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Foreign Language Teaching Department

English Language Teaching Program

INVESTIGATING MINDSET, SELF-REGULATION, ACADEMIC SELF-CONCEPT, DMC,
AND ACADEMIC ACHIEVEMENT IN AN EFL SETTING

Emel KULAKSIZ

Ph.D. Dissertation

Ankara, 2023

With leadership, research, innovation, high quality education and change,

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YABANCI DİL OLARAK İNGİLİZCE ORTAMINDA ZİHNİYET, ÖZ DÜZENLEME,
AKADEMİK ÖZ KAVRAM, HEDEFLİ MOTİVASYON EĞİLİMLERİ VE AKADEMİK
BAŞARIYI ARAŞTIRMAK

Emel KULAKSIZ

Ph.D. Dissertation

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Acceptance and Approval

To the Graduate School of Educational Sciences,

This dissertation, prepared by **Emel KULAKSIZ** and entitled "Investigating Mindset, Self-Regulation, Academic Self-Concept, DMC, and Academic Achievement in an EFL Setting" has been approved as a thesis for the Degree of **Ph.D.** in the **Program of English Language Teaching** in the **Department of Foreign Language Teaching** by the members of the Examining Committee.

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This is to certify that this dissertation has been approved by the aforementioned examining committee members on 03/08/2023 in accordance with the relevant articles of the Rules and Regulations of Hacettepe University Graduate School of Educational Sciences, and was accepted as a **Ph.D. Dissertation** in the **Program of English Language Teaching** by the Board of Directors of the Graduate School of Educational Sciences from .../.../.....

Prof. Dr. İsmail Hakkı MİRİCİ

Director of Graduate School of Educational Sciences

Abstract

The aim of this study is to identify whether the participants hold a fixed mindset which has been proven to constitute an impediment to learning with several studies around the world or growth mindset which can promote learning. The study also intends to identify the relationship between growth mindset and fixed mindset and some affective factors like self-regulation (SR), directed motivational currents (DMC), and academic self-concept (ASC). The study was conducted in the 2021-2022 academic year at a state university with the participation of 355 preparatory class students who were chosen with convenience sampling. In the study which embraced the mixed method of research, data were collected through questionnaires comprising Likert scale and open-ended type of questions. The data were analyzed using content and statistical analyses, and the findings were listed narratively and numerically which were supported with direct quotations from the data. The findings of the study demonstrated that the participants showed mostly growth mindset rather than fixed mindset, but their mindset scores are slightly above the mixed mindset value, mindset scores are irrespective of gender and current proficiency level of English, their self-regulation has a full mediating role on the effect of mindset on DMC, and they revealed that students' DMC experience mostly starts with self-motivation, exams, future goals, for learning English, and influence of someone else respectively, and the participants would like to experience DMC again mostly because of reasons associated with achievements and positive outcomes, positive emotional loading and self-regulated strivings.

Keywords: fixed mindset, growth mindset, self-regulation, directed motivational currents, academic self-concept

Öz

Bu çalışmanın amacı, katılımcıların öğrenme için engel teşkil ettiği dünya genelinde pek çok çalışmayla saptanmış olan sabit zihniyete mi yoksa öğrenmeyi kolaylaştıran gelişim zihniyetine mi sahip olduklarını tespit etmektir. Çalışma ayrıca gelişim odaklı zihniyet ve sabit zihniyet ile öz düzenleme, akademik benlik kavramı ve hedefli motivasyon eğilimleri gibi duyuşsal faktörler arasındaki ilişkiyi de saptanmaya çalışmaktadır. Araştırma, 2021-2022 eğitim öğretim yılında İzmir'deki bir devlet üniversitesinde, 355 hazırlık sınıfı öğrencisinin katılımıyla yürütülmüş olup katılımcılar kolay ulaşılabilir örnekleme ile seçilmiştir. Karma yöntem benimsenmiş olan çalışmada, veriler Likert ölçeği ve açık uçlu soru türlerinden oluşan anketler yoluyla elde edilmiştir. Verilerin analizinde içerik analizi ve istatistiki analizler kullanılmış, analiz sonuçları sayısal biçimde ve anlatı biçiminde yazılarak doğrudan alıntılarla desteklenmiştir. Araştırma bulguları, katılımcıların çoğunlukla sabit zihniyettense gelişim zihniyeti gösterdiğini, fakat zihniyet puanlarının karışık zihniyet değerinden çok az yüksek olduğunu, zihniyet puanlarının cinsiyet ve şu anki İngilizce seviyesinden bağımsız olduğunu, öz düzenleme becerilerinin zihniyet türünün hedefli motivasyon eğilimlerine etkisinde tam aracılık rolü olduğunu göstermiş ve öğrencilerin hedefli motivasyon eğilimlerinin sırasıyla en çok kendini motive etme, sınavlar, gelecekteki hedefler, İngilizce öğrenme ve başka birinin etkisi olduğunu ve katılımcıların tekrar hedefli motivasyon eğilimi yaşama isteğinin en çok başarılar ve olumlu sonuçlarla, olumlu duygusal yüklemeye ve öz düzenleme çabalarıyla ilişkili nedenlerle olduğunu ortaya koymuştur.

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Symbols and Abbreviations

GM: Growth Mindset

FM: Fixed Mindset

ASC: Academic Self Concept

SR: Self-regulation

DMC: Directed Motivational Currents

ELT: English Language Teaching

L2: Second language

FL: Foreign language

SLA: Second language acquisition

CFA: Confirmatory Factor Analysis

SEM: Structural Equation Modelling

MC: Metacognitive

C: Cognitive

MA: Meta-affective

MS: Meta-sociocultural-interactive

S: Sociocultural-interactive

AC: Academic confidence

AE: Academic effort

Chapter 1

Introduction

This chapter includes six subsections. These subsections comprise the state of the problem, aim and significance of the study, research questions, assumptions, limitations, and definitions.

Statement of the Problem

Although they have been researched for a long time, the process of learning and education still maintains its up-to-date nature. In addition to their complicated nature, they vary significantly, depending on numerous factors. It is noticeable that many of these studies have focused on achievement and motivation. As Elliot and Dweck stated (2005), "...research on achievement and motivation has a long and distinguished history." The same applies to the language-learning process. Despite the fact that scientific research on language learning started in early dates, language learning is a topic that is influenced by a number of factors and comprises a large number of variables, and that is why it does not seem possible to attribute achievement or lack of achievement to a single factor. Therefore, it is supposed to be a logical and rational approach which aims to increase language learning success by focusing on factors with the highest rate of predicting success in language learning.

The studies of Dweck revealed that one of the significant factors in predicting student success in education is mindset (Dweck, 2010). According to Dweck, students have one of the two types of mindsets-one being growth mindset and the other one being fixed mindset. Students with a growth mindset believe that intelligence and their skills can be improved; as a result, they see each challenge as an opportunity to learn new things, take individual differences into consideration, compare their current performance or achievement with their previous achievements, and regard their mistakes not as a sign of being unsuccessful but as an opportunity for learning. On the other hand, studies have revealed that students with a

fixed mindset consider that intelligence and skills cannot be improved, tend to avoid challenges, attempt to give up and cheat when they face failure, and desire to be seen as successful rather than being successful through methods such as cheating.

Because of the point which our foreign language learning problem has reached as Turkish people, it is a common belief that we have serious problems in language learning as a nation. Therefore, many studies have been conducted in this research area. The fact that there are too many advertisements around with the theme “Would you like to learn English in three months?” and there is a demand for this gives rise to the idea that people are not aware of individual differences, tend to expect positive outcomes without much effort and in a short period of time, and avoid long and demanding learning processes, and eventually fail, which can stem from having a fixed mindset, not having good SR skills or experiencing lack of intense motivation.

Studies conducted by Dweck so far revealed that there is still hope for those with a fixed mindset, as a fixed mindset can be turned into a growth mindset by means of training students on a growth mindset, that is, an intervention on mindset. These studies demonstrated that students who previously had a fixed mindset and problems with school success had a growth mindset after a certain amount of training on the growth mindset, and as a result, their school success increased significantly. However, there are doubts about whether the impact of these interventions is permanent or temporary (lasting only for a short period of time). Moreover, considering that language learning is quite a complicated process, thinking that it can be attributed only to mindset can be oversimplifying the problem. For instance, during the learning process, it is also vital that the learners monitor, regulate, and control their learning in different ways such as cognitive or affective aspects. It is also widely known and accepted fact that motivation is needed both to initiate the learning process, and to sustain it, and this motivation is not adequate if it is short term or not intense. Therefore, as Sak and Gürbüz (2022) define, “DMCs are portrayed as highly intense and prolonged periods of motivation oriented to a much-desired goal of personal significance” (p.1), and the

more frequently and powerfully the learners experience directed motivational currents, the better outcomes they are likely to have at the end of the learning process. DMC, which is quite a novel topic in the field of language learning, is an issue which has been studied only limited times separately (Demir Ayaz and Erten, 2021), and has not been studied in relation to other affective concepts like mindset, SR or ASC. It is quite similar for ASC, as well, and that is why these concepts are thought to be interrelated despite not having been researched much separately and at all together.

Although the problem of language learning in Türkiye has been associated with several reasons so far, when the fact that teachers should not be regarded as transmitters of knowledge and that education should be student-centered is taken into consideration, it is obvious that learning how to learn has a significant role in learner achievement, again bringing learner mindset, experience of DMC, SR skills, and ASC to mind.

In light of the information provided above, it is of vital importance to research the relationship between mindset, which is claimed to be the most prominent factor in success, and other affective factors, such as SR, directed motivational currents, and ASC, which are influential in language learning achievement. Having a deeper understanding of the link between these affective aspects of the language learning process can be a step toward enhancing the language learning process, eliminating or minimizing problems regarding this process, and increasing the rate of achievement in language learning.

Aim and Significance of the Study

The main aim of this study is to determine the type of mindset the participants have and investigate the relationship between their mindset and some other affective factors (SR, ASC, and DMCs) and their academic achievements in language learning. Briefly, the study intends to answer the question: 'What is the function of mindset in language learning process?' Moreover, this research aims to shed light on the relationship between participants' mindset and their SR, directed motivational currents, and ASC, seeking to

explore the most influential factor in the language learning process and the interplay between these concepts.

The current study contributes to our knowledge in the field of language learning by addressing two important issues. First, determining students' mindset is a relatively novel issue in terms of language learning in relation to other novel factors in the field, such as directed motivational currents. Second, although SR and ASC have been researched before, there is no particular study that aims to analyze these four variables in a single study and to demonstrate the link between them.

Research Questions

In this study, the following research questions and sub problems were attempted to be answered.

Research Questions and Sub Research Questions

1. What is the common mindset of Turkish EFL learners in preparatory classes based on their current proficiency levels of English?
2. Is there a statistically significant relationship between participants' growth or fixed mindset and their academic achievement in language learning...
 - 2a. when gender is the control variable?
 - 2b. when current English proficiency level is the control variable?
3. Which variable (self-regulation, academic self-concept or directed motivational currents) is the most significant predictor of participants' fixed mindset, growth mindset and academic achievement in language learning?
4. What is the relationship between the mindset of participants and affective factors such as self-regulation, academic self-concept, and directed motivational currents?
5. What kind of directed motivational currents experience have the participants had and how do they relate to mindset?
6. What is the most common reason for the desire to experience Directed Motivational Currents again and are the findings in line with the findings of participants' mindset as in Structural Equation Modelling analysis?

Assumptions

The data collected throughout the study was aimed to be collected without any manipulation. The participants took part in the study after reading and approving the consent form, which was a measure taken to prevent misleading data or involuntary participation. Adequate time was spent to carry out the research and the data analysis process, and expert opinion was taken to ensure that the right methodology and analysis were conducted.

Limitations

The research was conducted in the Izmir Democracy University School of Foreign Languages in the 2021-2022 Academic Year. Therefore, the data used in the study were limited to those collected from the participants of prep-class students at Izmir Democracy University School of Foreign Languages. In this regard, it would not be suitable to state that the findings of the research are generalizable for all English language learners in Türkiye and to make such generalizations. However, in further studies, it will be possible to increase the sample size and expand the total number of participants included in the study.

The institution where this research was carried out was chosen based on convenience sampling, and all the institutions have differing education programs, syllabuses, materials, and instructors. Therefore, it can be misleading to make overgeneralizations for other institutions.

Furthermore, as the required data of the study were collected using questionnaires for each variable, the consistency of this data with reality may lack, it may not completely reflect the participants' viewpoints, and it is not possible to validate them for each variable with other instruments or data collection tools due to time limitations. To minimize this problem and to eliminate the problems stemming from the weaknesses of the survey method, confirmatory factor analysis was conducted, and the reliability and validity of the adapted instruments were checked in addition to the distribution of the collected data.

An additional limitation may depend on the assumption that all participants responded in an unprejudiced and sincere manner. However, if the participants respond in a biased way, it can lead to deviations from the true findings. In other words, there may be a certain discrepancy between the reality and the findings of the current research because some participants may tend to give favorable responses to look prestigious or favorable despite knowing that there are no right or wrong answers. This may stem from what Pines and Aronson (1988) call 'fallacy of uniqueness' or 'pluralistic ignorance'-the respondents' assumption that they are faulty and responsible for all the problems they encounter, and the right thing is to hide their problems and weaknesses and negative aspects about themselves. They tend to believe that they are the only people who fail to cope with these problems and respond in an undesirable manner (Pines & Aronson, 1988, p. 257).

Definitions

Mindset (implicit self-theory): Mindsets represent some of the basic assumptions individuals make about various human attributes such as intelligence or personality (Mercer & Ryan, 2010a). Implicit theories are defined as core assumptions about the malleability of personal traits and abilities (Dweck & Leggett, 1988; Molden & Dweck, 2006)

Growth mindset (incremental theory): The belief that individuals can develop intelligence over time (Dweck, 1999).

Fixed mindset (Entity theory): The belief that intelligence is simply an inborn trait—individuals have a certain amount, and that is that. (Dweck, 1999).

Academic achievement: The extent to which a student, teacher or institution has achieved their short- or long-term educational goals.

Self-regulation: An active, constructive process whereby learners set goals for their learning and attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and contextual features in the environment. (Pintrich, 2000).

Directed Motivational Currents: “an intense motivational drive - or surge - which is capable of stimulating and supporting long-term behavior, such as learning a foreign/second language (L2)” (Dörnyei et al., 2016, p.18).

Academic self-concept: ASC is a part of self-concept and refers to one’s beliefs about one’s skills and academic achievement.

Chapter 2

Theoretical Basis of Research and Literature Review

This chapter comprises theoretical basis of research and literature review. Subsections of the literature review part are mindset, SR, ASC and directed motivational currents.

Language learning has been a topic of interest in many fields including psychology, linguistics, education, and cognitive science. Research has shown that various factors, including mindset, SR, ASC, and directed motivational currents, affect language-learning outcomes. This literature review aimed to explore the current state of research on the interplay between these factors in language learning.

To promote the most favorable improvement and success in the school setting, the principles of Positive Psychology and the best practice of teaching and educational paradigms were combined, leading to an increase in Positive Education. As a result of this attempt, the significance of positive emotions, positive engagement, positive accomplishment, positive health, and positive purpose came into prominence. (Norrish et al., 2013). One of the factors that was influenced by the emergence of Positive Education was the belief systems of learners.

Throughout history, there have been a number of factors that are believed to be influential in human behavior, one of which is mindset, which is defined as “a set of attitudes or fixed ideas that somebody has and that are often difficult to change” (Oxford Learners’ Dictionaries). The ideas that individuals internalize as a result of their mindset may influence their behavior directly or indirectly, making their behaviors a reflection of their mindset. Therefore, it is inevitable that mindset has an impact on individuals’ education. According to Dweck (2006), a distinguished professor in the field of psychology, to put forth the terms growth and fixed mindset, one of the most significant factors influencing one’s character and behavior and predicting achievement is the mindset one holds. Dweck (2010) points out that,

in contrast to providing equal facilities and resources, beliefs held by administrators, teachers, and students are more challenging to capture and shape, and they are discovered to have a striking influence on students' achievements. Based on the idea that learners hold in terms of their own intelligence is improvable, Dweck and Leggett (1988) described people under two categories as those with a growth mindset or a fixed mindset based on their way of thinking.

