issues as preparatory year is an additional time to cover the expenses of the students. Third, the administrators and the instructors of EPPs are also involved in the proficiency level of their students as their results acquaint them related to the strengths and weakness of their teaching programs and teaching skills. For these reasons, this study provides valuable pedagogical implications for practice.

First, the results of that study revealed that fixed minded EPP students learn English mostly not because of their personal needs or interests, but because of their fears of becoming incompetent. On the other hand, all these reasons to learn language individually affect success level in a negative way. In order to prevent these negative effects of fixed-mindedness, students can be guided or trained to empower their growth mindset. Surveys might be applied to identify the mindsets,

achievement goals, motivational reasons of students so that teachers might learn about their needs. In case of lack of future ideals or the dominance of future fears as a reason to learn English, they may provide in-class materials so that students might become aware of some other reasons (i.e. positive outcomes of being proficient in English). Some workshops or seminars can be suggested to help students to revise their mindset or ideals so that they can become more successful in English..

Teaching materials might also be revised to imply the advantages of being proficient in English which might affect students' success positively. Thus, they can have the chance to change their mindset about their capacity and also find out some other personal reasons such as their future ideals to learn English.

Second, both of the investigated models identified the negative role of fixed mindset in academic resilience, which indicates the necessity to transform mindset of English learners if we desire them to cope with their constant academic problems in English. In addition to demonstrating the methods to control the effects of their fixed mindset, students might also be informed about possible strategies to deal with their problems in English. For that purpose, preparatory school administrators might invite psychological counsellors to their schools in order to organize related workshops. Teachers might identify students with fixed mindset through applying surveys, so that they could be aware of problems of these students during language learning process. Alternatively, parents may direct their children towards consulting or therapy so that students may have the chance to get help for that issue.

Finally, in both models, academic resilience had a strong positive relationship with academic buoyancy. In other words, when students have the capacity to deal with their long-term problems in English, they are more capable of coping with daily struggles they have. As fixed minded students need some additional support to

become more resilient, this kind of support might also help them to become more buoyant. That means when students are guided to control the negative effects of fixed mindset or to become more capable to deal with their long-term problems in English, they might have more skilled to manage the daily pressures caused by their foreign language learning experiences. At that point, teachers might encourage their students through observing and praising their strengths. For example, teachers might draw attention of students to how they could cope with stress during a specific activity so that they might use the same strategy to be buoyant in the future.

Becoming academically more buoyant and more proficient in English is a desirable characteristic not only for students and their parents but also for their teachers and the administrators of EPPs.

Implications for Further Research

The current study can contribute further to the field if the following suggestions are applied. First, this study might be replicated in several different settings with different participant groups, which may provide more concrete results about the relationships between the constructs. As a result, it might be possible to generalize the results more.

Second, the study can be designed as mixed-method research by adding qualitative data such as class observations or interviews with students in addition to the quantitative data. This would enable the researcher to identify students' views in addition to their cognitive processes which will also contribute to the reliability of the research through triangulation.

Finally, the correlations between constructs may be compared across different contexts. As a result, it might be possible to have an idea for each construct in terms of the similarities and differences between each university. By this way, researchers

may have more comprehensive ideas about the student profiles in state universities and private universities. This may help teachers and curriculum developers in terms of suggesting effective solutions for each type of context to increase success level of the students in language classes.

Limitations

This study was conducted with students from EMI universities EPPs, which has several limitations like almost all research studies. First, as this study was originally designed as a quantitative research, the data were collected through questionnaire. As it was a comprehensive questionnaire with a big number of items for each construct, analysis of the surveys took a long period time. As the participants of the survey had already completed the program meanwhile (in 7 weeks), it was not possible to collect additional qualitative data from the same group of the students. Integrating some qualitative data such as semi-structured interviews with the same group of students would have enriched the data collected.

Second, as the target institutions of the study did not allow to reach students directly by the researcher, survey instrument was distributed to the departments and programs via email, which included a link to the online survey. Since the students were not contacted in-person, this approach presented challenges in achieving a large sample size. Thus, utilizing a paper version of the survey might have facilitated the collection of a larger and more reliable dataset, which was not possible in that period.

Third, the data were based on the idea of trusting students in terms of reporting their grades, which could be accepted as another limitation of that study. Although the researcher applied to the institutions to get the exam scores of the students, that was rejected in order not to harm individual rights of the students. By

getting the grades of students from the institution would have been more reliable compared to the self-reported grades.

Finally, the questionnaire applied in this study included five different scales: Mindset Points by Dweck (2000b), Achievement Goals by Elliot and Murayama (2008), Academic Buoyancy by Martin and Marsh (2008a), Academic Resilience by Cassidy (2016), Re-conceptualized L2 Motivational Self System by Peker (2016). As a result, providing reliable outer loadings for each survey items and constructing validity for the final form of the survey was difficult. Re-designing the survey by conducting a pilot study with higher number of participants might be beneficial to design a reliable and valid tool more practically in the future research.

REFERENCES

- Akhter, J., Amin, M., Saeed, F., Abdullah, S., & Muhammad, K. (2016). Comparison and contrast between first and second language learning. *Advances in Language and Literary Studies*, 7(1), 1-5.
<https://doi.org/10.7575/aiac.all.v.7n.1p.130>
- Akşit, T., & Kahvecioğlu, S. (2022). Stakeholder perspectives on the use of English-medium instruction (EMI) in Turkish universities. In Y. Kırkgöz & A. Karakaş (Eds.), *English as the medium of instruction in Turkish higher education* (pp. 86-106). Springer. <https://doi.org/10.1007/978-3-030-88597-7>
- Almesaar, O. (2024). L2MSS in the Saudi Arabian context: Item, scale, and external validity analysis. *Frontiers in Education*, 9(1247701), 1-12.
<https://doi.org/10.3389/feduc.2024.1247701>
- Al-Muqarshi, A., Al-Adawi, S. S., & Al-Bahlani, S. M. (2024). English as a medium of instruction and intellectual capital creation in Omani higher education: Unravelling the dilemma. *Journal of Intellectual Capital*, 25(1), 119-142.
<https://doi.org/10.1108/JIC-10-2022-0192>
- Altay, M., Curle, S., Yuksel, D., & Soruç, A. (2022). Investigating academic achievement of English medium instruction courses in Turkey. *Studies in Second Language Learning and Teaching*, 12(1), 117-141.
<https://doi.org/10.14746/ssllt.2022.12.1.6>
- Altınar, C. (2018). Preparatory school students' English language learning motivation: A sample from Turkey. *Universal Journal of Educational Research*, 6(8), 1729-1737. <https://doi.org/10.13189/ujer.2018.060814>
- Anderson, R. C., Beach, P. T., Jacovidis, J. N., & Chadwick, K. L. (2020, March 23). *Academic buoyancy and resilience for diverse students around the world*.

International Baccalaureate Organization.

<https://ibo.org/globalassets/publications/ib-research/policy/academic-resilience-policy-paper-en.pdf>

Atlı, I., & Özal, D. (2017). Does English medium instruction (EMI) make a difference on student motivation? *Journal of Language Research*, 1(1), 25-36.

Aydın, B. (2017). *Türkiye’de hazırlık okullarında yaşanan sorunlara bir çözüm önerisi: Anadolu Üniversitesi örneği*. Pegem Akademi.

Aydın, G., & Michou, A. (2020). Self-determined motivation and academic buoyancy as predictors of achievement in normative settings. *British Journal of Educational Psychology*, 90, 964-980. <https://doi.org/10.1111/bjep.12338>

Bai, B., & Wang, J. (2020). The role of growth mindset, self-efficacy, and intrinsic value in self-regulated learning and English language learning achievements. *Language Teaching Research*, 11, 1-22. <https://doi.org/10.1177/1362168820933190>

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

Barclay, D. W., Higgins, C. A., & Thompson, R. (1995). The partial least squares approach to causal modeling: Personal computer adoption and use as illustration. *Technology Studies*, 2, 285-309.

Bester, G., & Kuyper, N. (2020). The influence of additional educational support on poverty-stricken adolescents’ resilience and academic performance. *Africa Education Review*, 17(3), 158-174. <https://doi.org/10.1080/18146627.2019.1689149>

Bettinger, E., Ludvigsen, S., Rege, M., Solli, I. F., & Yeager, D. (2018). Increasing perseverance in math: Evidence from a field experiment in Norway. *Journal of*

Economic Behavior & Organization, 146, 1-15.

<https://doi.org/10.1016/j.jebo.2017.11.032>

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/10.1111/j.1467-8624.2007.00995.x>

British Council & TEPAV. (2015). *The state of English in higher education*. British Council.

Brougham, L., & Kashubeck-West, S. (2018). Impacts of a growth mindset intervention on academic performance of students at two urban high schools. *Professional School Counseling*, 21(1), 1-9.

<https://doi.org/10.1177/2156759X18764934>

Burge, J. (2009). *Coping frequency, coping effectiveness, and personality factors in university students*. [Unpublished doctoral dissertation]. University of Canberra.

Cacali, E. R., (2018). The effects of growth mindsets on university EFL motivation in Japan. *Kwansei Gakuin University Humanities Review*, 23, 125-132.

Calo, M., Peiris, C., Chipchase, L., Blackstock, F., & Judd, B. (2019). Grit, resilience and mindset in health students. *The Clinical Teacher*, 16, 317-322.

<https://doi.org/10.1111/tct.13056>

Calo, M., Judd, B., Chipchase, L., Blackstock, F., & Peiris, C. L. (2022). Grit, resilience, mindset, and academic success in physical therapist students: A cross-sectional, multicenter study. *Physical Therapy*, 102(1), 1-10.

<https://doi.org/10.1093/ptj/pzac038>

- Cassidy, S. (2015). Resilience building in Students: The role of academic self-efficacy. *Frontiers in Psychology*, 6, 1-14.
<http://dx.doi.org/10.3389/fpsyg.2015.01781>
- Cassidy, S. (2016). The academic resilience scale (ARS-30): A new multidimensional construct measure. *Frontiers in Psychology*, 7, 1-11.
<https://doi.org/10.3389/fpsyg.2016.01787>
- Chao, C. N. G., McInerney, D. M., & Bai, B. (2019). Self-efficacy and self-concept as predictors of language learning achievements in an Asian bilingual context. *Asia-Pacific Edu Res*, 28(2), 139-147. <http://dx.doi.org/10.1007/s40299-018-0420-3>
- Cho, E., Toste, J. R., Lee, M., & Ju, U. (2019). Motivational predictors of struggling readers' reading comprehension: the effects of mindset, achievement goals, and engagement. *Reading and Writing*, 32, 1219-1242.
<https://doi.org/10.1007/S11145-018-9908-8>
- Chou, M. H. (2023). The role of goal orientations and communication strategies in willingness to communicate in EMI classrooms. *Journal of Language and Education*, 9(3), 24-37. <https://doi.org/10.17323/jle.2023.17207>
- Civan, A., & Coşkun, A. (2016). The effect of the medium of instruction language on the academic success of university students. *Educational Sciences: Theory & Practice*, 16(6), 1981-2004. <https://doi.org/10.12738/estp.2016.6.0052>
- Cohen, S., & Williamson, G. (1988). Perceived stress in a probability sample of the U.S. In S. Spacapan & S. Oskamp (Eds.), *The social psychology of health: Claremont symposium on applied social psychology* (pp. 31-67). Newbury Park. Sage.

- Collie, R. J., Martin, A. J., Malmberg, L., Hall, J., & Ginns, P. (2015). Academic buoyancy, student's achievement, and the linking role of control: A cross-lagged analysis of high school students. *British Journal of Educational Psychology*, 85, 113-130. <https://doi.org/10.1111/bjep.12066>
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment (CEFR)*. Retrieved June 28, 2024 from <https://rm.coe.int/16802fc1bf>
- Corradi, D., Nicolai, J., & Levrau, F. (2019). Growth mindset and its predictive validity- do migration background and academic validation matter? *High Education Research*, 77, 491-504. <https://doi.org/10.1007/s10734-018-0286-6>
- Çağatay, S., & Erten, İ. H. (2020). The relationship between ideal L2 self, achievement and attributions and L2 achievement. *Eurasian Journal of Applied Linguistics*, 6(3), 337-359. <http://dx.doi.org/10.32601/ejal.834642>
- Çakıcı, D. (2016). The correlation among EFL learners' test anxiety, foreign language anxiety and language achievement. *English Language Teaching*, 9(8), 190-203. <http://dx.doi.org/10.5539/elt.v9n8p190>
- Çakır, O. E., & Gazioğlu, A. E. I. (2021). The role of psychological and academic variables in predicting transition from primary to secondary education exam achievement in Turkey. *Psychology in the Schools*, 58, 1858-1876. <https://doi.org/10.1002/pits.22545>
- Çıtıl, C., Yurdakul, B. (2020). Examining English self-efficacy beliefs of university preparatory class students. *Eurasian Journal of Educational Research*, 86, 39-60. <https://doi.org/10.14689/ejer.2020.86.3>

- Danesh, J., & Shahnazari, M. (2020). A structural relationship model for resilience, L2 learning motivation, and L2 proficiency at different proficiency levels. *Learning and Motivation*, 72, 1-16. <https://doi.org/10.1016/j.lmot.2020.101636>
- Dearden, J. (2014). *English as a Medium of Instruction: A growing global Phenomenon*. University of Oxford, Department of Education. <http://www.education.ox.ac.uk/crdemi-oxford/emi-research/>
- DeBacker, T. K., Heddy, B. C., Kershen, J. L., Crowson, K. L., & Goldman, J. A. (2018). Effects of a one-shot growth mindset intervention on beliefs about intelligence and achievement goals. *Educational Psychology*, 38(6), 711-733. <https://doi.org/10.1080/01443410.2018.1426833>
- Demirtaş, İ., & Sert, N. (2010). English education at university level: Who is at the centre of the learning process? *Novitas-Royal (Research on Youth and Language)*, 4(2), 159-172.
- Dil Eğitimi Değerlendirme ve Akreditasyon Kurulu (DEDAK). (2024). Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment (CEFR)*. Retrieved June 28, 2024 from https://www.dedak.org/_files/ugd/5dee4b_83810402f6e34f0397dd00f15df5be78.pdf
- Ditommaso, E., & Spinner, B. (1993). The development and initial validation of the social and emotional loneliness scale for adults (SELSA). *Personality and Individual Differences*, 14, 127-134. [https://doi.org/10.1016/0191-8869\(93\)90182-3](https://doi.org/10.1016/0191-8869(93)90182-3)
- Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Lawrence Erlbaum Associates.

- Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation. Language identity and the L2 self* (pp. 9-42). Multilingual Matters.
- Duckworth, A., & Quinn, D. (2009). Development and validation of the short grit scale (grit-S). *Journal of Personality Assessment*, 91, 166-174.
<https://doi.org/10.1080/00223890802634290>
- Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, 41(10), 1040-1048. <https://doi.org/10.1037/0003-066X.41.10.1040>
- Dweck, C. S. (1999). *Self-theories: Their role in motivation, personality, and development* (1st ed.). Psychology Press.
- Dweck, C. S. (2000a). *Self-theories: Their role in motivation, personality, and development* (1st ed.). Taylor & Francis.
- Dweck, C. S. (2000b). *Theories of intelligence scale*. American Association of Colleges for Teacher Education.
<https://secure.aacte.org/apps/planner/uploads/13/2044/145429/theories-of-intelligence-2000.pdf>
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- Dweck, C. S., & Leggett, E. L. (1988). A social-cognitive approach to motivation and personality. *Psychological Review*, 95(2), 256-273.
<https://doi.org/10.1037/0033-295X.95.2.256>
- Dweck, C. S., Walton, G. M., & Cohen, G. L. (2014). *Academic tenacity: Mindsets and skills that promote long-term learning*. Stanford Graduate School of Education. <https://ed.stanford.edu/sites/default/files/manual/dweck-walton-cohen-2014.pdf>

- ELbashir, B. (2024). The effect of EMI on the academic achievement of engineering students: A case of A'Sharqiyah University, Oman. *International Journal of English Language and Linguistics Research*, 12(2), 18-32.
<https://doi.org/10.37745/ijellr.13/vol12n21832>
- Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, 34(3), 169-189. <https://doi.org/10.1037/0022-3514.70.3.461>
- Elliot, A. J., & McGregor, H. A. (2001). A 2x2 achievement goal framework. *Journal of Personality and Social Psychology*, 80(3), 501-519.
<https://doi.org/10.1037/0022-3514.80.3.501>
- Elliot, A. J., & Murayama, K. (2008). On the measurement of achievement goals: Critique, illustration, and application. *Journal of Educational Psychology*, 100, 613-628. <https://doi.org/10.1037/0022-0663.100.3.613>
- Ellis, M. (2017). Inside a rural lower secondary school in Poland: Factors affecting learner achievement in English. *Neofilolog*, 49(1), 61-77.
<https://doi.org/10.14746/N.2017.49.1.04>
- Erdoğan, G., & Mede, E. (2021). The evaluation of an English preparatory program using CIPP model and exploring A1 level students' motivational beliefs. *Journal of Education and Educational Development*, 8(1), 53-76.
<https://doi.org/10.22555/joeed.v8i1.109>
- Fallon, C. M. (2010). *School factors that promote academic resilience in urban Latino high school students* [Unpublished doctoral dissertation]. Loyola University Chicago.

- Fathi, J., & Hejazi, S. Y. (2024). Ideal L2 self and foreign language achievement: The mediating roles of L2 grit and foreign language enjoyment. *Current Psychology*, 43, 10606-10620. <https://doi.org/10.1007/s12144-023-05187-8>
- Firth, A. (1996). The discursive accomplishment of normality: On 'lingua franca' English and conversation analysis. *Journal of Pragmatics*, 26, 237-259. [https://doi.org/10.1016/0378-2166\(96\)00014-8](https://doi.org/10.1016/0378-2166(96)00014-8)
- Fraenkel, J. R., Wallen, N., & Hyun, H. (2012). *How to design and evaluate research in education*. (8th ed.). McGraw-Hill.
- Fryer, M., & Roger, P. (2018). Transformations in the L2 self: Changing motivation in a study abroad context. *System*, 78, 159-172. <https://doi.org/10.1016/j.system.2018.08.005>
- Fuente, J., Fernandez-Cabezas, M., Cambil, M., Vera, M. M., Gonzalez-Torres, M. C., & Artuch-Garde, R. (2017). Linear relationship between resilience, learning approaches, and coping strategies to predict achievement in undergraduate students. *Frontiers in Psychology*, 8(1039), 1-13. <https://doi.org/10.3389/fpsyg.2017.01039>
- Griffiths, C. (2023). The practice of EMI around the world: An overview. In C. Griffiths (Ed.), *The practice of EMI around the world* (pp. 7-12). Springer. https://doi.org/10.1007/978-3-031-30613-6_2
- Gonzalez-Becerra, I. (2019). Language learning among STEM students: Motivational profile and attitudes of undergraduates in a UK institution. *The Language Learning Journal*, 47(3), 385-401. <http://dx.doi.org/10.1080/09571736.2017.1320421>

- Grenfell, M., & Harris, V. (2013). Making a difference in language learning: The role of sociocultural factors and of learner strategy instruction. *The Curriculum Journal*, 24(1), 121-152. <http://dx.doi.org/10.1080/09585176.2012.744326>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
- Hair, J. F., Hult, G.T. M., Ringle, C. M., & Sarstedt, M. (2022). *A Primer on partial least squares structural equation modeling (PLS-SEM)*. (3rd ed.) SAGE Publications.
- Healey, N. M. (2008). Is higher education really ‘internationalizing’? *Higher Education*, 55(3), 333-355. <https://doi.org/10.1007/s10734-007-9058-4>
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319-340. <https://doi.org/10.1037/0033-295X.94.3.319>
- Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. *Advances in Experimental Social Psychology*, 30, 1-46. [https://doi.org/10.1016/S0065-2601\(08\)60381-0](https://doi.org/10.1016/S0065-2601(08)60381-0)
- Higgins, E. T. (2005). Value from regulatory fit. *Current Directions in Psychological Science*, 14(4), 209-213. <https://doi.org/10.1111/j.0963-7214.2005.00366.x>
- Hirvonen, R., Putwain, D. W., Maatta, S., Ahonen, T., & Kiuru, N. (2020). The role of academic buoyancy and emotions in students’ learning-related expectations and behaviours in primary school. *British Journal of Educational Psychology*, 90, 948-963. <https://doi.org/10.1111/bjep.12336>
- Huang, D. (2015). Exploring and assessing effectiveness of English medium instruction courses: The students’ perspectives. *Procedia-Social and*

Behavioral Sciences, 173, 71-78.

<https://doi.org/10.1016/J.SBSPRO.2015.02.033>

İnal, B., & Aksoy, E. (2014). Çankaya Üniversitesi hazırlık sınıfı İngilizce öğretim programının değerlendirilmesi. *Journal of Research in Education and Teaching*, 3(3), 85-98.

Incirci, A., Turan, S., & Öztürk, E. (2018). The relationship between foreign language anxiety and critical thinking tendency: A path analysis. *International Journal of Eurasia Social Sciences*, 9(34), 2393-2405.

Islam, M., Lamb, M., & Chambers, G. (2013). The L2 motivational self-system and national interest: A Pakistani perspective. *System*, 41, 231-244.
<https://doi.org/10.1016/j.system.2013.01.025>

Jankay, A. (2020). The impact of growth mindset on perseverance in writing. *The Journal of Teacher Action Research*, 7(1), 60-79.

Jowkar, B., Kojuri, J., Kohoulat, N., & Hayat, A. A. (2014). Academic resilience in education: The role of achievement goal orientations. *Journal of Advances in Medical Education & Professionalism*, 2(1), 33-38.

Karakaş, A. (2018). Visible language-covert policy: An investigation of language policy documents at EMI universities in Turkey. *International Online Journal of Education and Teaching*, 5(4), 788-807.

Karcı Aktaş, C., & Gündoğdu, K. (2020). An extensive evaluation study of the English preparatory curriculum of a foreign language school. *Pegem Eğitim ve Öğretim Dergisi*, 10(1), 169-214. <https://doi.org/10.14527/pegegog.2020.007>

Kaya, S., Yüksel, D., & Curle, S. (2023). The effects of language learning and math mindsets on academic success in an engineering program. *Journal of Engineering Education*, 112(1), 90-107. <https://doi.org/10.1002/jee.20499>

- Kır, F. Ş. (2024). English-medium instruction (EMI) as the great (un)equalizer: experiences of former EMI students in Turkey. *Journal of Multilingual and Multicultural Development*, 45 (1), 1-15.
<https://doi.org/10.1080/01434632.2024.2302950>
- Kırkgöz, Y. (2005). Motivation and student perceptions of studying in an English-Medium university. *Journal of Language and Linguistic Studies*, 1(1), 101-122.
- Kırkgöz, Y. (2014). Students' perceptions of English language versus Turkish language used as the medium of instruction in higher education in Turkey. *Turkish Studies*, 9(12), 443-459. <http://dx.doi.org/10.7827/TurkishStudies.7596>
- Kim, T., & Kim, Y. (2011). The impact of resilience on L2 learners' motivated behaviour and proficiency in L2 learning. *Educational Studies*, 43(1), 1-15.
<https://doi.org/10.1080/03055698.2016.1237866>
- Kim, Y., & Kim, T. (2011). The effect of Korean secondary school students' perceptual learning styles and ideal L2 self on motivated L2 behavior and English proficiency. *Korean Journal of English Language and Linguistics*, 11(1), 1-22. <https://doi.org/10.15738/kjell.11.1.201103.21>
- Kim, T., Kim, Y., & Kim, J. (2018). A qualitative inquiry on EFL learning demotivation and resilience: A study of primary and secondary EFL students in South Korea. *Asia-Pacific Edu Res*, 27(1), 55-64.
<https://doi.org/10.1007/S40299-017-0365-Y>
- Kim, T. Y., & Kim, Y. (2021). Structural relationship between L2 learning motivation and resilience and their impact on motivated behavior and L2 proficiency. *Journal of Psycholinguistic Research*, 50, 417-436.
<https://doi.org/10.1007/s10936-020-09721-8>

- Korn, R. M. & Elliot, A. J. (2016). The 2x2 standpoints model of achievement goals. *Frontiers in Psychology*, 7, 1-12. <https://doi.org/10.3389/fpsyg.2016.00742>
- Kök, İ. (2023). The practice of EMI around the World: A metaview. In C. Griffiths (Ed.), *The practice of EMI around the world* (pp. 227-244). Springer. https://doi.org/10.1007/978-3-031-30613-6_2
- Kustritz, M. V. R. (2017). Pilot study of veterinary student mindset and association with academic performance and perceived stress. *Journal of Veterinary Medical Education*, 44(1), 141-146. <https://doi.org/10.3138/jvme.1115-181R1>
- Kwek, A., Huong, T. B., Rynne, J., & Fung So, K. K. (2013). The impacts of self-esteem and resilience on academic performance: An investigation of domestic and international hospitality and tourism undergraduate students. *Journal of Hospitality & Tourism Education*, 25, 110-122. <https://doi.org/10.1080/10963758.2013.826946>
- Li, M., & Zhang, L. (2021). Tibetan CSL learners' L2 motivational self system and L2 achievement. *System*, 97, 1-11. <https://doi.org/10.1016/j.system.2020.102436>
- Linnenbrink, E. A., & Pintrich, P. R. (2002). Motivation as an enabler for academic success. *School Psychology Review*, 31(3), 313-327.
- Lockwood, P., Jordan, C. H., & Kunda, Z. (2002). Motivation by positive or negative role models: regulatory focus determines who will best inspire us. *Journal of Personality and Social Psychology*, 83(4), 854-864. <https://doi.org/10.1037/0022-3514.83.4.854>
- Lou, N. M., & Noels, K. A. (2017). Measuring language mindsets and modeling their relations with goal orientations and emotional and behavioral responses in

failure situations. *The Modern Language Journal*, 101(1), 214-243.