According to those with a growth mindset, intelligence and abilities are traits that can be developed over time. (Dweck, 2006; Keenan, 2018; Orosz et al., 2017). By contrast, individuals with a fixed mindset believe that intelligence and abilities are innate limited traits; hence, they argue that it cannot be developed (Dweck & Leggett, 1988; Walters, 2014). Individuals who believe that intelligence is innate and cannot be developed are defined as those with a fixed mindset, and those with a growth mindset consider that intelligence can be developed with effort. (Dweck, 2006, 2015a).

Holding a growth or fixed mindset is also found to be influential in the academic achievement of individuals, and it shapes their behavior in reaching their academic goals. Research demonstrates that the beliefs people hold are influential in how they perceive the academic world (Stec, 2015). People with fixed mindset believe their academic performance to be a reflection of their current intelligence and a result of naturally acquired skills (Dweck, 2015b) and their intelligence is stable and it is a trait that is almost impossible to be changed (Orosz et al., 2017). On the other hand, individuals who perceive a growth mindset are aware that their academic achievement is dependent on their effort and experience, which makes them believe that skills can be developed with good learning strategies and efforts, bringing about control over their own learning. (Stec, 2015). This way of thinking is also claimed to contribute to learners' learning, academic achievement, and self-efficacy (Keenan, 2018), which in turn leads to success or current failure.

Regarding the significance of mindset over learning, Boylan et al. (2018) maintain that "The integration of mindset theory into classrooms can assist children in optimizing academic

achievement, increasing their agency for learning. The development of a growth mindset allows children to exercise autonomy over their learning, helping them to develop positive lifelong habits for the twenty-first century... These mindsets play a significant role in motivation, SR, achievement, and interpersonal process.” (p.16).

Holding growth or a fixed mindset also determines one’s reaction in the face of failure, or when faced with a challenge. Dweck (2006) emphasizes that holding a growth mindset causes people not to lose courage when faced with a challenge and to accept that failures are just like steppingstones for the learning process, which makes them more persistent in contrast to those holding a fixed mindset and ends up with success. Notwithstanding, Miller (2013) argued that those who pursue a fixed mindset acknowledge that failures are a source of disappointment when they encounter them, leading them to avoid exerting effort and cease to learn.

Mindset (Implicit Self-Theory)

Mindset (implicit self-theory) is related to one's belief in whether intelligence can be controlled or changed over time or whether it is pre-determined at birth and difficult to alter (Dweck et al., 1995). In other words, it is defined as the main assumption regarding the malleability of personal characteristics (Dweck et al., 1995; Dweck & Leggett, 1988; Molden & Dweck, 2006). They are called implicit because they are rarely explicit, and they are called theories because they constitute a framework for making predictions and judging the meaning of events in an individual's world. Although implicit theories may be relevant to any personal attribute, those relevant to education are claimed to be implicit theories of intelligence and implicit theories of personality (Yeager & Dweck, 2012b). For instance, in their study which measured the mindset of 5653 university applicants with scholastic aptitude test, Bahnik and Vranka (2017) discovered growth mindset to be positively correlated with test result and they state that implicit theories of intelligence have been proposed to predict various outcomes in education.

As Murphy and Thomas (2007) claim, there are a great number of studies which suggest that students' beliefs, such as self-theories have significant influence on academic success. Yeager and Dweck (2012b) found out it is not only academic success that is affected by self-theories. Implicit self-theories determine the goals, beliefs about effort, attribution and learning strategies adapted by students. Table 1 illustrates these differences stemming from implicit self-theories adapted.

Table 1

Academic Mindsets for Those with More of an Entity Versus Incremental Implicit Theory of Intelligence (Yeager & Dweck, 2012b)

	<i>Entity Theory</i>	<i>Incremental Theory</i>
Goals	Look smart	Learn
Value of effort, help and strategies?	Higher	Lower
Response to challenge	Tendency to give up	Work harder and smarter
Changes in grades during times of adversity	Decrease or remain low	Increase
Changes in grades during times of adversity	Decrease or remain low	Increase

As it can be understood from the table above, there are two types of implicit theories as entity and incremental theory to be discussed in the following parts (Dweck, 2016; Dweck et al. 1995). The research of Yeager and Dweck (2012) revealed that teaching students about incremental theories can result in positive outcomes in terms of academic success. The same idea is accurate for implicit theories of personality. Once the students are aware of the fact that personal traits can be shaped, they tend to educate their peers about their problem-causing behaviors.

Although it was once believed that success was predicted by high levels of IQ, it was found out that not all students with high IQ have top scores and some of the best performers were with lower IQ scores, causing new research to be conducted on motivation and persistence (Hochanadel & Finamore, 2015). Later, Dweck's research revealed that educating students on brain's capacity of alteration when faced with challenges assisted them persevere and develop growth mindset. As Dweck (2010) claims, the most motivated and resilient students were discovered not to be the ones with a lot of fixed and innate

intelligence but those who consider that their abilities and intelligence can be developed through learning, challenges, and effort. As a result, she came up with the idea that what students believe about their intelligence is what matters a lot. This phenomenon is described with the fact that those who use their mind well do not get discouraged when they face a challenge or experience a failure; in contrast, they are aware of being in the process of learning (Dweck, 2006).

In her more recent studies, however, Dweck (2006) commences using the terms 'growth and fixed mindset' to refer to the same beliefs about one's own intelligence (implicit self-theories). Carol Dweck maintain that individuals tend to have one of two types of theories: growth mindset and fixed mindset. Mindset theory refers to the extent to which a person sees intelligence as fixed (entity theory) or growth (incremental theory) has influence on one's learning behaviour (Mangels et al, 2006). Those with fixed mindset believe intelligence to be static and it is almost impossible to change it whereas those with growth mindset consider that one's intelligence may increase with hard work and persistence.

However, it is necessary to better comprehend what we mean with the terms 'fixed mindset' and "growth mindset". Adimoto (2015) emphasizes a misunderstanding caused by how people view growth and fixed mindsets. Despite mostly regarded as two different views, sometimes there is not a clear-cut difference between these two phenomena. They are defined as "opposite ends of a continuum". In other words, it is likely for a person to believe strongly or weakly to the fact that intelligence is possible to be improved. Mercer and Ryan (2009) point out another confusing phenomenon regarding fixed and growth mindset. They state that it is possible for an individual to have different mindsets in different domains (domain-specific mindset). Similarly, this distinction may also occur at skill-domain level within EFL, i.e., it can occur even in sublevel of a skill-specific mindset belief. For instance, a student may believe that s/he can improve her/his skills for reading skills but not for writing or s/he can improve her/his skills for vocabulary but not for pronunciation.

Dweck's (2010) longitudinal and experimental research on mindset which analysed students' scores over a two-year period is another proof that those who believe that intelligence can be improved (those with growth mindset) significantly outperform the ones who consider that intelligence is a static quality that cannot be changed or improved (those with fixed mindset). Despite the fact that it was once believed that study skills are the fundamental predictors of student success, Dweck (2010) claims that the students who were trained merely on study skills did not show a marked improvement on their grades and could not gain adequate motivation. On the other hand, it was not the case for those who learned that their brains are quite similar to a muscle that gets stronger when used more and they form new connections whenever they push their limits while learning, which results in being smarter.

However, there are also some studies which seek the link between mindset and other factors like culture. In their study aiming to find out the cross-cultural differences in creative mindsets between two European countries which are similar geographically but different in terms of history, politics, and religion, Tang et al. (2016) discovered that the Polish students tended to regard creativity as a fixed trait while German students were more likely to perceive it as malleable, which leads us to the result that mindset can also be bound to the culture of the individuals. Another factor that may determine whether learners will develop growth or fixed mindset is found out to be culture in which these people are raised. In their study, Mercer and Ryan (2009) discovered that in cultures where effort is appreciated more, people tend to develop growth mindset in contrast to cultures where intelligence is given more importance, leading people to hold fixed mindset more.

After finding out that mindset is a fundamental predictor of achievement, research started to seek the relationship between mindsets and other factors that have an impact on student success (Haimovitz & Dweck, 2016). These two types of mindsets do not differ merely in terms of their viewpoint of intelligence but plethora of ways which are claimed to have an impact on or predict success and failure. To exemplify, the students' goals,

orientation, reaction to feedback, perception of success tend to differ based on their mindsets. The following figures demonstrate how these factors differ based on the type of mindset one has.

Figure 1

Carol Dweck's Work on Fixed and Growth Mindsets (Krakovsky, 2007)



Figure 2

Fixed vs Growth Mindset Retrieved from <https://www.aot.edu.au/infographics/fixed-vs-growth-mindset/>

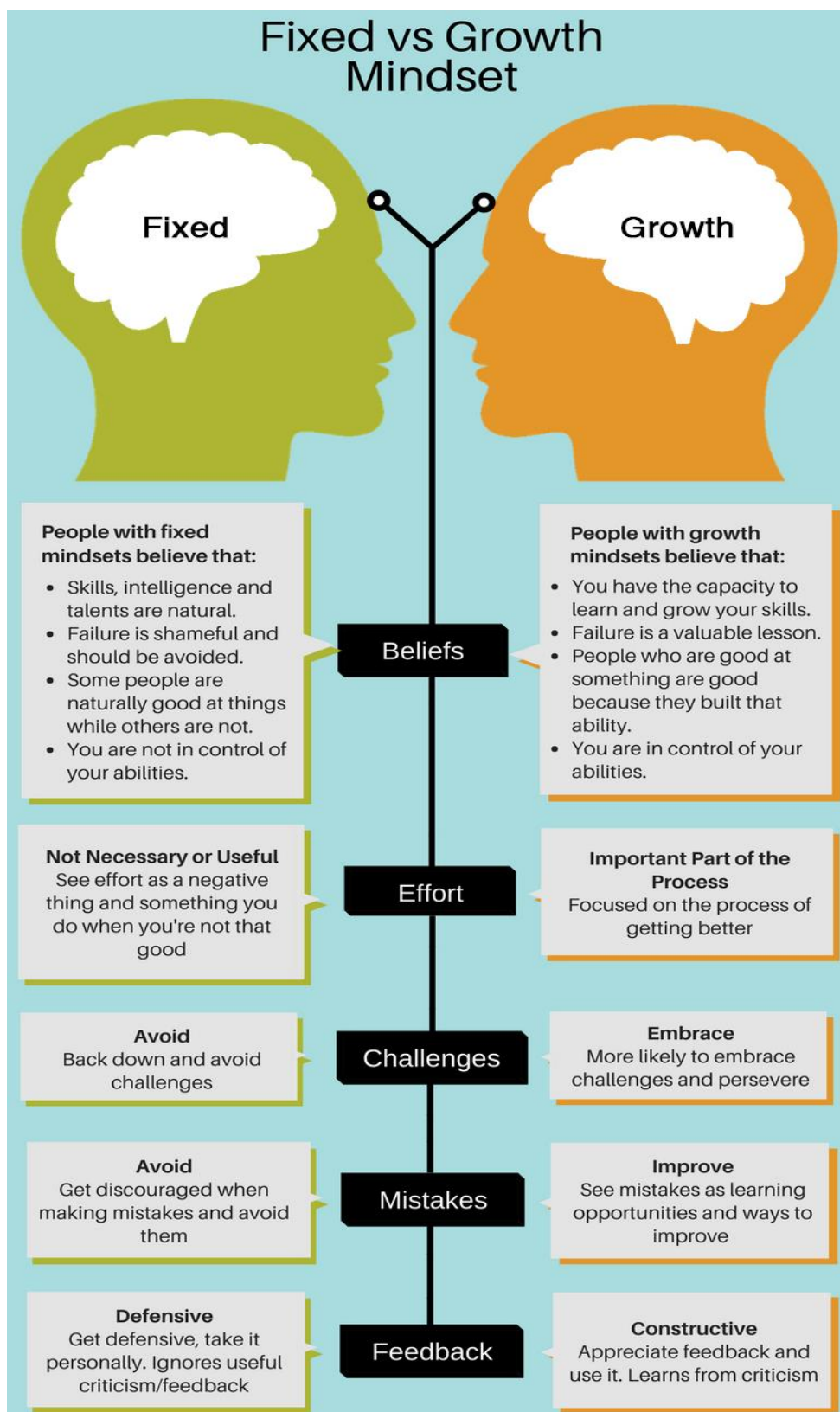


Figure 3

The Fixed Mindset and the Growth Mindset (Dweck, 2006)

FIXED MINDSET		GROWTH MINDSET
<ul style="list-style-type: none"> • SOMETHING YOU'RE BORN WITH • FIXED 	SKILLS	<ul style="list-style-type: none"> • COME FROM HARD WORK. • CAN ALWAYS IMPROVE
<ul style="list-style-type: none"> • SOMETHING TO AVOID • COULD REVEAL LACK OF SKILL • TEND TO GIVE UP EASILY 	CHALLENGES	<ul style="list-style-type: none"> • SHOULD BE EMBRACED • AN OPPORTUNITY TO GROW. • MORE PERSISTANT
<ul style="list-style-type: none"> • UNNECESSARY • SOMETHING YOU DO WHEN YOU ARE NOT GOOD ENOUGH 	EFFORT	<ul style="list-style-type: none"> • ESSENTIAL • A PATH TO MASTERY
<ul style="list-style-type: none"> • GET DEFENSIVE • TAKE IT PERSONAL 	FEEDBACK	<ul style="list-style-type: none"> • USEFUL • SOMETHING TO LEARN FROM • IDENTIFY AREAS TO IMPROVE
<ul style="list-style-type: none"> • BLAME OTHERS • GET DISCOURAGED 	SETBACKS	<ul style="list-style-type: none"> • USE AS A WAKE-UP CALL TO WORK HARDER NEXT TIME.

Because mindset is a phenomenon that is relevant to many other factors regarding academic achievement and learning, several researchers attempted to clarify the relationship between mindset and these factors. For instance, Valentiner, et al. (2011) studied on mindset to be able to better understand shyness and growth and fixed mindset. Their research is based on the idea that shyness can be explained by mindset like it is relevant to types of anxiety (performance and interaction). Whereas performance anxiety is associated with growth mindset due to its environmentally-determined and treatable nature, interaction anxiety is explained with fixed mindset as it is defined as genetically-determined and stable. Depending on this idea, they hypothesized that shyness mindset assists us comprehend behavior, learning and outcomes in the social domain and proved to be right.

Through her research attempting to define the relationship between praise and mindset, Dweck (2010) discovered that praise on intelligence leads to fixed mindset among students as it leads to the assumption that they are already intelligent enough to cope with the challenges, leading little or no effort and failure. On the other hand, those who were

praised for their effort wanted challenge, maintained confidence, and performed far better. As Bronson (2007) maintains, "Giving students the label "intelligent" does not prevent them from underperforming. It might actually be causing it." (p.2). The underlying reason is that the child to have received this praise is for the idea that s/he does not need to make an endeavour as the current intelligence will be adequate for him/her to perform well or succeed and putting more effort is likely to make them look 'dumb'. This kind of students' grades were observed not to improve as they think increasing effort is evidence of failure. Dweck (2007) also proves this view by stating that the type of praise may determine whether the students will develop self-defeating behavior or motivate themselves to assist themselves learn. Besides, Dweck (2010) maintains that fast learning is not always the best one as it may lack depth and it may take more time for learners to develop a deeper understanding of something.

Another significant component of the learning process is feedback to which the reaction of the learner can be predicted according to mindset s/he pursues. Individuals with growth mindset regard challenges as a chance of improvement and failures as constructive feedback assist them in avoiding similar mistakes in the future (Blackwell et al., 2007). In this sense, growth mindset is determined to have an impact that promotes the desire to learn (Burnette, et al, 2020) and guides individuals to their learning goals (Bempechat et al., 1991; Chen, et al., 2020).

In order to make students develop growth mindset instead of fixed mindset, it is essential to give them meaningful tasks to deal with and determine the suitability of task difficulty for them. Given that students always experience success repetitively, they may come to the conclusion that they are already sufficiently smart, and they can achieve without putting effort. Therefore, it is necessary for teachers to identify the students who can easily master the tasks and materials and give them new problems or assignments that require more effort and make them stretch. Giving students pre-test and post-test can also make the experience a sense of success after their effort, teachers may give them pre-test and post-test to let them compare and see their progress.