<https://doi.org/10.1111/MODL.12380>

Lou, N. M., Chaffee, K. E., & Noels, K. A. (2021). Growth, fixed, and mixed mindsets: Mindset system profiles in foreign language learners and their role in engagement and achievement. *Studies in Second Language Acquisition*, 44(3), 607-632. <https://doi.org/10.1017/S0272263121000401>

Macaro, E., Akıncioğlu, M., & Dearden, J. (2016). English-medium instruction in universities: A collaborative experiment in Turkey. *Studies in English Language Teaching*, 4(1), 51-76. <https://doi.org/10.22158/SELT.V4N1P51>

Macayan, J. V., Quinto, E. J. M., Otsuka, J. C., & Cueto, A. B. S. (2018). Are Filipino students' L2 learning goals performance- or mastery-oriented? An explanatory sequential analysis. *GEMA Online Journal of Language Studies*, 18(1), 51-68. <https://doi.org/10.17576/GEMA-2018-1801-04>

Mahu, D. (2012). Why is learning English so beneficial nowadays? *International Journal of Communication Research*, 2(4), 374-376.

Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*, 41(9), 954-969. <https://doi.org/10.1037/0003-066X.41.9.954>

Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, 43, 267-282. <https://doi.org/10.1002/pits.20149>

Martin, A. J., & Marsh, H. W. (2008a). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology*, 46, 53-83. <https://doi.org/10.1016/j.jsp.2007.01.002>

Martin, A. J., & Marsh, H. W. (2008b). Workplace and academic buoyancy: Psychometric assessment and construct validity amongst school personnel and

- students. *Journal of Psychoeducational Assessment*, 26, 168-184.
<https://doi.org/10.1177/0734282907313767>
- Martin, A. J., & Marsh, H. W. (2009). Academic resilience and academic buoyancy: multidimensional and hierarchical conceptual framing of causes, correlates and cognate constructs. *Oxford Review of Education*, 35(3), 353-370.
<https://doi.org/10.1080/03054980902934639>
- Martin, A. J. (2013). Academic buoyancy and academic resilience: Exploring 'everyday' and 'classic' resilience in the face of academic adversity. *School Psychology International*, 34(5), 488-500.
<https://doi.org/10.1177/0143034312472759>
- Martinovic, A. (2018). The L2 motivational self system: Differences among learners. *Jezikoslovlje*, 19(1), 133-157.
- Masrai, A., El-Dakhs, D. A. S., & Yahya, N. (2022). What predicts academic achievement in EMI courses? Focus on vocabulary knowledge and self-perceptions of L2 skills. *SAGE Open*, April-June 2022, 1-13.
<https://doi.org/10.1177/21582440221101044>
- Mede, E., & Uygun, S. (2014). Evaluation of a language preparatory program: A case study. *ELT Research Journal*, 3(4), 201-221.
- Ministry of National Education [MoNE] (2019). *MEB 2023 eğitim vizyonu*. T.C. Milli Eğitim Bakanlığı.
http://2023vizyonu.meb.gov.tr/doc/2023_EGITIM_VIZYONU.pdf
- Mosanya, M. (2020). Buffering academic stress during the COVID-19 pandemic related social isolation: Grit and growth mindset as protective factors against the impact of loneliness. *International Journal of Applied Positive Psychology*, 5(3). <https://doi.org/10.1007/s41042-020-00043-7>

- Moskovsky, C., Racheva, S., Assulaïmani, T., & Harkins, J. (2016). The L2 motivational self system and L2 achievement: A study of Saudi EFL learners. *The Modern Language Journal*, 100, 1-14. <https://doi.org/10.1111/modl.12340>
- Mouratidis, A., Michou, A., Demircioğlu, A. N., & Sayil, M. (2018). Different goals, different pathways to success: Performance-approach goals as direct and mastery-approach goals as indirect predictors of grades in mathematics. *Learning and Individual Differences*, 61, 127-135. <https://doi.org/10.1016/j.lindif.2017.11.017>
- Munoz, C. (2014). Starting age and other influential factors: Insights from learner interviews. *Studies in Second Language Learning and Teaching*, 4(3), 465-484. <https://doi.org/10.14746/ssllt.2014.4.3.5>
- Nadler, J. T., Weston, R., & Voyles, E. C. (2015). Stuck in the middle: The use and interpretation of mid-points in items on questionnaires. *The Journal of General Psychology*, 142(2), 71-89. <https://doi.org/10.1080/00221309.2014.994590>
- Oades-Sese, G. V., & Li, Y. (2011). Attachment relationships as predictors of language skills for at-risk bilingual preschool children. *Psychology in the Schools*, 48(7), 707-722. <https://doi.org/10.1002/pits.20583>
- Official Gazette. (1984). *Yükseköğretim kurumlarında yabancı dil eğitim-öğretimi ve yabancı dille eğitim-öğretim yapan yükseköğretim kurumları hakkında yönetmelik*. T.C. Resmi Gazete. <https://www.resmigazete.gov.tr/arsiv/18378.pdf>
- Official Gazette. (2016). *Yükseköğretim kurumlarında yabancı dil öğretimi ve yabancı dille öğretim yapılmasında uyulacak esaslara ilişkin yönetmelik*. T.C. Resmi Gazete. <https://www.resmigazete.gov.tr/eskiler/2016/03/20160323-6.htm>

- Oredo, J. & Njihia, J. (2017). The role of organizing vision in cloud computing adoption by organizations in Kenya. *American Journal of Information Systems*, 5(1), 38-50. <https://doi.org/10.12691/ajis-5-1-6>
- Öner, G., & Mede, E. (2015). Evaluation of A1 level program at an English preparatory school in a Turkish university: a case study. *ELT Research Journal*, 4(3), 204-226.
- ÖSYM (2019). *2019 Yükseköğretim programları ve kontenjanları kılavuzu*. T.C. Ölçme, Seçme ve Yerleştirme Merkezi.
<https://www.osym.gov.tr/TR,16858/2019-yuksekokretim-programlari-ve-kontenjanlari-kilavuzu.html>
- Öz, H., & Bursalı, N. (2018). The relationship between L2 motivational self-system and willingness to communicate in learning English as a foreign language. *Journal of Language and Linguistic Studies*, 14(4), 1-11.
- Özer, O., & Bayram, N. (2019). Students' experiences of English-medium courses at tertiary level: A case in Turkey. *International Online Journal of Educational Sciences*, 11(1), 61-70. <https://doi.org/10.15345/IOJES.2019.01.005>
- Paker, T. (2012). Türkiye'de neden yabancı dil (İngilizce) öğretmiyoruz ve neden öğrencilerimiz iletişim kurabilecek düzeyde İngilizce öğrenemiyor? *Pamukkale University Journal of Education*, 32, 89-94. <https://doi.org/10.9779/PUJE563>
- Papi, M. (2010). The L2 motivational self-system. L2 anxiety. and motivated behavior: A structural equation modelling approach. *System*, 38, 467-479. <https://doi.org/10.1016/J.SYSTEM.2010.06.011>
- Papi, M., Bondarenko, A. V., Mansouri, S., Feng, L., & Jiang, C. (2019). Rethinking L2 motivation research: The 2x2 model of L2 self-guides. *Studies in Second*

Language Acquisition, 41(2), 337-361.

<https://doi.org/10.1017/S0272263118000153>

Papi, M., Wolff, D., Nakatsukasa, K., & Bellwoar, E. (2021). Motivational factors underlying learner preferences for corrective feedback: Language mindsets and achievement goals. *Language Teaching Research*, 25(6), 858-877.

<https://doi.org/10.1177/13621688211018808>

Paker, T., & Özkardeş-Döğüş, A. (2017). Achievement attributions of preparatory class learners in learning English. *Journal of Language and Linguistic Studies*, 13(2), 109-135.

Peker, H. (2016). *Bullying victimization, feared second language self, and second language identity: Reconceptualizing the second language motivational self system* (Unpublished doctoral dissertation). University of Central Florida, USA.

Peker, H. (2020). Feared L2 self as an emerging component of the reconceptualized L2 motivational self system. *The Eurasian Journal of Applied Linguistics*, 6(1).

<https://doi.org/10.32601/ejal.834658>

Pekrun, R. (2024). Overcoming fragmentation in motivation science: Why, when, and how should we integrate theories? *Educational Psychology Review*, 36(1), Article 27. <https://doi.org/10.1007/s10648-024-09846-5>

Pintrich, P. R. (2000). An achievement goal theory perspective on issues in motivation terminology, theory, and research. *Contemporary Educational Psychology*, 25(1), 92-104. <https://doi.org/10.1006/ceps.1999.1017>

Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82, 33-40. <https://doi.org/10.1037/0022-0663.82.1.33>

- Roshandel, J., Ghoonsooly, B., & Ghanizadeh, A. (2018). L2 motivational self-system and self-efficacy: A quantitative survey-based study. *International Journal of Instruction*, 11(1), 329-344.
<https://doi.org/10.12973/IJI.2018.11123A>
- Ryan, A. M., & Shim, S. S. (2006). Social achievement goals: The nature and consequences of different orientations toward social competence. *Personality and Social Psychology Bulletin*, 32(9), 1246-1263.
<https://doi.org/10.1177/0146167206289345>
- Sadeghi, F., Sadighi, F., & Bagheri, M. S. (2020). The relationship between Iranian EFL learners' language mindset with goal orientation and responses to failure. *Cogent Education*, 7, 1-21. <https://doi.org/10.1080/2331186X.2020.1833814>
- Shi, H. (2018). English language learners' strategy use and self-efficacy beliefs in English language learning. *Journal of International Students*, 8(2), 724-741.
<https://doi.org/10.32674/JIS.V8I2.101>
- Shih, H. (2019). L2 Anxiety, self-regulatory strategies, self-efficacy, intended effort and academic achievement: A structural equation modeling approach. *International Education Studies*, 12(3), 24-35.
<https://doi.org/10.5539/ies.v12n3p24>
- Smiley, P. A., Buttitta, K.V., Chung, S. Y., Dubon, V. X., & Chang, L. K. (2016). Mediation models of implicit theories and achievement goals predict planning and withdrawal after failure. *Motiv Emot*, 40, 878-894.
<https://doi.org/10.1007/S11031-016-9575-5>
- Song, J., Kim, S., & Bong, M. (2020). Controllability attribution as a mediator in the effect of mindset on achievement goal adoption following failure. *Frontiers in Psychology*, 10(2943), 1-9. <https://doi.org/10.3389/fpsyg.2019.02943>

- Soylu, M. Y., Zeleny, M. G., Zhao, R., Bruning, R. H., Dempsey, M. S., & Kauffman, D. F. (2017). Secondary students' writing achievement goals: Assessing the mediating effects of mastery and performance goals on writing self-efficacy, affect and writing achievement. *Frontiers in Psychology*, 8, 1-11. <https://doi.org/10.3389/fpsyg.2017.01406>
- Splan, R. K., Brooks, R. M., Porr, S., & Broyles, T. W. (2011). Resiliency and achievement goal orientation among agricultural students. *NACTA Journal*, 55(4), 31-38.
- Suharsono, Y., & Fatimah, S. (2024). Growth mindset in higher education: Exploring academic buoyancy's mediating effect on students' academic engagement and psychological well-being. *International Conference of Applied Psychology*, 2024, 375-390.
- Sukup, L., & Clayton, R. (2021). Examining the effects of resilience on stress and academic performance in business undergraduate college students. *College Student Journal*. 55(3), 293-304.
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Upper Saddle River. Pearson.
- Tekin, M. (2015). Evaluation of a preparatory school program at a public university in Turkey. *The Journal of International Social Research*, 8(36), 718-733. <https://doi.org/10.17719/JISR.2015369537>
- Toprak-Çelen, E. (2020). *A structural equation model on EFL tertiary level students' academic buoyancy, academic resilience, reconceptualized L2 motivational self system, and their academic achievement* [Unpublished doctoral dissertation]. İhsan Doğramacı Bilkent University.

- Trigueros, R., Aguilar-Parra, J. M., Cangas, A. J., Bermejo, R., Ferrandiz, C., & Lopez-Liria, R. (2019). Influence of emotional intelligence, motivation and resilience on academic performance and the adoption of healthy lifestyle habits among adolescents. *International Journal of Environmental Research and Public Health*, 16(2810), 1-12. <https://doi.org/10.3390/ijerph16162810>
- Uysal, D. (2019). Problems and solutions concerning English language preparatory curriculum at higher education in view of ELT instructors. *International Journal of Contemporary Educational Research*, 6(2), 452-467. <https://doi.org/10.33200/ijcer.635093>
- Uysal, D., & Güven, M. (2018). Negative feelings of Turkish students in EFL learning process. *European Journal of Foreign Language Teaching*, 3(4), 120-140. <https://doi.org/10.5281/zenodo.1469726>
- Xu, J., & Feng, X. (2024). Mindsets, resilience and student engagement as predictors of L2 achievement among Chinese English learners: Insights from fuzzy-set qualitative comparative analysis. *System*, 124, 1-12. <https://doi.org/10.1016/j.system.2024.103358>
- Yana, A. A. G. A., Rusdhi, H. A., & Wibowo, M. A. (2015). Analysis of factors affecting design changes in construction project with Partial Least Square (PLS). *Procedia Engineering*, 125, 40-45. <https://doi.org/10.1016/j.proeng.2015.11.007>
- Yang, L., & Chanyoo, N. (2022). Motivational factors and intended efforts in learning East Asian languages among Thai undergraduate students. *Theory and Practice in Language Studies*, 12(2), 254-262. <https://doi.org/10.17507/tpls.1202.06>

- Yang, L., & Liang-Itsara, A. (2024). Thai undergraduates' motivation in learning different foreign languages: A Dörnyei's L2MSS perspective. *International Journal of Learning, Teaching and Educational Research*, 23(1), 159-185. <https://doi.org/10.26803/ijlter.23.1.9>
- YDYO-TR Yöneticiler Platformu. (2017). 11. Yabancı diller yüksekokulu yöneticileri toplantısı sonuç bildirgesi. Retrieved October 28, 2020 from <https://ydyotr.wordpress.com/wp-content/uploads/2018/01/11-ydy-toplantisi-sonuc3a7-bildirgesi-15-ocak-2018.pdf>
- Yılmaz-Fındık, L. (2016). What makes a difference for resilient students in Turkey? *Eurasian Journal of Educational Research*, 62, 91-108. <https://doi.org/10.14689/ejer.2016.64.5>
- Yu, K., & Martin, A. J. (2014). Personal best (PB) and 'classic' achievement goals in the Chinese context: their role in predicting academic motivation, engagement and buoyancy. *Educational Psychology*, 34(5), 635-658. <https://doi.org/10.1080/01443410.2014.895297>
- Yu, J., & McLellan, R. (2020). Same mindset, different goals and motivational frameworks: Profiles of mindset-based meaning systems. *Contemporary Educational Psychology*, 62, 1-13. <https://doi.org/10.31234/osf.io/khd8c>
- Yuan, R., Chen, Y., & Peng, J. (2022). Understanding university teachers' beliefs and practice in using English as a medium of instruction. *Teaching in Higher Education*, 27(2), 233-248. <https://doi.org/10.1080/13562517.2020.1715936>
- Yun, S., Hiver, P., & Al-Hoorie, A. H. (2018). Academic buoyancy: Exploring learners' everyday resilience in the language classroom. *Studies in Second Language Acquisition*, 40, 805-830. <https://doi.org/10.1017/S0272263118000037>

Wichadee, S., & Pattanapichet, F. (2018). Enhancement of performance and motivation through application of digital games in an English language class. *Teaching English with Technology*, 18(1), 77-92.

Zarrinabadi, N., Lou, N. M., & Ahmadi, A. (2022). Resilience in language classrooms: Exploring individual antecedents and consequences. *System*, 109(2022), 1-12. <https://doi.org/10.1016/j.system.2022.102892>

Zhao, X., Xiao, W., Zhang, J. (2022). L2 motivational self-system, international posture and the sustainable development of L2 proficiency in the COVID-19 ear: A case of English majors in China. *Sustainability*, 14(8087), 1-15. <https://doi.org/10.3390/su14138087>

APPENDICES

Appendix A

Survey 1 (Turkish Version)

Değerli katılımcı,

Bu araştırmanın amacı İngilizce derslerini almakta olan öğrencilerin dersle ilgili motivasyonlarını, hedeflerini ve zorlukları aşma potansiyellerini belirlemek ve anlamaktır. Bu sebeple, verdiğiniz yanıtlar bu konuda önemli verilerin toplanmasına yardımcı olacaktır.

Bu çalışmada, size 68 maddelik bir anket uygulanacaktır. Bunların yanı sıra cinsiyet, yaş ve milliyetiniz gibi birkaç demografik soru da yöneltilecektir. İsminiz sorulmayacak, fakat öğrenci numaranız motivasyonunuz, hedefleriniz ve zorlukları aşma potansiyellerinizle ilişkilerine bakmak amacıyla istenecektir. Öğrenci numaranız dahil vereceğiniz bütün bilgiler tamamıyla gizli tutulacak ve sadece konferans sunumları ile yayınları da içeren araştırmalar maksadıyla kullanılacaktır.

Hiçbir sorunun doğru yada yanlış cevabı yoktur ve sadece sizin ankette verilen her durum için görüşlerinizi toplama amacı güdülmektedir. Bu anketteki sorular sadece görüşlerinizle ilgili olup başka bir şeyi ölçmemektedir. Çalışmaya katılmak istememeniz yada çalışmadan çekilmek istemeniz kurumunuzla ilişkilerinizde bir sorun teşkil etmeyecektir. Anketi İngilizce yada Türkçe olarak doldurabilirsiniz.

Dönem sonunda, notlarınızı bildirmeniz amacıyla mail yoluyla size ulaşılması gerekebilir. Çalışmanın veri toplama aşaması tamamlandığında ankete güvenilir cevaplar veren katılımcılar arasında çekiliş yapılacaktır. Bu çekilişle belirlenen 5 katılımcıya 200 TL verilecektir.

Bu anket, Bilkent Üniversitesi'nde doktora öğrencisi olan Sinem MADEN'in (), Dr. Öğretim Üyesi Hilal PEKER

() tarafından yürütülen doktora tezi kapsamında yapılmaktadır. Anketin toplam süresi yaklaşık 10-15 dakikadır. Ankette yer alan soruların cevapları kişiden kişiye değişebilir. O nedenle lütfen kendi açınızdan en doğru ve geçerli cevapları veriniz.

Anketin herhangi bir bölümüyle alakalı sorularınız veya endişeleriniz olması durumunda, lütfen Sinem Maden () veya Dr. Hilal Peker ()'e iletişime geçiniz. Bu akademik çalışmaya ayırdığınız zaman ve katkılarınız için çok teşekkür ederiz.

Lütfen aşağıdaki kriterleri karşılıyor ve ankete katılmak istiyorsanız aşağıdaki ok işareetine basınız.

Kriterler:

- 1) 18 yaşından büyüğüm.
- 2) Bu çalışmayla ilgili bilgilendirmeyi okudum ve anladım.
- 3) Çalışmanın herhangi bir aşamasında çalışmadan ayrılabilceğimi anladım.
- 4) Projenin sonunda elde edilecek verilerin ne amaçla ve kimler tarafından kullanılabileceğini anladım.
- 5) Bu çalışmanın etik açıdan Bilkent Üniversitesi Etik Komitesi tarafından incelendiğini ve uygun bulunduğunu anladım.

Lütfen aşağıdaki örnek durumu okuyunuz. Devamındaki sorulara örnek durumda hissedeceklerinizi düşünerek cevap veriniz.

İngilizce dersinde yaptığınız bir ödevden “başarısız” olduğunuzu (F notu aldığınızı) öğrendiniz. Daha önceki iki ödevinizden (Örn. Bir essay ve reflection paper) aldığınız notlar da umduğunuzdan düşük gelmiştir. Hem kariyer planlarınız için sorun olacağından hem de ailenizi hayal kırıklığına uğratacağınızdan notlarınızla ilgili endişelenmektesiniz. Dersin öğretim elemanından performansınızla ilgili aldığınız dönüt de sizin için oldukça önemlidir. Bu dönütte başarısız olduğunuz noktalara dikkat çekilmiş, performansınızı arttırmanız için bazı önerilerde bulunulmuştur.

	Kesinlikle katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
1. Öğretim elemanının dönütünü kabul etmem.					
2. Bu dönütü çalışmalarımı düzeltmek için kullanırım.					
3. Hemen çalışmayı bırakırım.					
4. Bu durumu kendimi motive etmek için kullanırım.					
5. Kariyer planlarımı değiştiririm.					
6. Muhtemelen bu duruma sinirlenirim.					
7. Üniversitede başarılı olma şansımın düşük olduğunu düşünmeye başlarım.					
8. Bu durumu bir zorluk olarak görürüm.					
9. Olumsuz düşüncelerden kurtulmak için					

elimden gelenin en
iyisini yaparım.

10. Bu durumun
geçici olduğunu
düşünürüm.

11. Daha çok
çalışırım.

12. Muhtemelen
depresif olurum.

13. Bu durum için
yeni çözümler
düşünürüm.

14. Çok fazla hayal
kırıklığına
uğrarım.

15. Bu durum için
öğretim elemanını
suçlarım (Örn.
başarısızlığımın
sebebimin öğretim
elemanı olduğunu
düşünürüm).

16. Denemeye
devam ederim.

17. Uzun vadeli
hedeflerimde ve
hırslımda değişiklik
olmaz.

18. Geçmişteki
başarılarımı
kendimi motive
etmek için
kullanırım.

19. Gelecekte
istediğim mesleği
yapma ihtimalimin
düşük olduğunu
düşünürüm.

20. Çabalarımı ve
başarılarımı
gözlemlemeye ve
değerlendirmeye
başlarım.

21. Öğretim
elemanından
yardım isterim.

22. Kendimi
cesaretlendiririm.

23. Kendimi
telaşlandırmayı

bırakırım.

24. Ders çalışmak
için farklı yollar
denerim.

25. Başarılı olmak
için kendi
hedeflerimi
belirlerim.

26. Ailem ve
arkadaşlarımdan
beni
yüreklendirmelerin
i beklerim.

27. Daha iyi
çalışmak için güçlü
olduğum ve
yetersiz olduğum
yönlerim üzerine
kafa yorarım.

28. Her şeyin
bittiğini ve kötüye
gittiğini
düşünürüm.

29. Performansıma
göre kendime
ödülleri ve cezaları
belirlerim.

30. Notlarımı
düzelttebildiğimi
çevremdekilere
göstermeyi dört
gözle beklerim.

Aşağıdaki maddeleri lütfen kendi İngilizce performansınızı düşünerek cevaplayınız.

	Kesinlikle katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
31. Zeka kapasitemin sınırları var ve bunu değiştirmek için elimden çok da bir şey gelmez.					
32. Zeka düzeyim çok da değiştirebileceğim bir şey değildir.					
33. Başarısızlıklarımla başa çıkma konusunda iyiyim.					
34. Benim için İngilizce dersi alan diğer öğrencilerden daha başarılı olmak önemlidir.					
35. Benim için İngilizce dersi alan diğer öğrencilere kıyasla daha iyi sonuçlar almam önemlidir.					
36. İngilizce derslerinde İngilizcemin yetersizliği yüzünden utanmaktan korkarım.					
37. Daha önce İngilizcem yüzünden aşağılandığım için İngilizce'yi doğru şekilde kullanamamaktan korkuyorum.					
38. Kişiliğimden bağımsız olarak, zeka seviyemi büyük ölçüde değiştirebilirim.					
39. Dürüst olmak gerekirse, ne kadar zeki olduğumu değiştiremem.					
40. Stresin beni alt etmesine izin vermem.					
41. İngilizce derslerinde hedefim çoğu öğrenciden daha yüksek not almaktır.					
42. İngilizce derslerinde					

potansiyelim kadar
öğrenemeyeceğimden
endişeliyim.

43. İngilizce'mi
geliştirmeliyim çünkü
başkaları tarafından
İngilizce seviyem hakkında
eleştirilmeyi yada
aşağılanmayı istemem.

44. İngilizce'yi, düzgün
konuşamamam durumunda
insanların benimle dalga
geçebileceğinden
endişelenirim.

45. Ne kadar zeki
olduğumu büyük ölçüde
değiştirme şansım var.

46. Okulla ilgili
görevlerin/işlerin sebep
olduğu baskıyla başa
çıkmakta iyi olduğumu
düşünüyorum.

47. İngilizce derslerinin
konularını istediğim kadar
anlayamamaktan bazen
korkuyorum.

48. İngilizce dersi için
gereken bütün bilgileri
öğrenemeyebileceğimden
sık sık endişe duyarım.

49. Gönderilerimde
dilbilgisi hataları yapmam
durumunda insanların
Facebook ve/veya diğer
sosyal medya profillerimde
benimle dalga
geçmesinden endişe
duyarım.

50. İngilizce yazmaya veya
konuşmaya çekinirim
çünkü yapacağım hataların
küçük düşürücü bir şekilde
düzeltilmesinden korkarım.

51. Var olan zeka seviyem
ne olursa olsun, bu
seviyede bir miktar
değişiklik yapabilirim.

52. Aldığım kötü bir notun
kendime güvenimi
etkilemesine izin vermem.

-
53. İngilizce derslerinde mümkün olduğunca çok şey öğrenmek isterim.
54. İngilizce derslerinin içeriğini mümkün olduğunca iyi anlamak benim için önemlidir.
55. Gelecekteki kariyerimi ne zaman düşünsem, kendimi İngilizce'yi kullanırken hayal ediyorum.
56. Kendimi yabancı arkadaşlarımla İngilizce konuşurken hayal edebiliyorum.
57. İngilizce derslerinde sunulan konular ve materyaller hakkında tamamen yeterli olmayı çok isterim.
58. İngilizce derslerinde kötü performans sergilemekten çekiniyorum.
59. Kendimi anadili İngilizce olan kişilerle etkili şekilde İngilizce iletişim kurarken hayal edebiliyorum.
60. Kendimi anadili İngilizce olan biri gibi İngilizce konuşurken hayal edebiliyorum.
61. İngilizce derslerindeki hedefim kötü performans sergilemekten kaçınmaktır.
62. İngilizce derslerinde beni asıl motive eden kötü performans sergileme korkusudur.
63. Kendimi akıcı bir şekilde İngilizce mailler/mektuplar yazarken hayal edebiliyorum.
64. İngilizce öğrenmek gereklidir çünkü çevremdeki insanlar benden bunu bekliyor.
65. İngilizce öğrenmek

önemlidir çünkü saygı
duyduğum insanlar benden
bunu bekliyor.

66. Eğer İngilizce
öğrenmeyi başaramazsam,
çevremdeki insanları hayal
kırıklığına uğrattırım.

67. İngilizce çalışmak
benim için önemlidir
çünkü bence eğitimli biri
İngilizce konuşabilmelidir.

68. İngilizce çalışmak
benim için önemlidir
çünkü İngilizce bilirsem
diğer insanlar bana daha
çok saygı gösterecektir.