As mentioned above, students' mindsets are one of the most effective predictors of achievement despite not being the only one. In one of her research projects, Dweck (2010) studied the relationship between teacher mindset and students' achievement and found out that teachers' mindsets also have a striking impact on learner achievement. Students who have a teacher with a fixed mindset remained as low achievers whereas those who have a teacher with a growth mindset turned into moderate or high-achievers in time. She associates this result with the fact that teachers who believe in growth mindset are committed to find a way to make them high-achievers. They state that they know the students can do better, they encourage them that way and teach them the required strategies for studying and learning. That is the reason why Dweck is in favour of the idea that it is significant to attempt to create a growth mindset culture among administrators and teachers as well to assist students fulfil their potential without any bias. Similarly, Seals (2018) found out that the intervention aiming at developing growth mindset among teachers presented through distance learning created a positive impact on the students' interests on their lessons. There is still another concern about teacher mindset as Boylan et al. (2018) found out. Based on their research, it is clear that a great number of teachers believe the necessity of developing growth mindset among students for better learning and success despite the fact that most of them stated that they are not aware of how to do it effectively.

Fixed Mindset (Entity Theory)

Those with an entity theory of intelligence consider that intelligence is a fixed and unchangeable amount. The same idea applies for entity theory of personality, which means for people with entity theory of personality, socially relevant qualities are fixed and not possible to be changed. Entity theory is about measuring ability and everything that measures your ability (e.g. challenging tasks, effort and setbacks). They are regarded as threats and defenses (Yeager and Dweck, 2012b).

Moser et al. (2011) claimed that how we perceive and respond to mistakes is also shaped by our beliefs about learning and intelligence and their research proved that claim.

The findings revealed that people with fixed mindset view mistakes as evidence for their lack of intelligence or ability and they disengage from the task whereas those with growth mindset view failure as potential instructive feedback, an opportunity to learn and the latter group of people tend to allocate more attentional resources to corrective feedback, resulting in better performance on surprise retests. In brief, it can be stated that growth mindset is relevant to adaptive responses to mistakes, which was proved by analysis of neural mechanism, as well. As Adimoto (2015) claims, this can be about different responses to setbacks, some students avoiding similar challenges due to de-motivation whereas some others try to figure out the underlying reasons to develop strategies to cope with them.

Dweck (2010) explains the qualities of those holding a fixed mindset as follows: they try to look smart at all costs, not to make mistakes, not to work hard and if they make mistakes, they do not attempt to fix them. She also emphasizes that looking smart is much more significant than everything else for those with a fixed mindset, leading them not to take risks and not to admit deficiencies and to sacrifice learning opportunities. Rather than putting effort on something, they consider that if you have the ability and intelligence, everything should come naturally. That may be the underlying reason why students with fixed mindset tend to cheat, withdraw their effort, blame others, or lie about their scores.

Growth Mindset (Incremental Theory)

As Boyd (2014) maintains, "Growth mindset theory is simple, revolutionary, and efficient". The individuals with an incremental theory of intelligence believe that intelligence can be developed over time and through effort. Incremental theory of personality also refers to one's belief that personal traits have the potential to be changed. Incremental theory is about learning and growth (challenges, effort and setbacks are seen as helpful to learn and grow and as a chance of improvement) (Yeager & Dweck, 2012).

The research conducted by Aditomo (2015) revealed that students' growth mindset about their academic achievement prompted adaptation of mastery goals and effort attribution. Therefore, it can be claimed that growth mindset buffered against demotivation

and which in return led to better academic achievement. However, the research of Limeri et al. (2020) reveals that the reaction between the concepts of growth mindset and academic achievement is not a linear one, but a circular one in that not only mindset affects academic performance, but also academic performance affects mindset, turning the process to a feedback cycle.

Yeager and Dweck (2012b) emphasize that resilience (whether to react positively to challenges or not) is a significant quality for success as well. Even when the students are aware of the required intellectual or social skills, they may not be able to apply them adequately as long as they do not believe that academic and social adversities are possible to be improved. Therefore, they searched for the relationship between students' mindset and their resilience in terms of academic and social and academic challenges. The findings revealed that students who are for the idea or taught to believe that intellectual abilities can be developed performed higher abilities than those who believe that these qualities are fixed.

Recent study of Claro, et al. (2016) demonstrates that the mindset learners hold is a more significant predictor of their academic achievement than financial status and possible restrictions to access support, which means those with growth mindset can perform better academically despite financial difficulties.

Dweck (2010) lists the qualities of people holding a growth mindset as follows: they take on challenges, work hard and face their weaknesses and correct them. Dweck (2010) points out that those with growth mindset view even failures as a learning and growing opportunity. Rather than experiencing disappointment, getting discouraged and losing motivation, students focus on how informative this experience has been. They believe in the need for developing their abilities. This quality makes them remain involved, try new ways, use all the possible resources they have despite difficulties.

There have been several studies carried out with the purpose of changing the mindset of the learners from fixed mindset to growth mindset. The study of Bedford (2017) suggests that there was a significant difference of the responses of the participants after the

mindset intervention. The conducted interventions were successful in terms of changing the mindset of the learners towards a growth mindset, adding that further research is required to determine the sustainability of this impact. Fraser (2018) states that this is supposed to be a constant and continual process and it is necessary for schools to develop growth mindset rather than a temporary intervention in order to end up with a permanent alteration. There are also studies which found out little evidence that the motivational messages had the intended impact on mindset of the participants on the treatment group (Ostrow et al., n.d.).

In a research, Wang, et al. (2018) found out that growth mindset mediates the association between grey matter structure and trait grit (which is defined as “a person’s tendency to pursue long-term goals with continual perseverance and passion,... and plays a critical role in student achievement (p.2) in late adolescence.

After the term ‘growth and fixed mindset’ commenced being used by Carol Dweck, it managed to draw attention and to be used with an increasing popularity in the fields of both psychology and education (Joo et al., 2019; Miyazawa, 2019). Despite plethora dissertations and articles written on this field abroad, when it comes to foreign language teaching in Türkiye, there are only limited number of completed theses studying mindset, belonging to Altunel (2018), Delibalta (2020), Yılmaz (2020), Bilir (2017), Oldaç (2022), Yalın (2014), and Orhan (2021). Whereas the first four theses were written on language learning, the following two were within the field of psychology and the final one was on science teaching.

Although the number of research on mindset is limited in number in Türkiye, there are abundant studies conducted abroad and there is a growing body of research analysing mindset and its impact (King, 2020; O’Brien and Lomas, 2017; Rissanen et al., 2019; Seals, 2018; Sheffler and Cheung, 2020).

The Relationship between Language Learning and Mindset

Language learning and mindset are closely related. The outcomes of several investigations indicate that individuals embracing a growth-oriented linguistic perspective

demonstrate a greater propensity for achievement in language acquisition as opposed to those who adhere to a fixed linguistic mindset. This disparity arises due to the fact that individuals with a growth mindset perceive their linguistic competencies as malleable through diligent endeavor, thus exhibiting a higher likelihood of perseverance when confronted with obstacles. In conclusion, the way you approach learning a language can have a significant impact on your success and progress (Lou & Noels, 2016; Mercer & Ryan, 2009; Wang et al., 2021). The study of Lou and Noels (2016) found that learners with a growth language mindset (i.e., the belief that language ability can be improved through effort) had higher foreign language achievement and lower anxiety than learners with a fixed language mindset (i.e., the belief that language ability is innate) and the study of Mercer and Ryan (2009) found that learners with a growth language mindset were more motivated to learn a second language and were more likely to persist in the face of challenges. Wang et al. (2021) also found that learners with a growth language mindset reported more enjoyment in foreign language classes and had higher levels of grit than learners with a fixed language mindset.

One important mindset for language learning is having a growth mindset. This means believing that your abilities can be improved through dedication and hard work, rather than seeing your skills as fixed traits. With a growth mindset, you are more likely to persist through challenges and setbacks and to embrace mistakes as opportunities for learning and growth. Research also proves it that mindset is a crucial part of language learning process. Studies of Dweck (2006), Yeager and Dweck (2012) and Mercer and Ryan (2010b) represent only a select subset of the extensive research conducted regarding the significance of nurturing a growth mindset within the context of language acquisition. The conclusions drawn from these inquiries strongly imply that individuals possessing a growth mindset tend to achieve greater success in the realm of language learning compared to their counterparts harbouring a fixed mindset. This discrepancy arises from the fundamental belief held by growth-minded learners that their linguistic prowess can be enhanced through diligent exertion, rendering them more inclined to persevere when confronted with adversities.

A growth mindset can assist you stay motivated and focused on your goals, even when faced with difficult or frustrating aspects of the language. This can include being open-minded, flexible, and patient in your approach to learning, and having a sense of curiosity and excitement about the language and culture you are studying. Additionally, having a growth mindset can help you overcome language learning obstacles such as fear of making mistakes, lack of confidence, or feeling overwhelmed by the amount of information to learn. By adopting a growth mindset and a positive attitude, an individual can shift their focus from the challenges to the opportunities and rewards that come with learning a new language (Dweck, 2006; Yeager & Dweck, 2012b; Mercer & Ryan, 2010b).

The empirical data unambiguously demonstrates that cultivating a growth-oriented mentality confers a notable advantage upon individuals engaged in language acquisition. Should the objective be to enhance one's linguistic proficiency, it becomes paramount to embrace a growth mindset, firmly believing in the potential for skill improvement through diligent endeavour. This stance not only sustains motivation and goal-directed determination in the face of obstacles but also facilitates the surmounting of hindrances such as the fear of errors, self-doubt, or the overwhelming nature of the learning material. Through the adoption of a growth mindset coupled with a positive disposition, one can shift their focus from the impediments to the prospects and rewards inherent in the pursuit of mastering a new language.

Figure 4

The Way of Thinking Based on the Pursued Mindset Retrieved from <https://www.laurelschool.org/>

	FIXED MINDSET THINKING	GROWTH MINDSET THINKING *
ACHIEVEMENT...	means proving you're smart.	means that you're learning and stretching.
BEING SMART...	means that you're making no mistakes.	means that you're confronting a challenge and making progress.
A SETBACK OR MISTAKE...	leads to loss of confidence.	indicates an area for growth.
FAILURE...	leads to humiliation.	means that you're not yet fulfilling potential.
EFFORT...	shouldn't be required if you're smart and takes away excuses for failure.	is the path to mastery that makes you smarter. You get out what you put in.
SUCCESS...	is defined as being the best and is based on talent.	is defined as working hard to become your best and is based on motivation.
A BAD GRADE...	means it's time to give up.	means it's time to work harder.
FEEDBACK...	is threatening, as it provides good or bad news about precious traits.	is welcomed, as it provides useful direction toward areas to work on.
THE NEED TO ASK FOR HELP...	indicates a weakness or deficiency which should not be admitted.	is a useful strategy for growth.
STEREOTYPE THREAT...	is high due to fears of confirming negative stereotype.	is low; a stereotype is simply someone else's inaccurate view of their abilities.
TALENTED PEERS...	become grounds for feeling threatened and jealous.	are a source of inspiration.

In summary, having a growth mindset and a positive attitude can greatly enhance the language learning process, helping you to stay motivated, persistent, and open to learning and growth. Research has proven that language learning outcomes are affected by mindset. Those who believe that their abilities can be improved via effort and perseverance are likely to be better language learners and perform better in the language learning process than those with fixed mindset. Furthermore, treatments conducted with the purpose of facilitating a growth mindset have been found to contribute to better language learning outcomes. Although it was once believed that grammatical structure and vocabulary acquisition was the core component of language learning, more recent research has shown that a person's mindset can be crucial for learning a new language.

Self-Regulation

SR is an essential part of language learning that has been researched extensively in

the recent years. The fact that an individual who believes that language learning is very likely to adjust his/her strategies, techniques, etc. in other words his or her self, makes it necessary to find out what kind of a link there is between mindset and SR. Therefore, in this part of the literature review, an analysis of the current research on SR along with the definition of the SR, its interplay with language learning and through which strategies and techniques self-regulated learning can be promoted.

Definition of Self-Regulation

SR is defined as the process by which learners control, monitor, and regulate their cognitive, affective, and behavioral processes in order to achieve their learning goals (Zimmerman, 1998). This process involves setting goals, planning and organizing learning activities, monitoring progress, and adapting strategies based on feedback.

Self-Regulation and Language Learning

SR has a significant role learning a new language since it assists learners to be engaged in language learning process actively, intensify their motivation, and increase their performance. Research has shown that self-regulated learning affects language learning in a number of ways including learner characteristics like personality, SR, and self-efficacy in addition to situational factors like learning environment and instructional strategies (Gao and Xie, 2021; Gkonou and Tatzl 2019; Zimmerman, 1990). As for mindset,

Strategies and Techniques for Self-Regulated Learning in Language Learning

Strategies and techniques which have been identified by the researchers to promote SR in language learning are various and they can be listed as follows:

Goal setting: It becomes easier for language learners to aim their attention at and exert effort on accomplishing their language learning goals through setting absolute and particular goals.

Metacognitive strategies: These strategies are grounded in monitoring and adjusting cognitive processes which can be exemplified as planning, monitoring or evaluating language learning activities.

Cognitive strategies: These strategies include particular learning techniques related to

cognition like notetaking, elaboration or summarizing to boost learning and memory.

Affective strategies: They include how to manage emotions and motivation to facilitate learning and reduce anxiety while learning a language.

Social strategies: These strategies are based on interactions with others like peers and teachers with the purpose of enhancing learning and receiving feedback.

For learners to take control of their own language learning process and reach the pre-determined language learning goals, it is essential to comprehend and apply the aforementioned strategies.

What differs human beings from other creatures is to better adapt novel situations by adjusting yourself to the environment in terms of not only behaviours, but also thoughts, feelings, interests, attitudes, and motivation. One of the pioneers of the idea of SR, Bandura (1991) puts forth this concept depending on the idea that individuals are capable of controlling their behaviours via a process named SR. The concept 'SR' gained popularity in the field of education in 1980s as a result of the emphasis put on learner autonomy and responsibilities learners are required to take for their own learning (Bandura, 1986). The emergence of research on SR commences with the realization of the fact that the abilities and skills of language learners were not sufficient for explaining the learners' academic achievements. Schunk (2005) maintains the underlying reason for studies of academic SR with the fact that other factors such as learners' skills and abilities were not adequate to explain student achievement. Therefore, the requirement of investigating other factors like SR and motivation occurred.

With the emergence of learner-centred education, in contrast to what was once believed, teachers and school administer were no longer the only responsible people for learning to take place. After the emergence of self-regulated learning theory, claiming that learners are able to improve their own learning strategies by choosing their own knowledge of cognition and motivation strategies, learners started to be regarded as those who start and control the learning process. During the process of SR, learners make their own choices in terms of strategies and even create their own learning environments and play an active role

for choosing how much to learn and how to learn based on their own requirements. According to SR theory, learners are active in terms of knowledge of cognition, motivation and behaviour during self-regulated learning (Zimmerman, 2001).

There is plethora of definitions for the SR concept. To begin with, Pintrich (2000) defines SR as “an active, constructive process whereby learners set goals for their learning and attempt to monitor, regulate, and control their cognition, motivation and behaviour, guided and constrained by their goals and the contextual features in the environment”. (p.453) Whereas Zimmerman (2000) clarifies SR as “self-generated thoughts, feelings and actions that are planned and cynically adapted to the attainment of personal goals” (p.14). As for Hadwin (2008), it is “...deliberate planning, monitoring, and regulating of cognitive, behavioral, and affective or motivational processes toward completion of an academic task (p.187).

Self-regulated learning requires students to monitor their learning strategies and regulate them. Monitoring activities include controlling the content of the study, comprehending learning difficulties, evaluating improvement and predicting the learning outcomes. In other words, self-regulated learning is a multidimensional phenomenon that includes the individual's cognition, emotions, activity and environment. (Cheng, 2011). In addition to these, Turingan and Yang (2009) discuss this issue in a more holistic way, dwelling on the interaction between cognitive strategies in which learners take responsibility for their own learning, knowledge of cognition and motivation.