Demografik Sorular:

69. Lütfen öğrenci numaranızı yazınız.

70. Lütfen email adresinizi yazınız.

71. Yaş aralığınızı işaretleyiniz.

18-24

25-34

35-44

45-54

55-64

65-74

75 ve üstü

72. Cinsiyetinizi seçiniz?

Erkek

Kadın

Diğer

73. Nerelisiniz?

▼ Afganistan (1) ... Zimbabve (1357)

74. Lütfen şu anki eğitim durumunuz hakkında bilgi veriniz.

- Hazırlık okulu öğrencisiyim.
- Lisans öğrencisiyim.
- Hazırlık yada Lisans öğrencisi değilim.

75. Hazırlık sınıfında tekrar eden öğrenci misiniz?

- Evet
- Hayır

Appendix B

Survey 1 (English Version)

Dear Participant,

The aim of this study is to understand motivations, goals and academic resilience of students of English courses. To that end, your careful completion of the questionnaire honestly will contribute to obtaining valuable data, which is crucial for more accurate findings.

In this study, you will be asked to take an online survey that includes 68 items. There are also a few demographic questions that we would like you to answer about your gender, age, and your nationality. No names will be used, but we will obtain your student number to match your grades with your motivations, goals and academic resilience in learning English. All information including your ID numbers will be kept strictly confidential and will be used just for research purposes, including conference presentations and publications.

There is no right or wrong answer but you will just rate your level of agreement with each statement in this survey. The questions you will be asked in this survey are simply about your opinions, and do not measure anything else. Refusing to participate in the survey or withdrawing from the study at any time does not cause you to have any problems in your relations with your institution. You can complete the survey in English or Turkish.

At the end of the semester, it may be necessary to contact you through your email so that you can report your grades. When the data collection process is completed, there will be a raffle among the participants providing reliable responses. 5 winners of the raffle will be granted 200 TLs.

This survey is implemented as a part of a PhD thesis at Bilkent University, written by Sinem MADEN, and supervised by Dr. Hilal PEKER. It will last for 10-15 minutes. The answers for each item may be different for each student. Therefore, please provide the correct and valid answers for you.

If you have any questions or concerns about any part of this study, please contact Sinem Maden at sinem.maden@bilkent.edu.tr or Assistant Professor Hilal Peker at hilal.peker@bilkent.edu.tr. Thank you very much in advance for your invaluable time and cooperation.

Please click on the arrow below if you meet the criteria and agree to participate!

Criteria:

1. I am over 18.
2. I have read and understood the information about this study.
3. I understand that I can withdraw from the study without any consequences at anytime.
4. I understood who would have access to identifying information provided what will happen to the data at the end of the project.
5. I understand that this project has been reviewed by and received ethical clearance through Bilkent University Research Ethics Committee.

SURVEY ITEMS (English Version)

Please read and imagine the scenario below. Complete the following items based on your feelings in that situation.

You have received a grade for an assignment in your English courses and it is a 'fail'. The grades you received for two other recent assignments (e.g., an essay and a reflection task) were also poorer than you would expect. You care about your grades as they will be a problem for your career plans and your family will be disappointed at you. The feedback you received from the instructor for your performance is quite important. The feedback emphasizes your weaknesses, but it also includes ways to improve your performance.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
1. I wouldn't accept the instructor's feedback.					
2. I would use the feedback to improve my work.					
3. I would just stop studying.					
4. I would use the situation to motivate myself.					
5. I would change my career plans.					
6. I would probably get annoyed.					
7. I would begin to think my chances of success at university were poor.					
8. I would see the situation as a challenge.					
9. I would do my best to stop thinking negative thoughts.					
10. I would see the situation as temporary (i.e. something that wouldn't last forever).					
11. I would work harder.					
12. I would probably get depressed.					
13. I would try to think of new solutions.					
14. I would be very disappointed.					
15. I would blame the instructor (i.e. I would think					

the instructor is responsible from this negative situation).

16. I would keep trying.
17. I would not change my long-term goals and ambitions.
18. I would use my past successes to help motivate myself.
19. I would begin to think my chances of getting the job I want were poor.
20. I would start to monitor and evaluate my achievements and effort.
21. I would ask for help from my instructors.
22. I would give myself encouragement.
23. I would stop myself panicking.
24. I would try different ways to study.
25. I would set my own goals for achievement.
26. I would look for encouragement from my family and friends.
27. I would try to think more about my strengths and weaknesses to help me work better.
28. I would feel like everything was destroyed and was going wrong.
29. I would start to impose rewards and punishments on myself depending on my performance.
30. I would look forward to showing that I can improve my grades.

Please think about your English performance while reading the items below.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
31. I have a certain amount of intelligence and I really can't do much to change it.					
32. My intelligence is something about me that I can't change very much.					
33. I am good at dealing with setbacks (e.g., bad mark, negative feedback on my work).					
34. It is important for me to do better than other students in English courses.					
35. It is important for me to do well compared to others in English courses.					
36. I am afraid of being humiliated/teased (i.e. feeling shame about being unsuccessful) due to my limited use of English in English courses.					
37. I am afraid of not using English accurately because somebody teased me (i.e. caused me to feel ashamed) about my English before.					
38. No matter who I am, I can significantly change my intelligence level.					
39. To be honest, I can't really change how intelligent I am.					
40. I don't let study stress get on top of me.					
41. My goal in English courses is to get a better grade than most of the other students.					
42. I am worried that I may not learn as much as my potential in English courses.					
43. I have to improve my English because I don't					

-
- want to be criticized or harassed by others (i.e. feeling worried) about my English level.
44. I worry that people might make fun of me if I can't speak English accurately.
 45. I can always extensively change how intelligent I am.
 46. I think I am good at dealing with schoolwork pressures.
 47. Sometimes I am afraid that I may not understand the content of English courses as extensively as I'd like.
 48. I am often concerned that I may not learn all the necessary knowledge in English courses.
 49. I am worried that people will make fun of me on Facebook and/or other social media profiles if I make some grammatical mistakes on my posts.
 50. I am afraid of writing or speaking in English because I fear that I will be corrected in a teasing/humiliating (i.e. causing shame) way.
 51. No matter how much intelligence I have, I can always change it quite a bit.
 52. I don't let a bad mark affect my confidence.
 53. I want to learn as much as possible from English courses.
 54. It is important for me to understand the content of English courses as extensively as possible.
 55. Whenever I think of my future career, I imagine myself using English.
 56. I can imagine myself speaking English with international friends or

-
- colleagues.
57. I desire to completely master the material presented in English courses.
 58. I just want to avoid doing poorly in English courses.
 59. I can imagine myself using English effectively for communicating with the native speakers.
 60. I can imagine myself speaking English as if I were a native speaker of English.
 61. My goal in English courses is to avoid performing poorly.
 62. My fear of performing poorly in English courses is often what motivates me.
 63. I can imagine myself writing emails/letters fluently in English.
 64. Learning English is necessary because people surrounding me expect me to do so.
 65. Learning English is important because the people I respect think that I should do it.
 66. If I fail to learn English, I'll be letting other people down (i.e. cause disappointment for people).
 67. Studying English is important to me because an educated person should be able to speak English.
 68. Studying English is important to me because other people will respect me more if I know English.

Demographic Questions:

69. Please write your student number.

70. Please write your email address.

71. What is your age range?

18-25

25-35

35-45

45-55

55-65

65-75

75 and over

72. What is your gender?

Male

Female

Other

73. . Which country are you from?

▼ Afghanistan (1) ... Zimbabwe (1357)

74. Please give information about your current education.

- I am a student at Preparatory School.
- I am a student at undergraduate level.
- I am neither at Preparatory School nor at undergraduate level.

75. Are you repeating Preparatory School?

- Yes
- No

Appendix C

Survey 2 (Turkish Version)

Değerli katılımcı,

Bu araştırmanın amacı İngilizce derslerini almakta olan öğrencilerin dersle ilgili motivasyonlarını, hedeflerini ve zorlukları aşma potansiyellerini belirlemek ve anlamaktır. Bu sebeple, verdiğiniz yanıtlar bu konuda önemli verilerin toplanmasına yardımcı olacaktır.

Bu ankette, çalışmamızın ikinci adımını oluşturan 4 maddeye yanıt vermeniz istenecektir. İsmi sorulmayacak, fakat öğrenci numaranız motivasyonunuz, hedefleriniz ve zorlukları aşma potansiyellerinizle ilişkilerine bakmak amacıyla istenecektir. Öğrenci numaranız dahil vereceğiniz bütün bilgiler tamamıyla gizli tutulacak ve sadece konferans sunumları ile yayınları da içeren araştırmalar maksadıyla kullanılacaktır.

Çalışmaya katılmak istememeniz yada çalışmadan çekilmek istemeniz kurumunuzla ilişkilerinizde bir sorun teşkil etmeyecektir. Anketi İngilizce yada Türkçe olarak doldurabilirsiniz.

Çalışmanın veri toplama aşaması tamamlandığında ankete güvenilir cevaplar veren katılımcılar arasında çekiliş yapılacaktır. Bu çekilişle belirlenen 5 katılımcıya 200 TL verilecektir.

Bu anket, Bilkent Üniversitesi'nde doktora öğrencisi olan Sinem MADEN'in (), Dr. Öğretim Üyesi Hilal PEKER () tarafından yürütülen doktora tezi kapsamında yapılmaktadır. Anketin toplam süresi yaklaşık 2-3 dakikadır. Ankette yer alan soruların cevapları kişiden kişiye değişebilir. O nedenle lütfen kendi açınızdan en doğru ve geçerli cevapları veriniz.

Anketin herhangi bir bölümüyle alakalı sorularınız veya endişeleriniz olması durumunda, lütfen Sinem Maden () veya Dr. Hilal Peker () ile iletişime geçiniz. Bu akademik çalışmaya ayırdığınız zaman ve katkılarınız için çok teşekkür ederiz.

Lütfen aşağıdaki kriterleri karşılıyor ve ankete katılmak istiyorsanız aşağıdaki ok işareti basınız.

Kriterler:

- 1) 18 yaşından büyüğüm.
- 2) Bu çalışmayla ilgili bilgilendirmeyi okudum ve anladım.
- 3) Çalışmanın herhangi bir aşamasında çalışmadan ayrılabilceğimi anladım.
- 4) Projenin sonunda elde edilecek verilerin ne amaçla ve kimler tarafından kullanılabileceğini anladım.
- 5) Bu çalışmanın etik açıdan Bilkent Üniversitesi Etik Komitesi tarafından incelendiğini ve uygun bulunduğunu anladım.
- 6) Bu çalışmayla ilgili hazırlanmış olan ilk ankete katıldım.



Dönem Sonu Not Bildirim Anketi-Türkçe Form

EI1. Lütfen öğrenci numaranızı yazınız.

EI2. Lütfen mail adresinizi yazınız.

S1. Hazırlık okulunda son bulunduğunuz kuru/seviyeyi geçtiniz mi?

Geçtim.

Kaldım.

S2. Eğer son olarak girdiğiniz sınav (ECA veya PAE) puanınızı biliyorsanız, lütfen puanınızı yazınız.

****** Eğer sınav puanınızı bilmiyorsanız lütfen bu maddeyi atlayın.

S3. Sınavdan önce hangi seviyede/kurdaydınız?

Temel Düzey

Orta Öncesi Düzey

Orta Düzey

Orta Üstü Düzey

Bölüm Öncesi Düzey

S4. Şimdi sınav sonrası hangi seviyede/kurdasınız?

Temel Düzey

Orta Öncesi Düzey

Orta Düzey

Orta Üstü Düzey

Bölüm Öncesi Düzey

Hazırlık Eğitimini bitirdim.

Appendix D

Survey 2 (English Version)

Dear Participant,

The aim of this study is to understand motivations, goals and academic resilience of students of English courses. To that end, your careful completion of the questionnaire honestly will contribute to obtaining valuable data, which is crucial for more accurate findings.

In this survey, you will give response to 4 items as the second step of the study. No names will be used, but we will obtain your student number to match your grades with your motivations, goals and academic resilience in learning English. All information including your ID numbers will be kept strictly confidential and will be used just for research purposes, including conference presentations and publications.

Refusing to participate in the survey or withdrawing from the study at any time does not cause you to have any problems in your relations with your institution. You can complete the survey in English or Turkish.

When the data collection process is completed, there will be a raffle among the participants providing reliable responses. 5 winners of the raffle will be granted 200 TLs.

This survey is implemented as a part of a PhD thesis at Bilkent University, written by Sinem MADEN, and supervised by Dr. Hilal PEKER. It will last for 2-3 minutes. The answers for each item may be different for each student. Therefore, please provide the correct and valid answers for you.

If you have any questions or concerns about any part of this study, please contact Sinem Maden at sinem.maden@bilkent.edu.tr or Assistant Professor Hilal Peker at hilal.peker@bilkent.edu.tr

Thank you very much in advance for your invaluable time and cooperation.

Please click on the arrow below if you meet the criteria and agree to

participate! Criteria:

1. I am over 18.
2. I have read and understood the information about this study.
3. I understand that I can withdraw from the study without any consequences at anytime.
4. I understood who would have access to identifying information provided what will happen to the data at the end of the project.
5. I understand that this project has been reviewed by and received ethical clearance through Bilkent University Research Ethics Committee.
6. I have completed the first survey related to that study.

EI1. Please write your student number.

EI2. Please write your email address.

Q1. Did you pass or fail the recent level at Prep school?

☐ Passed (1)

☐ Failed (2)

Q2. If you know your recent exam (ECA/PAE) score, please enter the score below.

*** If you don't know your exam score, please skip this item.

Q3. Which level were you at before the exam in the previous semester?

☐ Elementary (1)

☐ Pre-intermediate (2)

☐ Intermediate (3)

☐ Upper-intermediate (4)

☐ Pre-faculty (5)

Q4. Which level are you at now after the exam?

☐ Elementary (1)

☐ Pre-intermediate (2)

☐ Intermediate (3)

☐ Upper-intermediate (4)

☐ Pre-faculty (5)

☐ I completed Prep education. (6)

Appendix E
Model 1 Analysis Tables



E.1. Initial Outer Loadings

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
AB1	.81							
AB2	.78							
AB3	.83							
AB4	.84							
FM1				.84				
FM2				.90				
FM3				.80				
FM4				.87				
FM5				.88				
FM6				.70				
MASAP1					.87			
MASAP2					.86			
MASAP3					.69			
MASAV1						.81		
MASAV2						.84		

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
MASAV3						.89		
NEG1_R		.29						
NEG2_R		.60						
NEG3_R		.63						
NEG4_R		.51						
NEG5_R		.53						
NEG6_R		.64						
NEG7_R		.66						
PERAPP1							.92	
PERAPP2							.91	
PERAPP3							.90	
PERAV1								.94
PERAV2								.58
PERAV3								.60
PER1_R		.22			.77			
PER2		.45			.76			
PER3_R		-.45			.81			

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
PER4		.59			.77			
PER5_R		-.32			.73			
PER6		-.48				.24		
PER7		.71				.77		
PER8		.62				.80		
PER9		.64				.75		
PER10		.64				.62		
PER11_R		-.31				.76		
PER12		.68				.74		
PER13		.56					.83	
PER14		.11					.84	
REF1		.46						
REF2		.43						
REF3		.36					.79	
REF4		.71					.03	
REF5		.51					.58	
REF6		.59						

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
REF7		-.12						.61
REF8		.49						.43
REF9		.22						.70
Academic Success			1.00					.52

E.2. Initial Latent Variable Correlations

Construct	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
Academic Buoyancy	1.00							
Academic Resilience	.69	1.00						
Academic Success	.18	.18	1.00					
Fixed Mindset	-.31	-.40	-.13	1.00				
Mastery Approach Goals	.10	.27	.05	-.09	1.00			
Mastery Avoidance Goals	-.38	-.36	-.24	.25	.02	1.00		
Performance Approach Goals	.10	.17	.12	-.06	.07	-.03	1.00	
Performance Avoidance Goals	-.26	-.20	-.09	.13	-.28	.33	.13	1.00

E.3. Initial Composite Reliability and Convergent Validity Values

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Academic Buoyancy	.83	.84	.89	.66
Academic Resilience	.82	.92	.85	.23
Academic Success	.00	1.00	1.00	1.00
Fixed Mindset	.91	.92	.93	.69
Mastery Approach Goals	.73	.74	.85	.66
Mastery Avoidance Goals	.80	.82	.88	.71
Performance Approach Goals	.90	.94	.94	.83
Performance Avoidance Goals	.61	1.00	.76	.52

E.4. Initial Cross-loadings Table

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
AB1	.81	.58	.13	-.33	.09	-.32	.11	-.24
AB2	.78	.51	.07	-.20	.03	-.23	.03	-.12
AB3	.83	.55	.18	-.25	.17	-.33	.11	-.22
AB4	.84	.59	.18	-.24	.02	-.35	.08	-.26
FM1	-.28	-.37	-.14	.84	-.11	.23	-.05	.21
FM2	-.25	-.34	-.15	.90	-.06	.23	-.05	.14
FM3	-.24	-.26	-.10	.80	-.06	.17	-.09	.02
FM4	-.26	-.33	-.15	.87	.01	.28	-.03	.09
FM5	-.30	-.34	-.09	.88	-.09	.16	-.08	.06
FM6	-.23	-.32	-.02	.70	-.13	.17	.01	.08
MASAP1	.10	.24	.07	-.05	.87	.00	.07	-.09
MASAP2	.09	.21	.05	-.04	.86	-.02	.09	-.08
MASAP3	.47	.21	-.00	-.12	.69	.07	.02	.12
MASAV1	-.30	-.30	-.18	.25	-.09	.81	-.09	.25
MASAV2	-.27	-.23	-.19	.16	.12	.84	.04	.28

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
MASAV3	-.39	-.36	-.24	.23	.04	.89	-.02	.31
NEG1_R	.11	.29	.05	.01	.16	-.12	.06	-.01
NEG2_R	.49	.60	.22	-.23	-.01	-.39	.12	-.17
NEG3_R	.46	.63	.18	-.18	.11	-.32	.10	-.18
NEG4_R	.40	.51	.10	-.13	-.07	-.29	.07	-.22
NEG5_R	.39	.53	.06	-.23	.01	-.23	.13	-.13
NEG6_R	.60	.64	.07	-.25	.05	-.31	.04	-.20
NEG7_R	.55	.66	.15	-.16	.07	.28	.12	-.20
PERAPP1	.07	.14	.10	-.07	.10	-.00	.92	.11
PERAPP2	.05	.12	.10	-.05	.10	-.02	.91	.12
PERAPP3	.13	.18	.13	-.05	.02	-.05	.90	.14
PERAV1	-.29	-.21	-.09	.15	-.01	.34	.09	.94
PERAV2	-.10	-.09	-.05	.09	.02	.11	.17	.58
PERAV3	-.09	-.07	-.03	.04	-.09	.18	.10	.60
PER1_R	.08	.22	.08	-.15	.12	-.10	-.03	-.03
PER2	.21	.45	.13	-.20	.32	-.10	.12	.05

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
PER3_R	-.19	-.45	-.14	.13	-.16	.10	-.06	.06
PER4	.35	.59	.11	-.20	.21	-.11	-.00	-.12
PER5_R	-.15	-.32	-.08	.16	-.05	.12	-.05	.10
PER6	-.38	-.48	-.14	-.20	-.09	.29	-.00	.19
PER7	.50	.71	.14	-.26	.19	-.16	.15	-.10
PER8	.47	.62	.10	-.24	.18	-.26	.11	-.14
PER9	.44	.64	.15	-.28	.26	-.23	.17	-.13
PER10	.37	.64	.01	-.26	.21	-.14	.12	-.11
PER11_R	-.14	-.31	-.09	.13	-.17	.07	.01	.05
PER12	.40	.68	.14	-.29	.24	-.24	.07	-.11
PER13	.38	.56	.34	-.21	.13	-.13	.06	-.08
PER14	.06	.11	.01	-.10	.18	-.04	.32	.18
REF1	.27	.46	.12	-.15	.13	-.12	.16	-.01
REF2	.23	.43	.04	-.22	.19	-.12	.13	.04
REF3	.17	.36	.07	-.21	.33	-.08	.12	-.01
REF4	.55	.71	.02	-.28	.20	.19	.13	-.10

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
REF5	.23	.51	.01	-.27	.16	-.09	-.01	-.09
REF6	.42	.59	.06	-.28	.24	-.12	.10	-.11
REF7	-.18	-.12	-.11	.09	.16	.13	-.03	.18
REF8	.22	.49	.02	-.26	.28	-.12	.05	-.01
REF9	.11	.22	.06	-.19	.13	-.03	.12	-.02
Academic Success	.18	.18	1.00	-.13	.05	-.24	.12	-.09

E.5. Initial Fornell-Larcker Values

Construct	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
Academic Buoyancy	.81							
Academic Resilience	.69	.51						
Academic Success	.18	.18	1.00					
Fixed Mindset	-.31	-.40	-.13	.83				
Mastery Approach Goals	.10	.27	.05	-.09	.81			
Mastery Avoidance Goals	-.38	-.36	-.24	.25	.02	.85		
Performance Approach Goals	.10	.17	.12	-.06	.07	-.03	.91	
Performance Avoidance Goals	-.26	-.20	-.09	.13	-.03	.33	.13	.72

E.6. Outer Loadings Table During and After the Removal of Problematic Items

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
AB1	.80							
AB2	.78							
AB3	.83							
AB4	.84							
FM1				.83				
FM2				.89				
FM3				.80				
FM4				.86				
FM5				.88				
FM6				.70				
MASAP1					.88			
MASAP2					.86			
MASAP3					.68			
MASAV1						.80		
MASAV2						.84		

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
MASAV3						.89		
NEG6_R		.68						
NEG7_R		.67						
PERAPP1							.92	
PERAPP2							.91	
PERAPP3							.91	
PERAV1								1.00
PER7		.75						
PER9		.71						
PER10		.69						
PER12		0.71						
REF4		0.78						
Academic Success			1.00					

E.7. Composite Reliability and Convergent Validity Values After Removing Low Loading Indicators

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Academic Buoyancy	.83	.83	.89	.66
Academic Resilience	.84	.84	.88	.51
Academic Success	.00	1.00	1.00	1.00
Fixed Mindset	.91	.92	.93	.69
Mastery Approach Goals	.73	.75	.85	.66
Mastery Avoidance Goals	.80	.83	.88	.71
Performance Approach Goals	.90	.95	.94	.83
Performance Avoidance Goals	.00	1.00	1.00	1.00

E.8. Outer Loadings After Removing Low Loading Indicators

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
AB1	.80							
AB2	.78							
AB3	.83							
AB4	.84							
FM1				.83				
FM2				.89				
FM3				.80				
FM4				.86				
FM5				.88				
FM6				.70				
MASAP1					.88			
MASAP2					.86			
MASAP3					.68			
MASAV1						.80		
MASAV2						.84		

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
MASAV3						.89		
NEG6_R		.68						
NEG7_R		.67						
PERAPP1							.92	
PERAPP2							.91	
PERAPP3							.91	
PERAV1								1.00
PER7		.75						
PER9		.71						
PER10		.69						
PER12		.71				.75		
REF4		.78				.64		
Academic Success			1.00			.76		

E.9. Heterotrait-Monotrait Ratio (HTMT) Before Bootstrapping

Construct	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
Academic Buoyancy								
Academic Resilience	.81							
Academic Success	.19	.15						
Fixed Mindset	.36	.41	.14					
Mastery Approach Goals	.14	.31	.06	.12				
Mastery Avoidance Goals	.46	.37	.27	.29	.13			
Performance Approach Goals	.11	.18	.13	.07	.10	.08		
Performance Avoidance Goals	.30	.22	.09	.15	.13	.38	.09	

E.10. Cross-loadings After Removing Low Loading Indicators

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
AB1	.80	.57	.13	-.33	.09	-.33	.11	-.28
AB2	.78	.53	.07	-.20	.03	-.24	.03	-.10
AB3	.83	.58	.18	-.25	.17	-.33	.11	-.23
AB4	.84	.57	.18	-.24	.03	-.35	.08	-.29
FM1	-.28	-.33	-.14	.83	-.11	.23	-.05	.20
FM2	-.25	.30	-.15	.89	-.06	.23	-.05	.14
FM3	-.24	-.23	-.10	.80	-.06	.18	-.09	.06
FM4	-.26	-.28	-.15	.86	.01	.28	-.03	.12
FM5	-.30	-.32	-.09	.88	-.09	.16	-.08	.10
FM6	-.23	-.31	-.02	.70	-.13	.17	-.01	.10
MASAP1	.10	.22	.07	-.05	.88	.00	.07	-.07
MASAP2	.09	.19	.05	-.04	.86	-.02	.08	-.07
MASAP3	.05	.18	-.00	-.12	.68	.07	.02	.12
MASAV1	-.30	-.25	-.18	.25	-.09	.80	-.09	.28
MASAV2	-.27	-.19	-.19	.16	.12	.84	.04	.29

Items	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
MASAV3	-.38	-.32	-.24	.23	.04	.89	-.02	.31
NEG6_R	.60	.68	.07	-.25	.05	-.31	.04	-.20
NEG7_R	.55	.67	.15	-.16	.07	-.28	.12	-.18
PERAPP1	.07	.12	.10	-.07	.10	-.00	.92	.07
PERAPP2	.06	.11	.10	-.05	.10	-.02	.91	.07
PERAPP3	.13	.19	.13	-.05	.02	-.05	.91	.10
PERAV1	-.28	-.21	-.09	.15	-.02	.34	.09	1.00
PER7	.50	.75	.14	-.26	.19	-.16	.15	-.10
PER9	.44	.71	.15	-.28	.26	-.23	.17	-.16
PER10	.37	.69	.01	-.26	.21	-.14	.12	-.12
PER12	.40	.71	.14	-.29	.24	-.24	.07	-.11
REF4	.55	.79	.02	-.28	.20	-.19	.13	-.15
Academic Success	.18	.14	1.00	-.13	.05	-.24	.12	-.09

E.11. Fornell-Larcker Values After Removing Low Loading Indicators

Construct	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
Academic Buoyancy	.81							
Academic Resilience	.69	.71						
Academic Success	.18	.14	1.00					
Fixed Mindset	-.31	-.36	-.13	.83				
Mastery Approach Goals	.10	.24	.05	-.09	.81			
Mastery Avoidance Goals	-.38	-.31	-.24	.25	.02	.85		
Performance Approach Goals	.10	.16	.12	-.06	.07	-.03	.91	
Performance Avoidance Goals	-.28	.21	-.09	.15	-.02	.34	.09	1.00