However, SR is not a one-way process comprised of these forementioned components. Zimmerman (2000) emphasizes the cyclical nature of SR as a process which includes planning and bringing these plans into action. He elaborates on the issue by stating that the individual has the opportunity of evaluating the actions s/he takes thanks to his/her own feedback and feedback received from other people. This approach creates a perspective which takes SR from a reactive context (based on external action reaction relation) and defines it as a concept where a learner creates his/her own learning process proactively based on his/her own vision, experimentation, and reflection. (Nota et al., 2004;

Zimmerman, 2015).

There are three sub-processes of SR as self-observation (self-monitoring), self-judgment (or self-evaluation), and self-reaction (or behavioral adjustment) (Bandura, 1986; Zimmerman, 1986). Pintrich (1999), however, categorizes the strategies of SR into three as a) cognitive learning strategies, b) metacognitive and self-regulatory strategies to control cognition and c) resource management strategies. Concerning the components of SR, Baumeister et al. (2007), however, claim that SR is comprised of describing standards of desirable behaviour, motivation to meet those standards, monitoring of the situations and thoughts that anticipate breaking pre-determined standards and finally, willpower.

The abundance of definitions for SR also stems from the fact that the concept has been described differently from the perspective of a number of theories such as operant, phenomenological, and social cognitive theories, and by the time of progress, volitional-based SR, sociocultural and constructivist theories commenced being interested in it. (Almazloum, 2018). From the social cognitive point of view, it is considered as an interactive relation of personal, behavioral and environmental processes (Bandura, 1986). Corno & Mandinach (1983) (as cited in Corno, 1989) mention self-regulated learning from a volitional perspective as “an effort put forth by students to deepen and manipulate the associative network between the content areas, and to monitor and improve that deepening process” (p.111).

Pintrich (2003) emphasizes the significance of SR by stating that it is associated with higher achievement and autonomy of the learners. Zimmerman (1989) defines self-regulated learners as “metacognitively, motivationally, and behaviourally active participants in their own learning” (p. 329). In addition, he differentiates skillful self-regulated learners from the others by listing their characteristics as having specific goals, beliefs of self-efficacy, self-monitoring, strategy attribution and positive self-reactions, all of which assist the learner have control on their own learning and choose suitable strategies and motivate themselves without depending on teachers or any other external agents. According to Tsuda and Nakata (2013), self-regulated learning delves into complicated intrinsic factors, such as learning strategies

and motivation to learn, and it is an imperative part of achieving language proficiency.

Underperformance in academic and professional settings is often linked to a lack of self-discipline. Procrastination, which is commonly recognized as a factor leading to subpar outcomes, is seen as both a root cause and an indication of inadequate self-control. It is just one aspect of underachievement. Insufficient SR can also manifest in various other ways, such as diminishing individuals' resilience in the face of setbacks, impairing their ability to select conducive environments for optimal performance, hindering their capacity to establish and achieve objectives, and limiting their capability to sustain effort consistently over an extended period (Baumeister et al., 2007).

SR's effectiveness hinges on three key elements, each of which holds significant importance. The first element is the commitment to established standards, wherein individuals actively strive to meet specific expectations and goals. The second aspect pertains to self-monitoring, which involves observing and evaluating one's own behaviors. The third aspect encompasses the necessary actions to alter one's responses and behaviors. All these components are essential for effective SR.

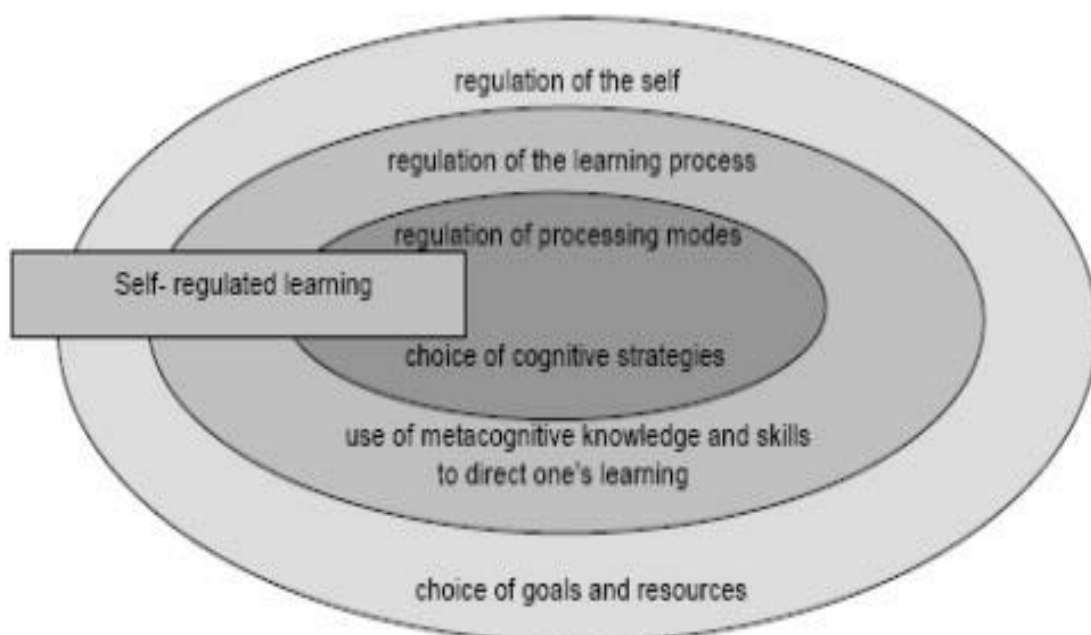
To begin with, without clear standards, SR becomes challenging as there is no benchmark to guide behavior. Ambiguous or conflicting standards can hinder SR, leading to difficulties in behavior modification. For instance, when parents hold divergent views on how their child should behave, the child is less likely to develop proper behavior patterns. Conflicting standards serve as a prominent factor leading to the breakdown of SR.

Regarding monitoring, in the 1970s, self-awareness research gained attention, and Carver and Scheier's 1981 book made a significant contribution by linking self-awareness to SR. They emphasized the importance of self-awareness in facilitating behavior change. The feedback-loop theory, which involves a sequence of steps: test, operate, test, and exit, became influential in understanding SR. Monitoring one's behavior and reducing discrepancies between the perceived self and standards are crucial in the process. Emotions also play a role, as they highlight discrepancies and respond to the rate of progress towards goals. Different standards elicit specific emotions, such as anxiety for failing to meet "ought"

goals and sadness for falling short of "ideal" standards. Positive emotions can arise from perceiving satisfactory progress. Carver and Scheier's work (1990) enhanced our understanding of the cognitive and emotional aspects of SR. Regardless of its being self-monitoring or an external monitoring, improving monitoring facilitates SR (Baumeister et al., 2007).

As for the learning process of SR, Souvignier and Mokslesgerami (2006) emphasize that it is essential to categorize strategies into a simple schema to be learned easily because the learners are required to internalize strategic behavior. However, they further explain that it is not adequate for the learners to have the knowledge of strategies and be aware of their functions. The necessary thing for the learners is to turn the declarative knowledge to procedural one. When learner motivation and motivational aspect of SR is to be fostered, learners' causal attribution of learning outcomes are shaped by the feedback which associates achievement with effort. In their study, Souvignier and Mokslesgerami (2006) examined the impact of different SR trainings and the results reflected that the integrated training which consisted of all aspects of SR learning proved to have the most long-lasting impact.

Figure 5
Three Layered Model of Self-regulated Learning



SR has been shown to be important in language learning as it affects motivation, engagement, and performance. Studies have found that students who have good SR skills, such as goal-setting, self-monitoring, and self-evaluation, perform better in language learning than those who do not. Mrazek et al. (2018) also support this idea with the evidence of their research showing that holding a growth mindset may change attributions and effort individuals allocate significantly so that they are more willing to attempt challenging tasks in addition to have more perseverance to complete them.

Effective learning strategies, which are quite related to SR strategies, can be of paramount importance for achievement in language learning (Vrugt and Oort, 2008), and mindset can also be a determinant for which strategies are most likely to be adopted by the learners (Dweck,2006). Whereas those who pursue growth mindset are more likely to seek opportunities to practice language skills like speaking or listening or to use memory techniques to reinforce their vocabulary knowledge, those with fixed mindset may rely more on passive learning strategies like listening texts or reading, not engaging with the source. They are not very likely to desire feedback or use self-reflection during the learning process to have more effective learning strategies. To sum up, one can state that SR seems to be quite relevant to the pursued mindset.

Academic Self-Concept

Self-concept can be defined as one's perception of his/her own physical, social and academic competence whereas ASC is defined as an individual's belief and attitude about his/her academic abilities and perception of competence in a specific academic area, such as learning a language. To put it another way, it is also a part of self-concept and refers to one's beliefs about his or her skills and academic achievement.

It is a construct that comprises self-efficacy (one's belief of what he/she can achieve regarding a certain task) and self-esteem (perception of self-worth). It includes attributes, characteristics, qualities, deficiencies, capabilities, limits, values and relationships one uses to describe himself or herself. Both self-report questionnaires and interviews can be used to

measure ASC in addition to assessment of performance and behavioural observations.

There are two major types of ASC as positive ASC and negative ASC. As academic achievement of students is related to ASC, enhancing student performance requires the enhancement of ASC. Research studies conducted up to the present day demonstrated that ASC has an impact on outcomes of language learning. It is found that learners who have a positive ASC tend to perform better in language learning than those with a negative ASC (Preckel et al., 2011). In addition, it is found that interventions which aims to improve ASC on a positive way brought about better language learning outcomes.

Factors Affecting Academic Self-Concept

There are a number of factors affecting ASC, some of which are age, gender, previous experience of language learning and individual differences (Huang, 2013). ASC is believed to be formed with physical and mental growth and begin to be formed at an early age. For instance, researchers have found that older learners' ASCs are more likely to be more positive when compared to younger learners' ASC.

Because ASC is shaped by a person's nature, maturity and surroundings, individuals around a person like parents, adults, peers and one's own are also influential in the establishment of one's ASC. The most significant factor in determining ASC can be teachers as one can accept himself/herself to be weak if they are made to believe so by their teachers. Furthermore, other factors which affect ASC can be listed as cultural and social factors like teacher expectation (Bücker, et al., 2011) or parental support (Yeung and Mok, 2019). In other words, when positive feedback and encouragement of both parents and teachers are provided, it is more likely for the student who receive them to develop a more positive self-concept.

Relationship between Academic Self-Concept and Language Proficiency and Achievement

Numerous studies have consistently demonstrated that an individual's perception of their academic abilities significantly influences their language proficiency and academic achievements. Students who possess a favorable ASC exhibit superior performance in

language learning endeavors and attain higher levels of language proficiency. Conversely, learners with a negative ASC may encounter difficulties in language learning tasks and exhibit lower motivation to acquire a new language. Furthermore, ASC and language proficiency display a reciprocal relationship, indicating that as language proficiency and achievements improve, so does one's ASC, and vice versa. It is also linked to academic performance and success. Making students develop a positive ASC can be the key to high academic achievement by being a determinant of effort, engagement, persistence and motivation. As Preckel et al. (2011) mention, "...academic self-concept is a powerful predictor for a variety of variables related to achievement and learning." (p. 466).

Preckel et al. (2011) suggest that students use the average level of academic achievement of their classmates or schoolmates as a reference of assessing their academic standing. Like many other factors affecting student achievement, ASC may also change over time. On the other hand, this alteration does not take place evenly in time but occurs shortly after students' shift from lower ability reference group to higher ability reference group. These students have to cope with the changes in new procedures, classmates, to a more challenging curriculum and competitive atmosphere, which results in upward social comparisons and lower ASC.

ASC is accepted as one of the predictors of student achievement and their motivation to learn a language, which makes it an important construct in language learning (Marsh and Craven, 2006; Marsh and Martin, 2011; Pajares and Schunk, 2001). That is why it is essential to define the concept and focus on its measurement in language learning the factors affecting it and its interplay with language achievement as well as language proficiency.

To sum up, ASC is a significant component of the language learning process in terms of both learner motivation and academic success. There are a number of variables which have an impact on it such as cultural and social factors, individual differences and previous educational experience. Furthermore, it is also relevant to language proficiency as well as language achievement. Further research should focus on the impact of interventions whose

purpose is to improve ASC and its effect on the outcomes of language learning.

Mindset is also found out to have an impact on academic behaviour and academic outcomes in an indirect way. For instance, by influencing student goals. It is revealed that students' goals differ based on the type of mindset they hold; those with fixed mindset have academic performance goals while those with growth mindset have mastery goals (Dweck and Sorich, 1999). Adimoto (2015) states that some researchers suggest a distinction between normative goals and ability goals which are alternatives for performance goals and academic goals. Achievement goals are found out to have an impact on learners' motivation and engagement (Dweck, 1986).

Based on the mindset of the students, they may have the possibility of evaluating their own ASC with reference to their classmates or their own progress, the former quality which can be linked to fixed mindset and the latter being related to growth mindset.

Directed Motivational Currents

Motivation is widely accepted to play a vital role in learning, especially for language learning. Cohen and Dörnyei (2002) support this view by claiming that "...most other learner variables presuppose the existence of at least some degree of motivation" (p.172). However, it is essential to define what motivation is. Gass et al. (2013) maintain that although motivation is the second strongest predictor of student success following aptitude, the exact nature of motivation is not clear. Williams and Burden (2000) agree with this view, adding that motivation is difficult to be defined due to its multifaceted nature. VanPatten and Benati (2010) define motivation in language learning as the degree and type of wanting to learn. Williams and Burden (2000) define motivation as follows: "... a state of cognitive and emotional arousal which leads to a conscious decision to act, and which gives rise to a period of sustained intellectual and/or physical effort in order to attain a previously set goal" (p. 120).

Brown (2007) states that the definition of motivation has changed through the time in line with the changing perspectives of different schools of thoughts. According to behavioral perspective, it is described as "...the anticipation of rewards." (p. 168). The purpose is to

achieve positive reinforcement depending on the previous experiences of reward. This view sees performance as attributed to external factors such as parents, teachers, peers, etc. From a cognitive perspective, the emphasis is on individuals' own decisions to reach or avoid something and the degree of effort they will put. This view focuses on the underlying reasons of motivation, which are described as the need for exploration, manipulation, activity, stimulation, knowledge and ego enhancement. In constructivist terms, "motivation is derived as much from our interactions with others as it is from one's self-determination" (p.169).

Despite the fact that motivation is regarded as a must for learning to take place, being motivated does not guarantee that the learning will take place. Cohen and Dörnyei (2002) maintain that motivation is a dynamic process including three stages: being generated (also called choice motivation), being actively maintained and protected (called executive motivation), motivational retrospection. Dörnyei (2009) emphasizes that motivation is tangible for the individual at any moment in time. It may change and display frequent and irrational ups and downs. Gass et al. (2013) also mentions the unstatic nature of motivation. They also describe Dörnyei's stages of motivation as pre-actional, actional and post-actional stages.

The reasons for being motivated also caused the creation of different definitions such as intrinsic, extrinsic, and instrumental and integrative motivation. Hedge (2000) defines instrumental motivation in terms of language learning as learning a language because of seeing it valuable as an instrument or a tool for achieving something else such as studying a subject in English at university whereas the purpose of language learning is to integrate with the speakers of that language. However, considering English as a lingua franca, it is quite challenging to decide whom these speakers refer to. Other motivation types which are intrinsic and extrinsic are put forward by Harter in 1981 (cited in Williams and Burden, 2000). Whereas the characteristics of intrinsic motivation are described as preference for challenge, curiosity/interest, independent mastery, independent judgment and internal criteria for success, the extrinsic motivation is described with preference for easy work, pleasing teacher / getting grades, dependence on teacher in figuring out problems, reliance on teacher's judgment about what to do and external criteria for success. VanPatten and Benati (2010)

claim that, with the inclusion of the terms such as possible and ideal selves, motivation as a process, demotivation, and evolution of motivation through time, the field of motivation research has become more complicated since 1970s.