E.12. Inner Collinearity (VIF) Results

Construct	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
Academic Buoyancy			2.09					
Academic Resilience	1.34		2.14					
Academic Success								
Fixed Mindset	1.18	1.09	1.18		1.00	1.00	1.00	1.00
Mastery Approach Goals	1.08	1.01	1.08					
Mastery Avoidance Goals	1.26	1.20	1.30					
Performance Approach Goals	1.05	1.02	1.05					
Performance Avoidance Goals	1.17	1.16	1.19					

E. 13. Outer Collinearity (VIF) Results

Items	VIF
AB1	1.69
AB2	1.69
AB3	1.87
AB4	1.90
FM1	2.94
FM2	4.18
FM3	2.44
FM4	2.89
FM5	3.31
FM6	1.55
MASAP1	2.19
MASAP2	2.19
MASAP3	1.17
MASAV1	1.49

Items	VIF
MASAV2	1.94
MASAV3	1.97
NEG6_R	1.48
NEG7_R	1.56
PERAPP1	4.35
PERAPP2	4.17
PERAPP3	2.08
PERAV1	1.00
PER7	1.73
PER9	1.80
PER10	1.67
PER12	1.63
REF4	1.88
Academic Success	1.00

E. 14. 1st Bootstrapping Analysis with Significant and Non-significant Path Coefficients

Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Fixed Mindset -> Mastery Approach Goals	-0.09	-0.09	0.07	1.22	0.22
Fixed Mindset -> Mastery Avoidance Goals	0.25	0.26	0.06	4.62	0.00
Fixed Mindset -> Performance Approach Goals	-0.06	-0.06	0.06	0.97	0.33
Fixed Mindset -> Performance Avoidance Goals	0.15	0.15	0.05	2.80	0.01
Fixed Mindset -> Academic Resilience	-0.26	-0.26	0.05	5.21	0.00
Fixed Mindset -> Academic Buoyancy	-0.05	-0.05	0.05	1.02	0.31
Fixed Mindset -> Academic Success	-0.06	-0.06	0.06	0.94	0.35
Mastery Approach Goals -> Academic Resilience	0.21	0.22	0.05	4.29	0.00
Mastery Approach Goals -> Academic Buoyancy	-0.05	-0.05	0.05	1.16	0.25
Mastery Approach Goals -> Academic Success	0.04	0.05	0.05	0.77	0.44
Mastery Avoidance Goals -> Academic Resilience	-0.21	-0.21	0.05	4.28	0.00
Mastery Avoidance Goals -> Academic Buoyancy	-0.14	-0.14	0.04	3.23	0.00
Mastery Avoidance Goals -> Academic Success	-0.20	-0.20	0.05	3.78	0.00
Performance Approach Goals -> Academic Resilience	0.13	0.14	0.05	2.79	0.00
Performance Approach Goals -> Academic Buoyancy	0.01	0.01	0.04	0.17	0.87

Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Performance Approach Goals -> Academic Success	0.11	0.11	0.05	2.05	0.04
Performance Avoidance Goals -> Academic Resilience	-0.10	-0.11	0.05	2.05	0.04
Performance Avoidance Goals -> Academic Buoyancy	-0.10	-0.10	0.04	2.46	0.01
Performance Avoidance Goals -> Academic Success	-0.01	-0.01	0.06	0.10	0.92
Academic Resilience -> Academic Buoyancy	0.62	0.62	0.05	13.63	0.00
Academic Resilience -> Academic Success	-0.04	-0.04	0.08	0.44	0.66
Academic Buoyancy -> Academic Success	0.09	0.09	0.08	1.13	0.26

E. 15. Final Bootstrapping Analysis with T statistics

Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Fixed Mindset -> Mastery Avoidance Goals	0.26	0.26	0.05	4.72	0.00
Fixed Mindset -> Performance Avoidance Goals	0.15	0.15	0.06	2.74	0.01
Fixed Mindset -> Academic Resilience	-0.26	-0.26	0.05	5.26	0.00
Mastery Approach Goals -> Academic Resilience	0.21	0.22	0.05	4.32	0.00
Mastery Avoidance Goals -> Academic Resilience	-0.21	-0.21	0.05	4.21	0.00
Mastery Avoidance Goals -> Academic Buoyancy	-0.15	-0.15	0.05	3.36	0.02
Mastery Avoidance Goals -> Academic Success	-0.24	-0.24	0.05	5.21	0.00
Performance Approach Goals -> Academic Resilience	0.13	0.14	0.05	2.83	0.01
Performance Approach Goals -> Academic Success	0.12	0.12	0.05	2.18	0.03
Performance Avoidance Goals -> Academic Resilience	-0.10	-0.10	0.05	2.05	0.04
Performance Avoidance Goals -> Academic Buoyancy	-0.10	-0.10	0.04	2.48	0.01
Academic Resilience -> Academic Buoyancy	0.62	0.62	0.04	15.87	0.00

E. 16. Final Bootstrapping Analysis with Significant Path coefficients

Construct	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
Academic Buoyancy								
Academic Resilience	0.62							
Academic Success								
Fixed Mindset		-0.26				0.26		0.15
Mastery Approach Goals		0.22						
Mastery Avoidance Goals	-0.15	-0.21	-0.24					
Performance Approach Goals			0.12					
Performance Avoidance Goals	-0.10	-0.10						

E. 17. Total Effects

Construct	Academic Buoyancy	Academic Resilience	Academic Success	Fixed Mindset	Mastery Approach Goals	Mastery Avoidance Goals	Performance Approach Goals	Performance Avoidance Goals
Academic Buoyancy								
Academic Resilience	0.62							
Academic Success								
Fixed Mindset	-0.26	-0.33	-0.06			0.26		0.15
Mastery Approach Goals	0.14	0.22						
Mastery Avoidance Goals	-0.28	-0.21	-0.24					
Performance Approach Goals	0.09	0.14	0.12					
Performance Avoidance Goals	-0.17	-0.10						

Appendix F
Model 2 Analysis Tables



F.1. Initial Outer Loadings

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
AB1	0.81						
AB2	0.78						
AB3	0.83						
AB4	0.84						
FM1					0.84		
FM2					0.90		
FM3					0.79		
FM4					0.86		
FM5					0.87		
FM6					0.69		
Feared1				0.73			
Feared2				0.72			
Feared3				0.63			
Feared4				0.85			
Feared5				0.73			
Feared6				0.81			

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Ideal1						0.66	
Ideal2						0.74	
Ideal3						0.83	
Ideal4						0.79	
Ideal5						0.83	
NEG1_R		0.28					
NEG2_R		0.62					
NEG3_R		0.64					
NEG4_R		0.53					
NEG5_R		0.54					
NEG6_R		0.65					
NEG7_R		0.67					
Ought1							0.82
Ought2							0.83
Ought3							0.84
Ought4							0.11
Ought5							0.63

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
PER1_R		0.22					
PER2		0.44					
PER3_R		-0.45					
PER4		0.58					
PER5_R		-0.32					
PER6		-0.48					
PER7		0.70					
PER8		0.62					
PER9		0.64					
PER10		0.64					
PER11_R		-0.31					
PER12		0.68					
PER13		0.56					
PER14		0.08					
REF1		0.45					
REF2		0.42					
REF3		0.35					

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
REF4		0.71					
REF5		0.50					
REF6		0.58					
REF7		-0.14					
REF8		0.48					
REF9		0.20					
Academic Success			1.00				

F.2. Initial Latent Variable Correlations

Construct	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Academic Buoyancy	1.00						
Academic Resilience	0.69	1.00					
Academic Success	0.18	0.18	1.00				
FL2S	-0.37	-0.37	-0.17	1.00			
Fixed Mindset	-0.31	-0.40	-0.13	0.16	1.00		
IL2S	0.28	0.33	-0.05	-0.22	-0.24	1.00	
OL2S	-0.18	-0.27	-0.10	0.44	0.20	-0.02	1.00

F.3. Initial Composite Reliability and Convergent Validity Values

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Academic Buoyancy	.83	0.84	0.89	0.66
Academic Resilience	.82	0.92	0.85	0.26
Academic Success	.00	1.00	1.00	1.00
FL2S	.84	0.86	0.88	0.56
Fixed Mindset	.91	0.92	0.93	0.69
IL2S	.84	0.92	0.88	0.60
OL2S	.74	0.83	0.81	0.50

F.4. Initial Cross-loadings Table

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
AB1	0.80	0.58	0.13	-0.29	-0.33	0.27	-0.21
AB2	0.78	0.52	0.07	-0.23	-0.20	0.15	-0.07
AB3	0.83	0.55	0.18	-0.32	-0.25	0.24	-0.11
AB4	0.84	0.60	0.18	-0.36	-0.24	0.24	-0.18
FM1	-0.28	-0.37	-0.14	0.25	0.84	-0.23	0.27
FM2	-0.25	-0.34	-0.15	0.16	0.90	-0.19	0.21
FM3	-0.24	-0.25	-0.10	0.00	0.79	-0.19	0.04
FM4	-0.26	-0.33	-0.15	0.14	0.86	-0.17	0.19
FM5	-0.30	-0.33	-0.09	0.08	0.87	-0.22	0.11
FM6	-0.23	-0.32	-0.02	0.09	0.69	-0.16	0.08
Feared1	-0.29	-0.25	-0.09	0.73	0.15	-0.14	0.31
Feared2	-0.22	-0.27	-0.11	0.72	0.11	-0.24	0.33
Feared3	-0.17	-0.16	-0.16	0.63	0.10	0.02	0.47
Feared4	-0.32	-0.27	-0.13	0.85	0.16	-0.22	0.42
Feared5	-0.35	-0.38	-0.17	0.73	0.07	-0.09	0.25
Feared6	-0.28	-0.29	-0.12	0.81	0.13	-0.30	0.29

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Ideal1	0.08	0.12	-0.01	-0.09	-0.13	0.66	0.03
Ideal2	0.12	0.16	-0.07	-0.12	-0.17	0.74	0.02
Ideal3	0.22	0.20	-0.00	-0.22	-0.13	0.83	-0.00
Ideal4	0.20	0.26	0.02	-0.14	-0.19	0.79	-0.01
Ideal5	0.33	0.38	0.01	-0.23	-0.24	0.83	-0.06
NEG1_R	0.11	0.28	0.05	-0.12	0.01	0.04	0.03
NEG2_R	0.49	0.61	0.22	-0.30	-0.24	0.12	-0.25
NEG3_R	0.46	0.64	0.18	-0.33	-0.18	0.12	-0.18
NEG4_R	0.40	0.53	0.10	-0.29	-0.13	0.04	-0.23
NEG5_R	0.39	0.54	0.06	-0.21	-0.23	0.18	-0.30
NEG6_R	0.60	0.65	0.08	-0.31	-0.25	0.12	-0.20
NEG7_R	0.55	0.67	0.15	-0.30	-0.16	0.21	-0.25
Ought1	-0.12	-0.19	-0.00	0.37	0.16	-0.02	0.82
Ought2	-0.11	-0.16	-0.07	0.30	0.10	0.01	0.83
Ought3	-0.19	-0.27	-0.13	0.38	0.20	-0.09	0.84
Ought4	-0.03	-0.04	-0.02	-0.00	-0.06	0.31	0.11
Ought5	-0.12	-0.17	-0.07	0.32	0.11	0.15	0.63

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
PER1_R	0.08	-0.22	0.08	-0.12	-0.15	0.01	-0.13
PER2	0.21	0.44	0.13	-0.05	-0.20	0.20	-0.16
PER3_R	-0.19	-0.45	-0.14	0.14	0.13	-0.06	0.12
PER4	0.35	0.58	0.11	-0.21	-0.20	0.15	-0.06
PER5_R	-0.15	-0.32	-0.08	0.12	0.16	-0.08	0.11
PER6	-0.38	-0.48	-0.14	0.26	0.20	-0.13	0.12
PER7	0.50	0.70	0.14	-0.16	-0.26	0.21	-0.11
PER8	0.46	0.62	0.10	-0.27	-0.24	0.24	-0.20
PER9	0.44	0.64	0.15	-0.26	0.28	0.35	-0.13
PER10	0.37	0.64	0.01	-0.22	-0.26	0.26	-0.14
PER11_R	-0.14	-0.31	-0.09	0.09	0.14	-0.16	0.16
PER12	0.40	0.68	0.14	-0.27	-0.29	0.25	-0.16
PER13	0.38	0.56	0.11	-0.19	-0.21	0.17	-0.14
PER14	0.01	0.08	0.01	0.19	-0.10	0.25	0.32
REF1	0.27	0.45	0.12	-0.09	-0.15	0.14	-0.03
REF2	0.23	0.42	0.04	-0.05	-0.22	0.18	-0.03
REF3	0.17	0.35	0.07	-0.09	-0.21	0.19	-0.09

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
REF4	0.55	0.71	0.02	-0.20	-0.28	0.28	-0.03
REF5	0.23	0.50	0.01	-0.12	-0.27	0.20	-0.16
REF6	0.42	0.58	0.06	-0.15	-0.27	0.29	-0.14
REF7	-0.18	-0.14	-0.11	0.20	0.10	0.02	0.20
REF8	0.22	0.48	0.02	-0.13	-0.26	0.18	-0.12
REF9	0.11	0.20	0.06	0.12	-0.18	0.19	0.18
Academic Success	0.18	0.18	1.00	-0.17	-0.13	-0.01	-0.10