There have been some discussions on which type of motivation is more influential for learning to take place. While some scholars are for the idea that intrinsic motivation is more important for learning, like Ryan and Deci (2000), who state that intrinsic motivation results in high quality learning and creativity and extrinsic motivation is pale and impoverished despite the fact that some types of extrinsic motivation are claimed to represent active and agentic state. Another study mentioned in Benabou and Tirole (2003) found out that the un-paid participants were found out to pay greater interest and spend more time on the task than the paid ones, revealing that the impact of intrinsic motivation lasts for a longer period of time. For extrinsic motivation, they claim that a reward is a positive reinforcer for a short time. Nevertheless, it decreases future motivation. Oxford (1990) states that it is the teacher who should decide on which type of motivation to depend on, adding that possibly the most effective way is to use a combination of both intrinsic and extrinsic motivation.

Bearing the vital role of motivation in learning and keeping the fact that the type of the adapted mindset is a significant determinant of language learning success, this study also strives to reveal whether there is a relationship between motivation and mindset (Dweck, 2006; Yeager & Dweck, 2012b). In other words, motivation holds significant significance when it comes to language acquisition, and mindset can profoundly influence the extent of learners' motivation. Those possessing a growth mindset are more inclined to be motivated in acquiring a new language as they hold the belief that their efforts will result in progress. They are also more prone to setting attainable goals and persisting despite encountering obstacles. On the contrary, individuals with a fixed mindset may experience demotivation if they perceive their lack of advancement as a reflection of their inherent limitations. They may also have a tendency to establish impractical goals or engage in unfavorable self-comparisons, resulting in feelings of frustration and discouragement.

Investigating mindsets allows us to identify what motivates students and how these

motivators can inspire them to reach their full potential and succeed. According to Dweck (2015), our mindsets significantly impact our actions, our lives, and our future. Research has shown that one's beliefs about their intelligence can greatly influence their level of achievement, anxiety, and resilience (Dweck, 2008). Additionally, studies indicate that individuals with a growth mindset tend to experience higher motivation levels and achieve greater academic success, including higher test scores (Aronson et al., 2002; Castella et al., 2015). Further research has demonstrated that a growth mindset is particularly associated with better academic outcomes (Castella and Byrne, 2015; Yeager et al., 2014).

Research has shown that directed motivational currents affect language learning outcomes. Whereas those who experience more powerful directed motivational currents like intrinsic motivation achieve better outcomes in language learning, it is vice versa for those with weak directed motivational currents. It is widely known that motivation is one of the most significant factors to have an impact on academic achievement (Mega et al. 2014; Robbins et al. 2006; West 2016). Dweck (2006;2010) states that pursued mindset affects motivation, belief of effort, reactions against challenge and failure at a certain degree. In this regard, Bedford (2017) maintains in his study that growth mindset positively affects student motivation and self-efficacy in addition to their academic achievement. Blackwell et al (2007) also indicate that it provides students with a number of motivational advantages to focus on their potential of increasing their intelligence, revealing the impact of mindset on motivation. There are also several other studies providing evidence for the fact that having growth mindset has a number of motivational benefits on students. (Diseth et al., 2014; Komarraju and Nadler, 2013; Rhew et al., 2018). That is why DMC, which is relatively a new concept is also considered to have a relationship with the mindset of the participants and there is a need to investigate it in detail.

When compared to the concept of motivation, directed motivational currents (DMCs) is a relatively novel concept in the area of language learning, put forth in the late 1990s as a result of developments in motivational psychology. Analyzing its origins, one can state that DMCs are a type of intrinsic motivation, but with a strong and constant urge to pursue a

specific goal or task (Dörnyei et al., 2014)

The roots of DMCs dates back to the research of psychologists such as Deci and Ryan (1980), who put forth the self-determination theory (SDT) in the 1980s. According to self-determination theory (SDT), intrinsic motivation occurs when individuals experience a sense of autonomy, competence, and relatedness in their endeavors. Put simply, people are highly motivated when they perceive themselves as having freedom to choose, possessing the necessary skills to accomplish a task, and feeling a sense of connection with others. Despite being a novel notion, there are several studies conducted on DMC since it gathered a lot of attention in the field of language learning (Colombo, 2017; García-Pinar, 2020; Ghanizadeh & Jahedizadeh, 2017; Henry, Davydenko & Dörnyei, 2015; Ibrahim, 2016; Ibrahim & Al-Hoorie, 2019; Muir, 2016; Pietluch, 2018; Selçuk & Erten, 2017; Watkins 2016; ; Zarrinabadi & Khajeh, 2021; Zarrinabadi & Khodarahmi, 2021; Zarrinabadi, Ketabi, & Tavakoli, 2019; Zarrinabadi & Tavakoli, 2017). Although the initial research focused on the validation of the concept of DMC, more recent ones aim to grasp the impact of interventions on this concept in the language learning context and to investigate how educators can make use of DMC interventions so that the learners can experience DMC or DMC-like processes. It also requires the instructional processes to be planned in accordance with the framework of DMC principles.

In language learning environments, DMCs have been demonstrated to be a significant factor in learner achievement. Research has shown that learners who go through a period of DMC tend to persist in their studies, engage in deeper understanding of language and end up being more proficient. However, the issue to be addressed is to identify how it can be possible to cultivate DMC in language learners. Some factors which are found out to contribute to the emergence of DMC in learners have been identified as personal values and interests, relevance of language to the goals, and the level of challenge the task includes.

The popularity of the DMC concept has also provoked the idea among educators that learning environment should encourage intrinsic motivation instead of depending merely on rewards and punishments, which demonstrates why individual learning experiences should

be tailored or unique interests of learners should be recognized and taken into account on the way to create a more engaging learning atmosphere, and effective learning experience for learners.

A 'Directed Motivational Current' (DMC) is an intense motivational drive - or surge - which is capable of stimulating and supporting long-term behavior, such as learning a foreign/second language (L2) (Dörnyei, Henry and Muir, 2016) Integrating aspects of several mainstream motivation theories in psychology as well as current strands of motivational thinking in Applied Linguistics, such as the L2 Motivational Self System, language learning vision and Dynamic Systems Theory, DMCs form a multipurpose construct with compelling motivational capabilities: they can act as a fundamental organizer of motivational impetus in general and, as such, have considerable potential as a specific tool to motivate learners in the language classroom.

What makes directed motivational currents different from the general concept of motivation is that it is "...a phenomenon of intense and enduring motivation in pursuit of a highly desired personal goal or vision." As can be understood thanks to this study of Dörnyei et al. (2016), the three distinctive characteristics of DMC as "goal/vision orientedness, salient facilitative structure, and positive emotionality.

Goal / Vision Orientedness

The most notable characteristic of DMC is its "directional nature" as such a strong motivational surge is so hard to attain without a well-defined target or an ultimate goal. The directional structure of DMC is demonstrated through its persistence, a feature which differs it from other actions resulting from high motivation without a specific final goal to reach, like for pleasure (Dörnyei et al., 2014). Dörnyei and Kubanyiova (2014) further explain that despite representing identical directional intentions, goal and vision are different concepts as the latter includes powerful sensory item in the form of concrete imagery regarding the goal achievement. Dörnyei et al. (2014) suggest that the strength of DMC is regulated by inclusion of that 'visionary aspect' the intended goal. It is also claimed that without vision,

despite having a clearly pre-determined goal, the strength and intensity of motivation is not possible to be sustained (Dörnyei et al., 2014, 2015; Henry et al., 2015).

Salient Facilitative Structure

Another distinctive feature of DMC is related to the process and is vital for both assisting the progress of the action and continuation of flow of the current. The obvious characteristics of salient facilitative structure of DMC are listed as distinct start points, fixed behavioral routines, sub-goals as progress checks (Dörnyei, 2016).

To begin with, a DMC must have a perceivable starting point that is easy to identify at the beginning of the process. The events that can initiate DMCs in a language context can be categorized as “at a lesson level, at term level, and at a course level” based on the time scales they occur (Dörnyei et al. 2014, 25; Muir and Dörnyei 2013, 369). An example of a lesson level one can be an engaging task introduced during a course whereas a presentation task assigned to students can be categorized as a term-level (as it requires the inclusion of a number of smaller tasks like looking for an interesting topic, preparing the speech, designing and organizing the Power-Point slides to create an effective presentation. When it comes to the third timescale, it requires students to be more devoted to the goal as this level ‘spans beyond a single term and concerns a language course as a whole’ (Dörnyei et al. 2014, 26).

Dörnyei and Muir (2013) suggest that those who experience a process of DMC build regular behavioral routines and activities and they commit themselves with the lack of deliberate control. Garcia-Pinar (2020) exemplifies this phenomenon as a L2 learner who experience DMC with the goal of achieving fluency and increasing linguistic confidence. This individual is likely to practice daily, give oral presentations and take every opportunity to talk to native speakers.

The last characteristic that makes DMC structure unique is progress checks. With the purpose of reaching the eventual goal, learners set particular and constant ‘proximal subgoals’ for themselves, which assist them conduct a type of self-evaluation and check their

improvement. Thanks to regular progress checks, the learner is likely to be provided with motivational feedback, ending up with encouragement, increase in self-efficacy and autonomy and eventually, leading to improvement (Garcia-Pinar, 2020).

Positive Emotionality

Positive emotionality can be described by Henry, Davydenko, and Dörnyei (2015) as the pleasure an individual gets while engaging in a certain activity because of the awareness that it assists them get closer to their goals. It is expected that those who undergo DMC will experience a feeling of enjoyment and fulfillment stemming from the consciousness that the course they follow is to lead them to their ultimate goal.

Conclusion

Studies have demonstrated that there is a reciprocation between mindset, SR (Kray & Haselhuhn, 2007; Nussbaum & Dweck, 2008; Thompson & Musket, 2005), ASC and directed motivational currents. For instance, Izuchi and Onyekuru (2017) stated as a result of their research conducted with 528 participants that they found a significant correlation between ASC, academic motivation, and academic achievement. Research has shown that learners who pursue growth mindset, good SR skills, positive ASC, and powerful directed motivational currents in language learning process tend to perform better than who do not. Moreover, it is expected that interventions to promote language the interaction between these factors lead to more positive learning outcomes in language learning. Further research is needed to explore the mechanisms underlying the interplay between these factors in language learning.

Chapter 3

Methodology

This chapter describes the methodology of the current study, and it comprises setting and participants, data collection, instruments and data analysis as subsections.

This study aims to determine the impact of mindset on the participants' academic achievement on language learning, SR, ASC and directed motivational currents (DMC), and the interplay between these concepts. For this purpose, mixed method research design, which as Edmonds and Kennedy (2017) "allows to examine the constructs at a deeper level and where the quantitative strand reveals what the qualitative strand leaves out and vice versa" was adapted in the current study. To them, mixed method can also be called as pragmatic as it permits the researcher to practically use multiple methodologies within a single study to address the research questions. Mixed method research design includes qualitative and quantitative data individually analyzed, interpreted which was followed by an overall interpretation. In the present study, the collected data includes both close-ended and numerical (quantitative) and open-ended and textual (qualitative) data collected and interpreted in line with the principles of mixed method design.

Within the framework of mixed method, the current study can be stated to adapt convergent-parallel approach as Edmonds and Kennedy (2017) maintain, both quantitative and qualitative data are collected simultaneously and one type of data functions as complementary to the other, used with the purpose of its elaboration. It is also called as concurrent triangulation design as the data on the same phenomena are collected simultaneously despite having been collected and analyzed separately. As a requirement of the parallel databases design, the quantitative and qualitative data are compared so as to validate the findings and have a deeper understanding on the issue. Edmonds and Kennedy (2017) state that this model is also called *triangulation design* and *convergence model*, as well.

Every research method has its own pros and cons, making it challenging for the researchers to choose among them. To clarify, quantitative research is conducted to be able to make valid and objective descriptions of the phenomena (Taylor, 2005). The advantages of applying quantitative research can be listed as crispness and clarity, lack of subjectivity and known reliability and validity. However, it also has some disadvantages. To illustrate, numeric data may not be adequate to measure the data characteristics the researcher is interested in, and it may not provide data richness as it lacks the participants' descriptions and conveying the full impact of the data set. The qualitative research, on the other hand, includes interpretive and naturalistic method to the phenomena, attempting to study the things in a natural setting, attempting to make sense of, or interpret the topic depending on the meaning the participants bring to it. In qualitative research, it is difficult to validate the data collection tools and to control the reliability in research and it is subjective to a great extent due to reflecting individuals' opinions in terms of coding and rating. However, it provides rich and interesting data, the data focus can be achieved since numbers may not be adequate for reflecting the quality of the data (Trumbull, 2005). Bearing the advantages and disadvantages of both research types in mind, it seems to be necessary to adapt a mixed-method research design, including data collection tools such as surveys and semi-structured interviews and interpreting the collected data with both statistical analysis and coding and rating to compensate for the disadvantages of both research types. In other words, the data to be collected includes both qualitative and quantitative data.

Each research method holds some limitations, and it is the case for mixed method design, as well. Byrman (2008) states that the first issue to occur is that a great number of researchers apply mixed method for the reason of its being popular, not elaborating or justifying the reasons of applying it adequately. Another concern she has about using mixed methods is the lack of agreed-upon the language to be used for discussing the mixed methods research. The underlying cause of this phenomenon could be the word limitation for some journals, or the fact that writers are competent in terms of using the key terms, but not

lack the common sense which underlie the various ways quantitative and qualitative research can be integrated. The third concern that the writer has is that the definition of mixed method research includes words like to integrate, combine, mesh, blend, etc. of both quantitative and qualitative research, but a consensus has not been reached on what is exactly meant with these words. For instance, is it enough that both quantitative and qualitative approach be adapted during data collection or not? Moreover, the components of a good mixed method research are not defined, either, which makes it difficult to be prescriptive about this type of research.

Creswell and Plano Clark (2017) broaden the definition of mixed methods to include not only the data collection procedure in the following way:

“In mixed methods, the researcher

- collects and analyzes both qualitative and quantitative data rigorously in response to research questions and hypotheses,
- integrates (or mixes or combines) the two forms of data and their results,
- organizes these procedures into specific research designs that provide the logic and procedures for conducting the study, and
- frames these procedures within theory and philosophy” (Creswell & Plano Clark, p.41).

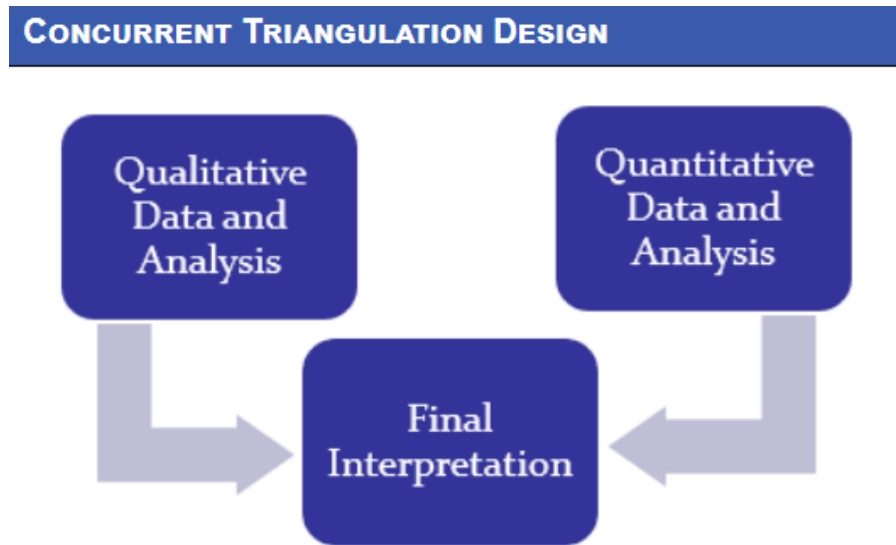
For each research, the best research design should be determined meticulously so that it can serve the purpose of the researcher of the present study. Whereas qualitative research design is more appropriate for some research questions, the opposite can be true for another research. Creswell and Plano Clark (2017) maintain that the purpose of a researcher who plans to adapt mixed methodology in his/her research might be to explain the results, generalize the exploratory findings, expand and enhance the experimental design, compare and contrast multiple cases, involve the participants in the study or program to be evaluated. They emphasize that when it is solely the qualitative data collected, the researcher can have a deeper understanding of the issue, but they lack the ability of making generalizations whereas the opposite is true when quantitative data is the only form of data

collected (the researcher may study with many participants, but because of the nature of the quantitative research design, the ability to further understand the case with each individual reduces). In a mixed method design, the reason for adapting it should be justified and for the present study, the underlying justification is the need to elaborate the findings of the quantitative study and to have a deeper understanding with the help of the qualitative data gathered through the explanations of the participants. In other words, it is assumed that through the application of mixed method, the strength of one approach can compensate for the weak aspect of the other and a greater variety of research questions can be addressed than it can be done with a single approach.

The idea of adapting mixed method for a study can be present from the commencement of the study or it can be adapted during ongoing research, when a need arises. Creswell and Plano Clark (2017) define the former case with the term 'fixed mixed methods design' while the latter is called 'emergent mixed methods design'. Considering that it was evident that this study was going to have a mixed method design beforehand, it can be stated to have a fixed mixed methods design.

As mentioned above, in this research, mixed method research methods was adapted. Concurrent triangulation (convergent) research design was applied in order to identify the interplay between the participants' type of mindset, SR, ASC and directed motivational currents. Whereas instruments used for data collection require quantitative data for the first three variables, the tool used for gathering data on directed motivational currents of the participants comprises open-ended questions in addition to numeric data. The following figure (Figure 6) illustrates the general outline of the study in terms of its phases and objectives, participants, data collection, and data analysis.

Figure 6
Outline of the Study



Setting and Participants

The universe of the study comprises the prep class students at Izmir Democracy University School of Foreign Languages. In this institution, there are three groups of students based on their English levels as A, B and C, Group A having the lowest scores, B having moderate levels of scores and C having the highest scores on the placement test conducted at the beginning of the academic year.

At the beginning of the first term, all the students are given an exemption exam developed by the institutions' test office. The test includes four main language skills, which are reading, listening, writing, and speaking, in addition to testing their grammar and vocabulary knowledge. The initial phase of the exam (which is based on receptive skills- listening and reading) includes multiple choice questions and the students are accepted to the second phase on condition that they pass the first phase successfully. The head of the test office, along with the administrators, decides on the level, skill and question distribution of the exam and informs the office members about the distribution so that they can prepare the questions as they are desired. After all the members finish writing the test, they check each other's questions and give feedback. Following the necessary changes based on the feedback, the administrators also check the questions to make them ready to be printed out.

The first phase of the exam is based on multiple choice questions to provide time efficiency and to be more practical. However, there are several types of questions such as cloze test questions, paragraph questions, word formation, vocabulary, or grammar questions. The exam papers of the first part are graded via an optical reader, avoiding any possible mistakes stemming from human error. In the second phase the students take the writing and speaking exams. The writing part includes writing an essay on one of the three given topics whereas the speaking part includes warm up questions, picture description, dialogue as a pair work and follow up part. To eliminate the human error, interrater reliability of the exam papers is checked and if the discrepancy between the two grades is more than 20%, the instructors evaluate the paper together one more time. Sample exemption and proficiency exam questions can be accessed at the website of the university school of foreign languages.

At the beginning of the academic year 2021-2022, there were 790 students who are obliged to get education at the prep class or prove that they are competent in English. Depending on their scores, the students are either exempted from the prep class or divided into these three categories based on their levels of English. As a result of the exemption and proficiency exam, 120 students are exempted from the prep class education and started their education at their own faculties and departments. The required minimum score for students 70 out of 100 for all the departments except for those who admit students based on their language test scores. For that group, the required minimum exemption score is 80 out of 100.

Students of Group A start the term with an elementary level book whereas Group B starts with a pre-intermediate level and Group C starts with an intermediate level book. When the students were grouped based on their exam scores, Group A included 389 students whereas Group B comprised of 159 students, and Group C had 48 students. (The rest of the students were kept out of the list a few weeks after the academic year started either because they didn't pay the tuition fees, or because they exceeded the maximum absenteeism hours.)

Group A level students have extra course hours to reach the level of the Group B students and these two groups start studying on the same level of book after some time. Both groups finish the academic year after finishing the intermediate level. C levels begin the first term with intermediate level, and they finish the upper-intermediate book by the end of the term.

Whereas their main course lessons are integrated i.e. including four language skills at the same time, they also have separate lessons to be able to improve the other skills such as reading-writing and listening-speaking further. As stated above, based on their English level, they have 23, 20 or 20 hours of course a week respectively, the strongest groups having the fewest hour of courses.

The participants are students of the faculty of engineering, the faculty of architecture, faculty of science and letters, faculty of education and faculty of economics and administrative sciences. None of the students received training on mindset before the data collection process.

Participation to study was on voluntary basis. The participants included those who read the consent form and volunteered to be a part of the research, knowing that they could withdraw from the study whenever they wanted, and the collected data was only to be used for academic purposes. However, permissions were also obtained both from the Educational Sciences Institute and the candidate school's administrations. For determining the sample of the study for the test, the relevant surveys were conducted depending on convenience sampling procedure from non-probability sampling procedure. Qualitative data was also collected to have a deeper understanding of the participants' DMC.

Table 2 demonstrates the gender distribution of the participants who responded to the questionnaires:

Table 2
Gender distribution of the participants

What is your gender?			
		Frequency	Percent
Valid	Female	223	62.8
	Male	132	37.2
	Total	355	100.0

Of 355 total participants, 223 participants were female, and 132 participants were male, which means the female participants outnumbered male participants in the current research study.

Because the study was conducted at the whole school of foreign languages at a state university, English proficiency level of the participants also varied greatly. Table 3 shows the current English proficiency levels of the participants:

Table 3
English proficiency level distribution of the participants

What is your current level of English?			
		Frequency	Percent
Valid	Elementary	197	55.5
	Pre-intermediate	114	32.1
	Intermediate	44	12.4
	Total	355	100.0

The most crowded group of participants in terms of English proficiency level is elementary with 197 students, followed by 114 pre-intermediate level students. The group with the fewest number of students is intermediate with a total of 44 students.

Data Collection

The required data were collected through the use of scales and questionnaires which had been previously developed and proved to be acceptable in terms of reliability and validity. In order to prevent the misunderstanding problems among the participants which

may result in misleading findings for the research, the questionnaires were provided in the participants' native language: Turkish. As Erten (2015) suggests, it is necessary to make sure that the translated items measure the same things as the original items. Therefore, translation-back translation method was conducted. After the completion of the translation process, the questionnaires and scales were modified and conducted to participants. Before administration of the questionnaire and scales and collection of data, all the participants were provided with consent forms to ensure the voluntary participation and to facilitate more trustworthy responses. Both the consent form and the questionnaires and scales were web-based, and the researcher informed the participants regarding the data collection process, to give information about the research and to provide assistance in case a problem occurred.

Instruments

In order to reach the data that were required to respond to the research questions of the study, the questionnaires and surveys that comply with the purpose of the study were carefully selected. The reliability and validity scores of the data collection instruments and some basic information about them are presented in the following list:

- **Dweck Mindset Instrument** (DMI; Dweck, 2006)

- **Self-Regulated Foreign Language Learning Strategy Questionnaire** (Habok, Magyar, 2018)

-**Academic Self-concept Scale** (Liu and Wang, 2005)

-**DMC Disposition Questionnaire** (Muir, 2016)

Instrument 1: Dweck Mindset Instrument

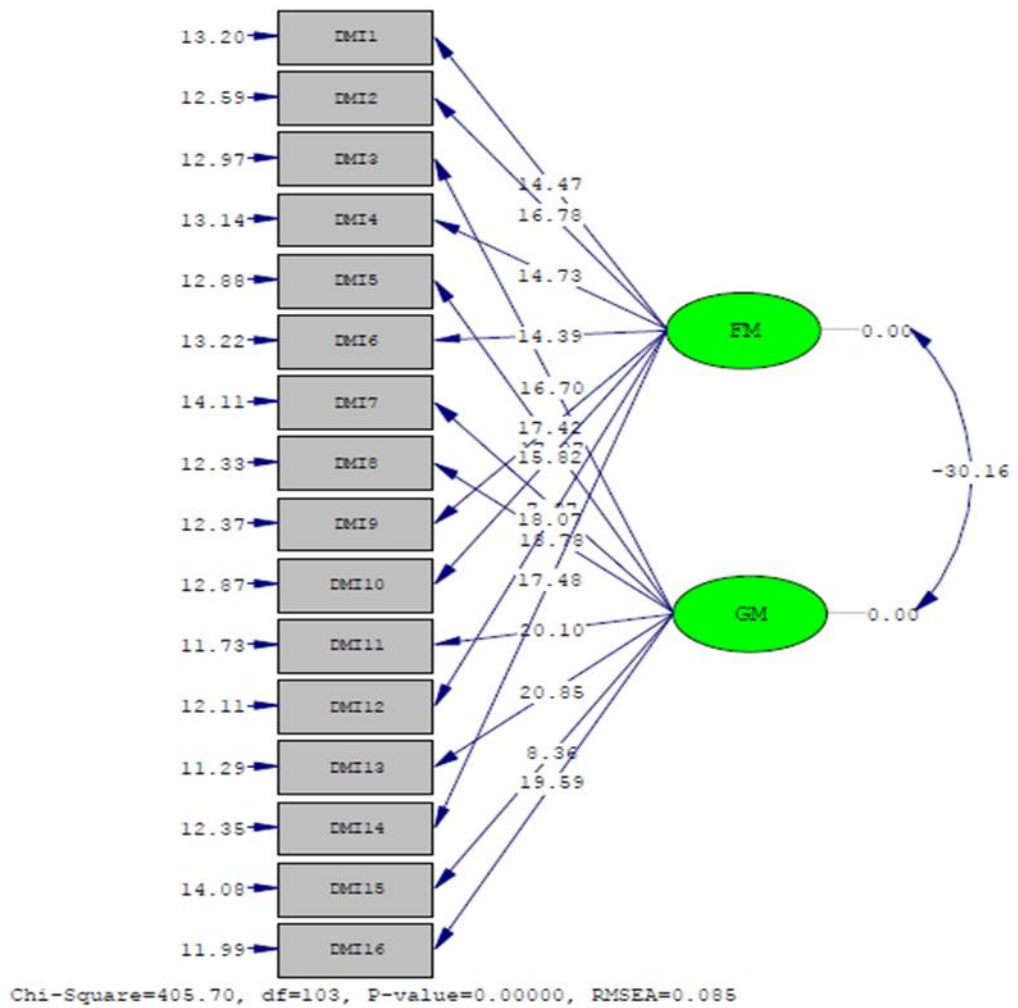
It is developed by Dweck (2006) with the intention of determining the mindsets of the individuals and to categorize them depending on how strong their growth or fixed mindsets are. The questionnaire is comprised of 16 items in the Likert scale form and assesses learners' agreement with some statements regarding their mindsets and their belief of the ability to develop their own intelligence. The instrument has two dimensions as fixed mindset

(FM) and growth mindset (GM). The items 1,2,4,6,9,10,12 and 14 constitute the fixed mindset dimension whereas the rest (items 3,5,7,8,11,13,15 and 16) constitutes the growth mindset dimension. Dweck's research reveals the questionnaire to have acceptable validity and reliability. However, the instrument was originally developed with the purpose of determining participants' mindset in general, not to specify their mindset on language learning. Because some adaptations were made on the instrument by the researcher to assess the participants' mindset on language learning, confirmatory factor analysis was conducted with reliability and validity concerns.

Mindset Scale Validity Results.

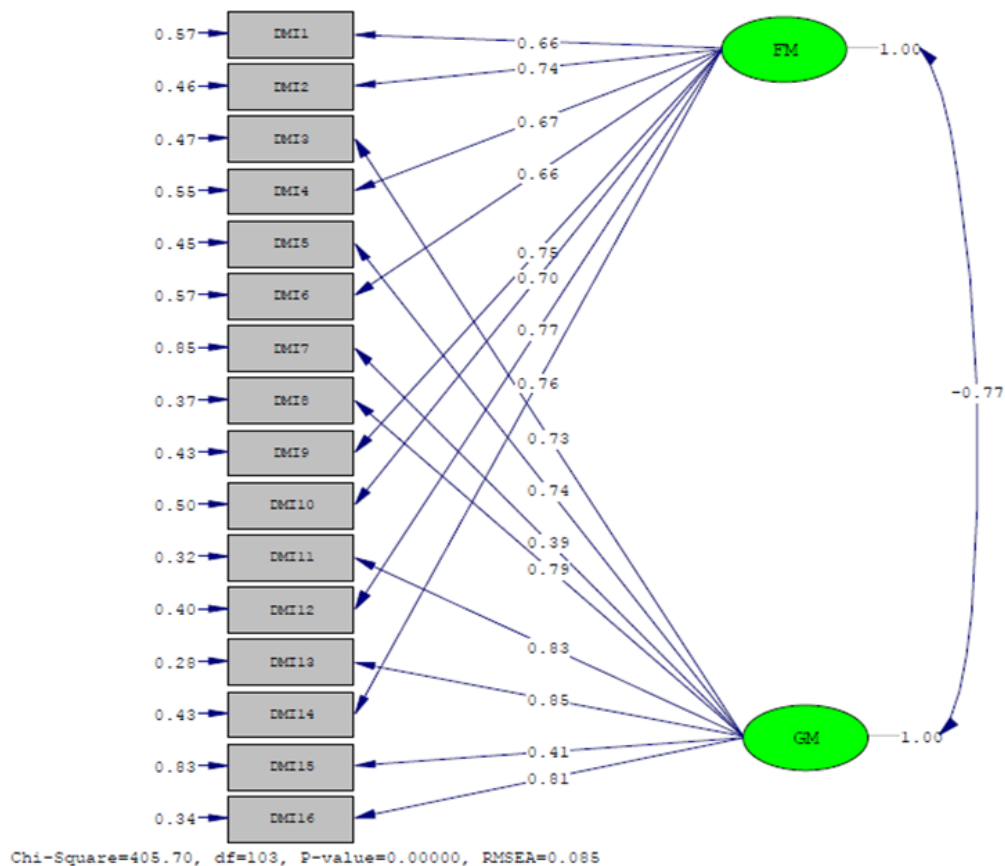
Mindset scale is a scale that is comprised of two dimensions, and the final 16-item scale was used in the adaptation study. First of all, it was checked whether there is missing data or incorrect data entry in the data set. In addition, the outlier value was checked for each item and the standard z value of each item was transformed for the extreme value. Tabachnick and Fidell (2013) stated that it can be considered as an extreme value when there is a value outside of ± 3.30 , and no value outside this range was found for the items. Confirmatory factor analysis was used for construct validity.

Figure 7
The T Values Graphics for Mindset Scale



First of all, the path coefficients between items and dimensions were examined. The fact that t values for all items are outside the critical t value of ± 1.96 at 0.05 signal level indicates that the factor load is significant (Cokluk et al., 2010). For the Mindset scale, path coefficients of all items in both FM and GM dimensions are greater than 1.96 and are statistically significant.

Figure 8
The Standard Regression Values for Mindset Scale



The standard path coefficients for the FM dimension were obtained between 0.66-0.77, and for the GM dimension they were obtained between 0.39-0.85. In general, it can be said that the path coefficients are high.