F.5. Initial Fornell-Larcker Values

Construct	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Academic Buoyancy	0.81						
Academic Resilience	0.69	0.51					
Academic Success	0.18	0.18	1.00				
FL2S	-0.37	-0.37	-0.17	0.75			
Fixed Mindset	-0.31	-0.40	-0.13	0.16	0.83		
IL2S	0.28	0.33	-0.01	-0.22	-0.24	0.77	
OL2S	-0.18	-0.27	-0.10	0.44	0.20	-0.02	0.71

F.6. Outer Loadings Table During and After the Removal of Problematic Items

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
AB1	0.80						
AB2	0.78						
AB3	0.84						
AB4	0.84						
FM1					0.84		
FM2					0.90		
FM3					0.79		
FM4					0.86		
FM5					0.88		
FM6					0.69		
Feared1				0.73			
Feared2				0.72			
Feared3				0.63			
Feared4				0.86			
Feared5				0.73			
Feared6				0.82			

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Ideal1						0.68	
Ideal2						0.74	
Ideal3						0.83	
Ideal4						0.79	
Ideal5						0.83	
NEG6_R		0.68					
NEG7_R		0.67					
Ought1							0.82
Ought2							0.83
Ought3							0.84
Ought5							0.64
PER7		0.75					
PER9		0.71					
PER10		0.69					
PER12		0.71					
REF4		0.78					
Academic Success			1.00				

F. 7. Composite Reliability and Convergent Validity Values After Removing Low Loading Indicators

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Academic Buoyancy	.83	0.83	0.89	0.66
Academic Resilience	.84	0.84	0.88	0.51
Academic Success	.00	1.00	1.00	1.00
FL2S	.84	0.86	0.88	0.56
Fixed Mindset	.91	0.92	0.93	0.69
IL2S	.84	0.83	0.88	0.60
OL2S	.80	0.91	0.87	0.62

F. 8. Outer Loadings After Removing Low Loading Indicators

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
AB1	0.80						
AB2	0.78						
AB3	0.84						
AB4	0.84						
FM1					0.84		
FM2					0.90		
FM3					0.79		
FM4					0.86		
FM5					0.88		
FM6					0.69		
Feared1				0.73			
Feared2				0.72			
Feared3				0.63			
Feared4				0.86			
Feared5				0.73			
Feared6				0.82			

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Ideal1						0.68	
Ideal2						0.74	
Ideal3						0.83	
Ideal4						0.79	
Ideal5						0.83	
NEG6_R		0.68					
NEG7_R		0.67					
Ought1							0.82
Ought2							0.83
Ought3							0.84
Ought5							0.64
PER7		0.75					
PER9		0.71					
PER10		0.69					
PER12		0.71					
REF4		0.78					
Academic Success			1.00				

F. 9. Heterotrait-Monotrait Ratio (HTMT) Before Bootstrapping

Construct	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Academic Buoyancy							
Academic Resilience	0.82						
Academic Success	0.19	0.15					
FL2S	0.42	0.40	0.19				
Fixed Mindset	0.36	0.41	0.14	0.18			
IL2S	0.29	0.37	0.03	0.26	0.25		
OL2S	0.20	0.24	0.10	0.55	0.20	0.12	

F. 10. Cross-loadings After Removing Low Loading Indicators

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
AB1	0.80	0.57	0.13	-0.29	-0.33	0.27	-0.21
AB2	0.78	0.53	0.07	-0.23	-0.20	0.15	-0.07
AB3	0.84	0.58	0.18	-0.32	-0.25	0.24	-0.11
AB4	0.84	0.57	0.18	-0.36	-0.24	0.24	-0.19
FM1	-0.28	-0.33	-0.14	0.25	0.84	-0.23	0.26
FM2	-0.24	-0.30	-0.15	0.16	0.90	-0.19	0.21
FM3	-0.24	-0.23	-0.10	0.00	0.79	-0.19	0.04
FM4	-0.26	-0.28	-0.15	0.14	0.86	-0.17	0.19
FM5	-0.30	-0.32	-0.09	0.08	0.88	-0.22	0.10
FM6	-0.23	-0.31	0.02	0.09	0.69	-0.16	0.08
Feared1	-0.29	-0.20	0.09	0.73	0.15	-0.14	0.31
Feared2	-0.22	-0.27	-0.11	0.72	0.11	-0.23	0.32
Feared3	-0.17	-0.14	-0.16	0.63	0.10	0.02	0.47
Feared4	-0.32	-0.26	-0.13	0.86	0.16	-0.22	0.41
Feared5	-0.35	-0.34	-0.17	0.73	0.07	-0.09	0.26
Feared6	-0.28	-0.30	-0.12	0.82	0.13	-0.30	0.28

Items	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Ideal1	0.08	0.16	-0.01	-0.09	-0.13	0.68	0.05
Ideal2	0.12	0.19	-0.07	-0.13	-0.17	0.74	0.03
Ideal3	0.22	0.21	-0.00	-0.22	-0.13	0.83	0.01
Ideal4	0.19	0.26	0.02	-0.15	-0.19	0.79	0.00
Ideal5	0.33	0.37	0.01	-0.23	-0.24	0.83	-0.05
NEG6_R	0.60	0.68	0.07	-0.31	-0.25	0.12	-0.20
NEG7_R	0.55	0.67	0.15	-0.30	-0.16	0.20	-0.25
Ought1	-0.12	-0.15	-0.00	0.36	0.16	-0.02	0.82
Ought2	-0.10	-0.12	-0.07	0.30	0.10	0.01	0.83
Ought3	-0.19	-0.21	-0.13	0.38	0.19	-0.09	0.84
Ought5	-0.11	-0.11	-0.07	0.32	0.11	0.15	0.64
PER7	0.40	0.75	0.14	-0.16	-0.26	0.21	-0.11
PER9	0.44	0.71	0.15	-0.26	-0.28	0.35	-0.12
PER10	0.37	0.69	0.01	-0.22	-0.26	0.26	-0.13
PER12	0.40	0.71	0.14	-0.27	-0.29	0.25	-0.16
REF4	0.55	0.78	0.02	-0.20	-0.28	0.28	-0.03
Academic Success	0.18	0.14	1.00	-0.17	-0.13	-0.01	-0.09

F. 11. Fornell-Larcker Values After Removing Low Loading Indicators

Construct	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Academic Buoyancy	0.81						
Academic Resilience	0.69	0.71					
Academic Success	0.18	0.14	1.00				
FL2S	-0.37	-0.35	-0.17	0.75			
Fixed Mindset	-0.31	-0.36	-0.13	0.16	0.83		
IL2S	0.28	0.33	-0.01	-0.22	-0.24	0.78	
OL2S	-0.18	0.20	-0.09	0.44	0.19	-0.00	0.79

F. 12. Inner Collinearity (VIF) Results

Construct	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Academic Buoyancy			2.01				
Academic Resilience	1.35		2.10				
Academic Success							
FL2S	1.40	1.32	1.44				
Fixed Mindset	1.19	1.10	1.20	1.00		1.00	1.00
IL2S	1.19	1.12	1.19				
OL2S	1.29	1.29	1.29				

F. 13. Outer Collinearity (VIF) Results

Items	VIF
AB1	1.69
AB2	1.69
AB3	1.87
AB4	1.90
FM1	2.94
FM2	4.18
FM3	2.44
FM4	2.89
FM5	3.31
FM6	1.55
Feared1	1.66
Feared2	1.67
Feared3	1.47
Feared4	2.54
Feared5	1.49
Ideal1	1.57

Items	VIF
Ideal2	1.84
Ideal3	2.18
Ideal4	1.84
Ideal5	1.63
NEG6_R	1.48
NEG7_R	1.56
Ought1	2.73
Ought2	2.88
Ought3	1.50
Ought5	1.27
PER7	1.73
PER9	1.80
PER10	1.67
PER12	1.63
REF4	1.88
Academic Success	1.00

F. 14. 1st Bootstrapping Analysis with Significant and Non-significant Path Coefficients

Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Fixed Mindset -> IL2S	-0.24	-0.24	0.05	4.49	0.00
Fixed Mindset -> OL2S	0.19	0.20	0.05	3.84	0.00
Fixed Mindset -> FL2S	0.16	0.16	0.06	2.77	0.01
Fixed Mindset -> Academic Resilience	-0.26	-0.26	0.05	5.46	0.00
Fixed Mindset -> Academic Buoyancy	-0.07	-0.07	0.05	1.57	0.12
Fixed Mindset -> Academic Success	-0.10	-0.10	0.06	1.56	0.12
IL2S -> Academic Resilience	0.22	0.22	0.06	3.97	0.00
IL2S -> Academic Buoyancy	0.02	0.02	0.06	0.39	0.70
IL2S -> Academic Success	-0.09	-0.10	0.06	1.55	0.12
OL2S -> Academic Resilience	-0.05	-0.05	0.07	0.74	0.46
OL2S -> Academic Buoyancy	0.03	0.03	0.05	0.23	0.00
OL2S -> Academic Success	-0.20	-0.20	0.05	3.78	0.00
FL2S -> Academic Resilience	0.13	0.14	0.05	2.79	0.00
FL2S -> Academic Buoyancy	0.01	0.01	0.04	0.56	0.58
FL2S -> Academic Success	-0.14	-0.14	0.07	1.92	0.06

Academic Resilience -> Academic Buoyancy	0.61	0.62	0.05	13.25	0.00
Academic Resilience -> Academic Success	0.01	0.00	0.08	0.07	0.95
Academic Buoyancy -> Academic Success	0.12	0.12	0.08	1.52	0.13

F. 15. Final Bootstrapping Analysis with T statistics

Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Fixed Mindset -> IL2S	-0.24	-0.24	0.05	4.64	0.00
Fixed Mindset -> OL2S	0.19	0.21	0.04	4.39	0.00
Fixed Mindset -> FL2S	0.16	0.17	0.06	2.85	0.00
Fixed Mindset -> Academic Resilience	-0.27	-0.27	0.05	5.51	0.00
IL2S -> Academic Resilience	0.21	0.21	0.06	3.76	0.00
FL2S -> Academic Resilience	-0.26	-0.26	0.05	4.84	0.00
FL2S -> Academic Buoyancy	-0.15	-0.15	0.04	3.79	0.00
FL2S -> Academic Success	-0.13	-0.13	0.06	2.14	0.03
Academic Resilience -> Academic Buoyancy	0.64	0.64	0.04	17.87	0.00
Academic Buoyancy -> Academic Success	0.13	0.13	0.06	2.14	0.03

F. 16. Final Bootstrapping Analysis with Significant Path coefficients

Construct	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Academic Buoyancy			0.13				
Academic Resilience	0.64						
Academic Success							
FL2S	-0.15	-0.26	-0.13				
Fixed Mindset		-0.27		0.17		-0.24	0.21
IL2S		0.21					
OL2S							

F. 17. Total Effects

Construct	Academic Buoyancy	Academic Resilience	Academic Success	FL2S	Fixed Mindset	IL2S	OL2S
Academic Buoyancy			0.13				
Academic Resilience	0.64		0.08				
Academic Success							
FL2S	-0.31	-0.26	-0.17				
Fixed Mindset	-0.26	-0.36	-0.05	0.17		-0.24	0.21
IL2S	0.14	0.21	0.02				
OL2S							

APPENDIX G

Ethical Consent Approval Form



Bilkent Üniversitesi
Akademik İşler Rektör Yardımcılığı

Tarih : 6 Aralık 2019
Gönderilen : Sinem Maden
Tez Danışmanı : Hilal Peker
Gönderen : H
Konu : "Mindset Points, ..." çalışması etik kurul onayı

Üniversitemiz İnsan Araştırmaları Etik Kurulu, 6 Aralık 2019 tarihli görüşme sonucu, "Mindset Points, Achievement Goals, Academic Buoyancy, Academic Resilience and L2 Motivational Self System as a Predictor of Student Success in EMI Universities Preparatory Year English Language Programs" isimli çalışmanız kapsamında yapmayı önerdiğiniz etkinlik için etik onay vermiş bulunmaktadır. Onay, ekte verilmiş olan çalışma önerisi, çalışma yürütücüler, ve bilgilendirme formu için geçerlidir.

Bu onay, yapmayı önerdiğiniz çalışmanın genel bilim etiği açısından bir değerlendirmedir. Çalışmanızda, kurumunuzun değerlendirmesi dışında kalabilen özel etik ve yasal sınırlamalara uymakla ayrıca yükümlü olursunuz.

Etik Kurul Üyeleri:

Ünvan / İsim	Bölüm / Uzmanlık	İmza
1.		
2.		
3.		
4.		
5.		
Yö		
Yö		

Kurul karar/toplantı No: 2019_12_06_04

APPENDIX H**VITA****Education**

- 2016-2024 Ph.D. in Curriculum and Instruction, Bilkent University, Ankara.
- 2012-2015 M.A. in Curriculum and Instruction, Bilkent University, Ankara.
- 2007-2012 B.A. in American Culture and Literature, Bilkent University, Ankara.

Professional Career

- 2022-2023 English Instructor, Başkent University, Ankara.
- 2014-2022 English Instructor, Çankaya University, Ankara.