Table 4
Model Fit-Indexes for Mindset Scale

Indexes	Perfect Fit	Good Fit	Research Findings	Result
X^2/sd	0-3	3-5	3.94	Good Fit
RMSEA	$.00 \leq RMSEA \leq .05$	$.05 \leq RMSEA \leq .10$	0.085	Good Fit
CFI	$.95 \leq CFI \leq 1.00$	$.90 \leq CFI \leq .95$	0.97	Perfect Fit
NFI	$.95 \leq NFI \leq 1.00$	$.90 \leq NFI \leq .95$	0.96	Perfect Fit
IFI	$.95 \leq IFI \leq 1.00$	$.90 \leq IFI \leq .95$	0.97	Perfect Fit
SRMR	$.00 \leq SRMR \leq .05$	$.05 \leq SRMR \leq .08$	0.057	Good Fit

(Schumacker & Lomax, 1996)

The model data fit table obtained from the confirmatory factor analysis results is given in Table 4. Model fits are statistics that give information about the fit of the tested structure. There are many model data fit statistics in the literature (Schumacker & Lomax, 1996). In this study, the most frequently used compatibility indices are included. First of all, the ratio of chi-square (Chi-square- χ^2) to the degrees of freedom was examined, and if this ratio is less than 3, it shows perfect fit and between 3-5 it is a good fit (Kline, 2011) This ratio is found to be (405.70/103) 3.94 and is within the standards of good fit. Root Mean Square Error of Approximation (RMSEA) is another frequently used fit index for model fit, and a value lower than 0.10 is accepted as acceptable lower limits for model data fit (Anderson & Gerbing, 1984; Cole, 1987). A RMSEA value less than 0.05 indicates a perfect fit (Schumacker & Lomax, 1996). The RMSEA value was obtained as 0.085 and the model fit was good fit. Other model data fit indices are Comparative Fit Index (CFI), Normed Fit Index (NFI), Incremental Fit Index (IFI) and Standardized Root Mean Square Residual (SRMR) indexes. According to the results of the validity analysis for the mindset scale, which was adapted with two factors according to the values related to the model data fit, the model showed good fit (RMSEA=.085, CFI=.97, NFI=.96, IFI=.97, SRMR= .057). Construct validity was ensured.

Instrument 2: Self-Regulated Foreign Language Strategy Questionnaire

Developed by Habok and Magyar (2018), this questionnaire aims to shed light on self-regulated foreign language strategies of language learners. The questionnaire has 34 items divided into five sub-scales as metacognitive, cognitive, meta-affective, meta-sociocultural-interactive, and sociocultural-interactive. Reliability values are found out to be acceptable for the questionnaire, Cronbach's alpha values ranging from 0.74 to 0.88 whereas inter-correlation coefficients ranged from 0.63 to 0.75 (Habok and Magyar, 2018). The questionnaire includes 5 dimensions as meta cognitive (items 1-8), cognitive (items 9-14), meta-affective (items 15-22), meta sociocultural interactive (items 23-30) and sociocultural interactive (items 31-34). For each subdimension, Habok and Magyar (2018) reported the

reliability values as follows: “The meta-sociocultural interactive strategy field indicated the highest reliability (Crba = 0.88; ω = 0.88), while the metacognitive field was also high (Crba = 0.84; ω = 0.84). Cronbach’s alpha and omega coefficients for the meta-affective (Crba = 0.77; ω = 0.79) and sociocultural-interactive (Crba = 0.74; ω = 0.74) fields fell slightly below the level of acceptability. The cognitive field also showed acceptable coefficients (Crba = 0.75; ω = 0.76). Our KMO index was very high at 0.972” (p. 7).

Table 5 demonstrates the reliability values:

Table 5
Internal consistency reliability (CRB) and composite reliability (CR).

Strategy	CRB	CR
Metacognitive	0.84	0.84
Cognitive	0.75	0.76
Meta-affective	0.77	0.79
Meta-sociocultural-interactive	0.88	0.88
Sociocultural-interactive	0.74	0.74

It can be understood from the table that both consistency reliability and composite reliability values are between acceptable ranges, which makes the instrument a reliable one.

As for validity studies of the instrument, Habok and Magyar (2018) calculated both convergent and discriminant validity values of the instrument and the results indicated that the values were acceptable, the inter-correlation coefficients (r) ranged from 0.63 to 0.75 and the composite reliability is higher than 0.7 for all constructs in the measurement model, confirming the convergent validity (Table 5), and discriminant validity results were between 0.63 and 0.75 (Table 6). All values being less than 0.85, discriminant validity was also confirmed.

Table 6*Average variance extracted (AVE) and inter-correlations for the 5-factor correlated model*

Strategy	AVE	MC	C	MA	MS	S
Metacognitive (MC)	0.41		0.71	0.70	0.70	0.66
Cognitive (C)	0.35			0.33	0.64	0.63
Meta-affective (MA)	0.33				0.72	0.68
Meta-sociocultural interactive (MS)	0.48					0.75
Sociocultural interactive (S)	0.42	0.4				

MC, metacognitive; C, cognitive; MA, meta-affective; MS, meta-sociocultural-interactive; S, sociocultural-interactive. All correlations are significant at $p < 0.001$.

HTMT ratio, which stands for Heterotriat-Monotriat Ratio of Correlations, proposed by Henseler, et al. (2015), is used for assessing discriminant validity. If the HTMT value is below 0.90, this means the establishment between two reflective constructs. Table 10 demonstrates the HTMT values for the instrument conducted to assess the participants' self-regulation.

Table 7*HTMT ratio of the correlations for the factors.*

Strategy	MC	C	MA	MS	S
Metacognitive (MC)		0.71	0.70	0.70	0.66
Cognitive (C)			0.68	0.64	0.63
Meta-affective (MA)				0.72	0.69
Meta-sociocultural-interactive (MS)					0.75
Sociocultural-interactive (S)					

As it can be seen at Table 7, the HTMT values for each sub-dimension is below 0.90, which means discriminant validity is established for all the subdimensions of SR questionnaire.

Instrument 3: Academic Self-Concept Scale

ASC scale, having 20 items in Likert scale, was developed by Liu and Wang (2005). The items 1,3,5,7,9,11,13,15,17 and 19 constitute academic confidence sub dimension whereas 2,4,6,8,10,12,14,16,18 and 20 constitute academic effort sub dimension. The validity and reliability of the scale was established by Liu, Wang and Parkins (2005) and the results of Cronbach's alpha coefficients demonstrated the ASC scale and its two first-order factors which are academic confidence and academic effort to have satisfactory internal consistencies (α s = .82, .71 and .76 respectively). Table 8 shows the fit indices of the alternative CFA models.

Table 8
The fit indices of the alternative CFA models

	χ^2	DF	CFI	GFI	AGFI	RMSR	RMSE
One-factor model (1)	379.77	147	.864	.917	.893	.026	.056
Two-factor model (2)	287.44	146	.917	.941	.923	.023	.044
Hierarchical Model (3)	287.45	146	.917	.941	.923	.023	.044

Instrument 4: DMC Disposition Questionnaire

It was developed by Muir for her PhD dissertation. Muir (2016) maintained that she conducted a reliability analysis by including all 12 items, whose Cronbach's Alpha was .80 and reached .84 after deleting the items 'struggle' and 'easyflow'. After deletion of them, 10 Likert scale items remained in the scale with strong internal consistency (Cronbach's Alpha=.84). She also carried out a reliability analysis for the two separate groups the first one being

the DMC group and the second one being the long-term general motivation group (including participants who experienced a long-term motivation, but not in a very intense way). The Cronbach's Alpha coefficient values reached levels of .85 and .79 respectively.

Data Analysis

This section aims to shed light on the analysis was used with the purpose of obtaining reliable and valid findings based on the collected data. The following sections explain which analysis were conducted and which research questions they answered.

In the first phase of the research, the data gathered through the application of previously mentioned instruments were computerized and analyzed via IBM SPSS statistics 24, LISREL 8.80, and NVIVO. While organizing scale scores, obtaining sub-dimensions and descriptive statistics were done with SPSS 24 program, LISREL 8.80 program was used in CFA, SEM and mediator analysis. Except for these, descriptive statistics, correlation, and multiple regression were also performed and presented. Before data analysis, data control was performed, and lost data were deleted. For the normality of the scale scores, skewness and kurtosis values were examined, and if these values are between ± 1 , the score distribution is normal (Tabachnick & Fidell, 2013). Scores for the sub-dimensions were obtained by the average of the items in those dimensions, and the relationship between the sub-dimensions was examined by Pearson correlation. Since all scale scores are continuous, estimation was made with the maximum likelihood method. The path coefficients obtained in SEM were interpreted according to the critical value of ± 1.96 , which is the t value at the level of $\alpha=05$, and the path coefficients for the t values outside the range of ± 1.96 are statistically significant (Cokluk et al., 2010). Structural equation modeling was constructed in two stages, first of all, the measurement model was tested for all variables to be included in the model, and then mediation was tested with the structural model according to the measurement model and hypotheses (Şimşek, 2007).

There are many model data fit indices in the literature. The most frequently used indexes are included in this study. Chi-square and degrees of freedom ratio, root mean square of error squares RMSEA (Root Mean Square Error of Approximation) fit index, comparative fit index CFI (Comparative Fit Index), goodness fit index GFI (Goodness of Fit Index), incremental fit index IFI (Incremental Fit Index), the normed fit index NFI (Normed Fit Index), and standardized root mean square error SRMR (Standardized Root Mean Square Residual) were used. The acceptable values of model data fit according to these fit indices are shown in Table 9.

Table 9
References for Model Data Fit Critical Values

Index	Critical Value	Reference
χ^2/sd	≤ 3 ; perfect fit ≤ 5 ; good fit	(Kline, 2005)
RMSEA; SRMR	$\leq .05$; perfect fit $\leq .08$; good fit $\leq .10$; good fit	(Steiger, 1990; Schumacker & Lomax, 1996 Hu & Bentler, 1999; Anderson ve Gerbing, 1984; Cole, 1987)
CFI	$\geq .95$; perfect fit $\geq .90$; good fit	(Schumacker ve Lomax, 1996; Fan, Thompson ve Wang, 1999)
GFI;	$\geq .95$; perfect fit $\geq .90$; good fit	(Schumacker ve Lomax, 1996; Hu & Bentler, 1999)
NFI; IFI	$\geq .95$; perfect fit $\geq .90$; good fit	(Hu & Bentler, 1999; Sümer, 2000)

In this study, the Structural Equation Modelling was tested with the sub-dimensions obtained from these items instead of the observed variables, namely the scale items. Since the DMC scale is a unidimensional scale, the SEM model should have at least two items in one dimension, so the item parceling method was used (Şimşek, 2007). Corrected item-total correlations were obtained for the items in the DMC scale, and these correlations were assigned to two dimensions, in an order from biggest to smallest (see Table 10).

Table 10
Item Parceling for DMC Scale

Dimensions	Items
Parcel 1	3-9 / 3-6 / 1-2 / 3-13 / 3 -10 / 2-2 / 1-1 / 2-1
Parcel 2	3-5 / 3 -12 / 3-14 / 3-2 / 3-1 / 1-3 / 3-3 / 1-4

The DMC scale consists of 2 parcels and each parcel contains 8 items. All scores were obtained by adding the items in the relevant dimension and dividing them by the number of items.

To comprehend whether a correlation exists between the participants' pursued mindset and academic achievement in language learning and to be able to respond to research question 2, a Pearson correlation test was intended to be conducted through SPSS 23. Before that, normality assumption was tested.

Normality of the data

Initially, the data collected through questionnaires were computerized and analyzed by the application of relevant tests through SPSS 23. The reverse items were recoded to prevent misinterpretations. Following this step, Kolmogorov-Smirnov and Shapiro-Wilk tests for normality were conducted to figure out whether the data showed normal distribution or not and whether an outlier exists in the data set or not, which will indicate whether Pearson correlation test can be applied or not. The findings are illustrated in Table 11:

Table 11
Test of Normality Results for Mindset Score and Midterm Scores

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Mindset_score	.110	355	.000	.937	355	.000
Midterm_score	.116	355	.000	.896	355	.000

a. Lilliefors Significance Correction

Figure 9 also illustrate the skewness of the data.

Figure 9
Histogram for Mindset

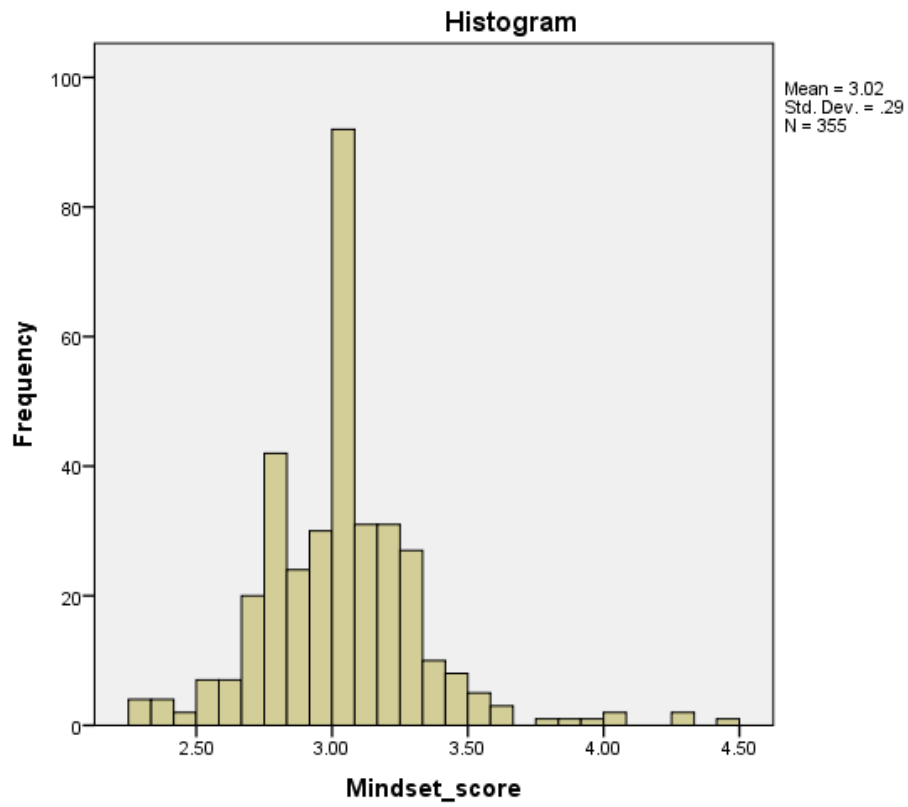
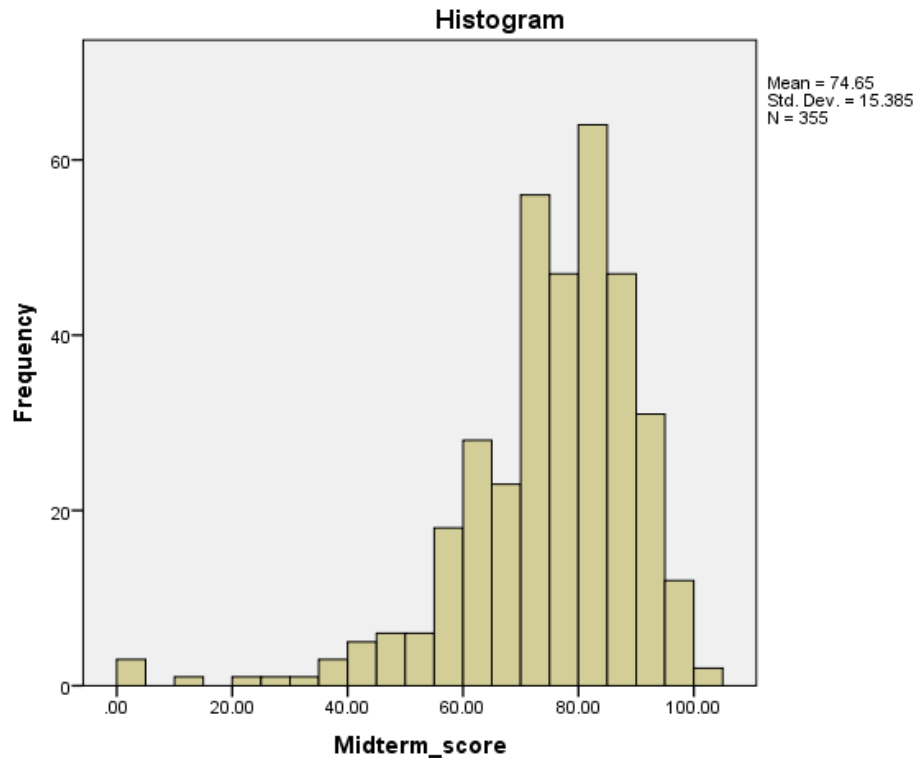


Figure 10
Histogram for Midterm Scores



To respond to the present research question 3, a multiple regression analysis needs to be conducted. However, as Pallant (2011) addresses, multiple regression analysis can be used for a number of purposes ranging from explaining how successful a group of variables are in terms of predicting an outcome to giving information on the best predictor of an outcome or to understanding whether a particular variable still has the ability to predict an outcome on condition that the impact of another variable is controlled.

To be able to conduct multiple regression analysis with a particular set of data, there are a number of assumptions to be controlled including “the sample size, multicollinearity and singularity, outliers, normality, linearity, homoscedasticity, independence of residuals” (Pallant, 2011).

Sample size

Different experts tend to give varying formula to explain the sufficient number of participants for particular research. For instance, whereas Stevens (1996) claims that reliable equation requires at least 15 participants for each predictor, Tabachnick and Fidell (2007)

suggest a formula as follows: $N > 50 + 8m$ (where m represents the number of independent variables. Pallant (2011) adds that if stepwise regression is the intended analysis, 40 cases will be needed for each independent variable. The sample size being 355 after the removal of missing data for the present study, this assumption was met regardless of the expert to be taken into consideration.

Multicollinearity and singularity

The data set was also checked to understand whether a big correlation exists between the variables or not - as correlation $r = .9$ or above is not appropriate for conducting multiple regression analysis (Pallant, 2011). It is also checked whether one variable is a combination of other variables. Table 12 demonstrates the findings of the correlation between the variables.

Table 12
Correlation Results for the Variables of the Study

Correlations

		Mindset_score	ASC_score	SR_score	DMC_score
Mindset_score	Pearson Correlation	1	.160**	.110*	.106*
	Sig. (2-tailed)		.002	.039	.046
	N	355	355	355	355
ASC_score	Pearson Correlation	.160**	1	.056	.048
	Sig. (2-tailed)	.002		.295	.372
	N	355	355	355	355
SR_score	Pearson Correlation	.110*	.056	1	.471**
	Sig. (2-tailed)	.039	.295		.000
	N	355	355	355	355
DMC_score	Pearson Correlation	.106*	.048	.471**	1
	Sig. (2-tailed)	.046	.372	.000	
	N	355	355	355	355

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

When the findings of the correlation were checked, it can be said that mindset scores of the participants have significant correlation with ASC ($p=0.002<0.05$), SR ($p=0.39<0.05$), and directed motivational currents ($p=0.046<0.05$). The table makes it clear that the correlation between the mindset and ASC ($r=.160$), SR ($r=.110$) and directed motivational currents ($R r=.106$) is small whereas it is necessary to be at the moderate level for conducting multiple regression, which violates one of the assumptions of multiple regression.

Normality of the data

Initially, the data collected through questionnaires were computerized and analyzed by the application of relevant tests through SPSS 23. The reverse items were recoded to prevent misinterpretations. Following this step, Kolmogorov-Smirnov and Shapiro-Wilk tests for normality were conducted to figure out whether the data showed normal distribution or not and whether an outlier exists in the data set or not, which will indicate whether multiple regression test can be applied or not. The findings are illustrated in Table 13:

Table 13
Test of Normality Results

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
ASC_score	.080	355	.000	.987	355	.003
SR_score	.046	355	.069	.992	355	.062
DMC_score	.057	355	.007	.982	355	.000
Mindset_score	.110	355	.000	.937	355	.000

a. Lilliefors Significance Correction

Here two tests run for normality reveal that the p value for ASC scale is 0.00 and 0.003, for SR, it is 0.069 and 0.062, for directed motivational currents, it is 0.007 and 0.00, and for mindset it is 0.00 and 0.00 for Kolmogorov- Smirnov and Shapiro-Wilk respectively ($p < 0.05$). Based on these findings, we can accept the alternative hypothesis and conclude that the data obtained from three of the questionnaires come from a non-normal distribution. However, histograms can also be valuable tools for understanding whether the data for each

variable show normal distribution or not. When the histograms are analyzed for each variable, it can be seen that the data set is not in line with the normal distribution curve with skewness and some outliers, and despite the sample size, the fluctuation of the data from the normal distribution can be assumed to violate the normal distribution of the data, making it inappropriate to conduct multiple regression.

Figure 11
Histogram for ASC

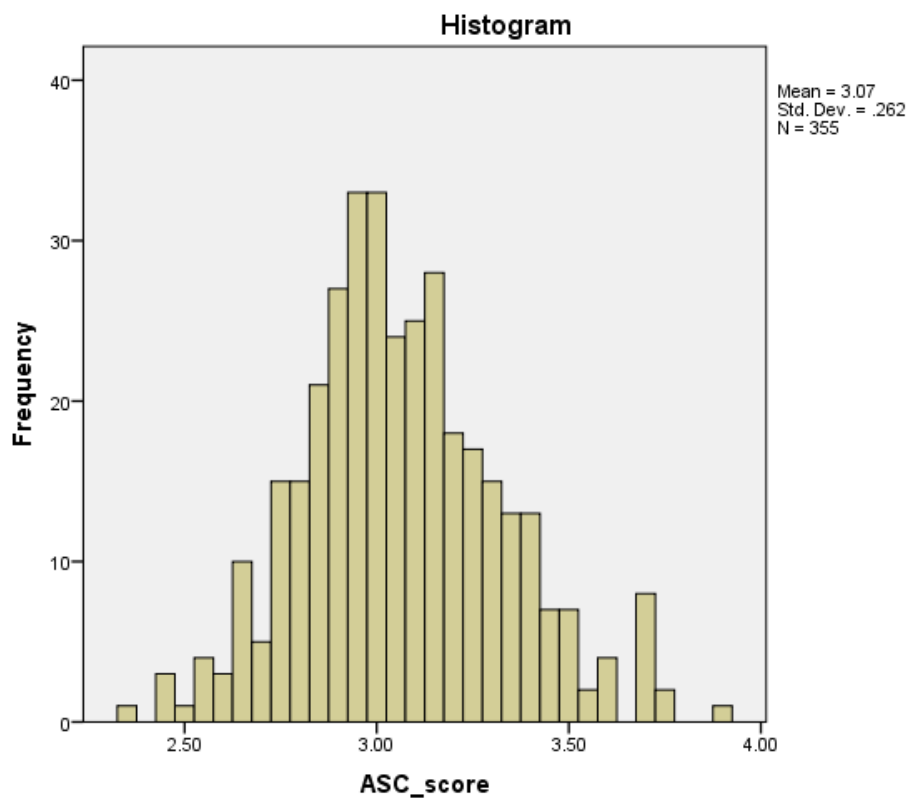


Figure 12
Histogram for SR

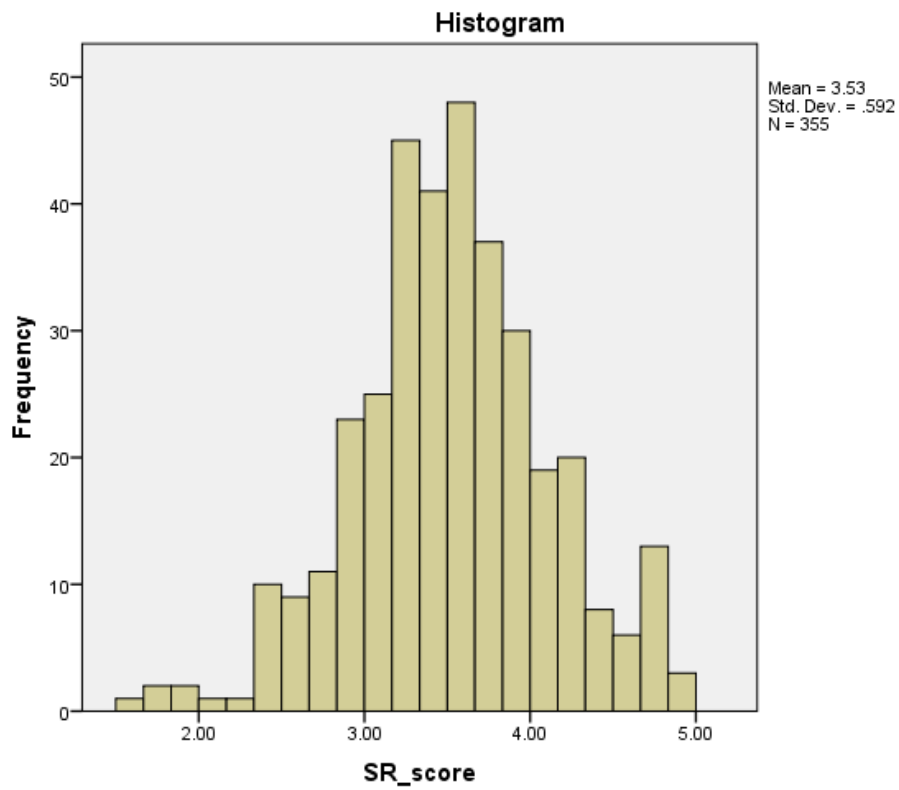


Figure 13
Histogram for DMC

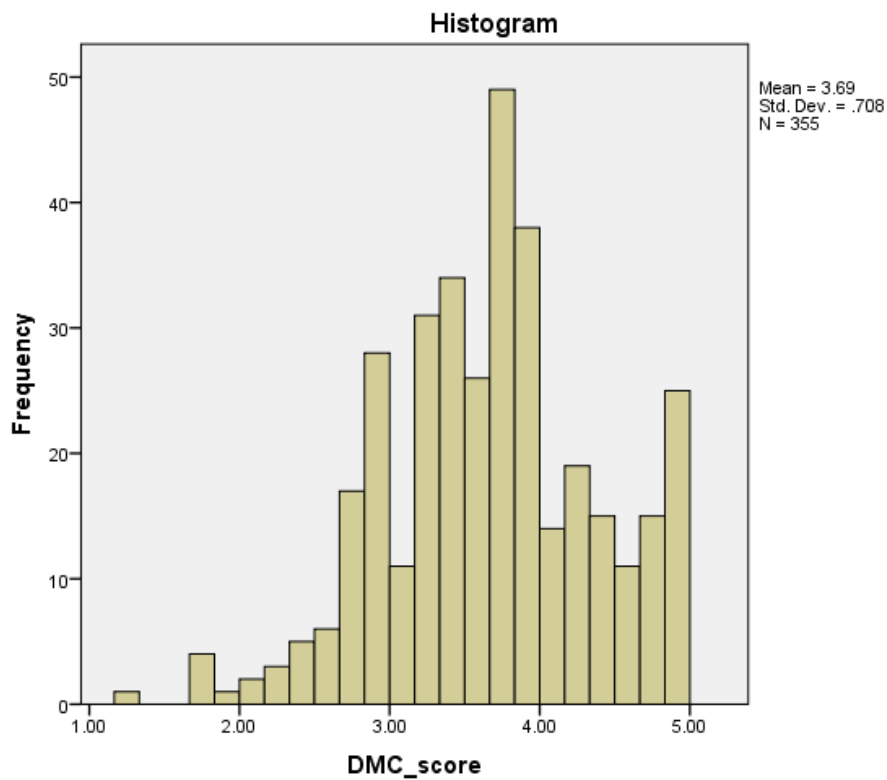
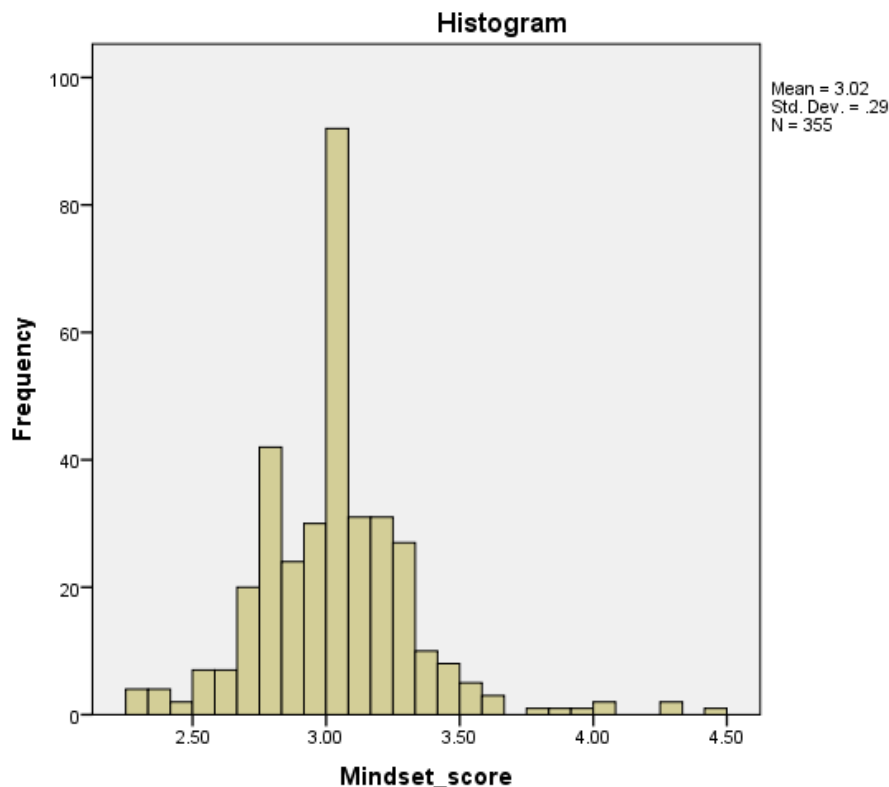


Figure 14
Histogram for Mindset



With the purpose of responding to research question 4, it was necessary to perform Structural Equation Modelling. However, initially, based on the literature review, a model that would be tested via SEM was created.

Hypothesized Structural Equation Model

When the literature on concept of mindset and relevant studies are analyzed, it can be seen that it is related to a number of factors in addition to academic achievement. To begin with, Murphy and Thomas (2007) stated that there are a great number of studies suggesting that student beliefs like self-theories have a crucial effect on academic success of them. Dweck (2010) also found out in her study in which she analyzed the students' scores over a two-year period found that those with growth mindset significantly outperformed those with fixed mindset. Claro et al. (2016) reached a similar conclusion as a result of the study conducted with financially disadvantaged participants, as well.

However, academic achievement was not the only factor to be linked to pursued

mindset. For instance, as Dweck (2010) put forth, those students who are the most motivated and resilient and who put more effort on the learning process were found out not to be the ones with fixed mindset who believed intelligence was innate, but those who hold a growth mindset, believing that intelligence can be improved through learning, challenges and effort. Therefore, one can conclude that our belief systems such as mindset can be influential in our motivation, buffering one against demotivation and leading to better academic performance.

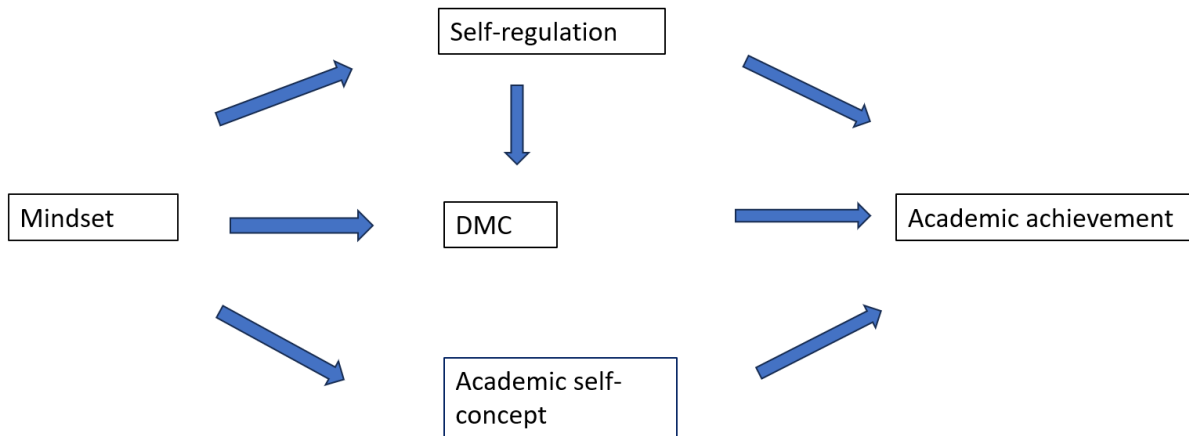
Although it was claimed that academic achievement and mindset were linked, that did not necessarily mean that there was a direct relationship between them since it is not only about believing but also exerting effort in a systematic way for controlling and monitoring the learning process to reach that certain learning goal, which reminds us of SR. In other words, there might be other mediating factors between academic achievement and mindset like SR. As it has been widely known and was put forth by Zimmerman (1998), SR is a process in which learners control, monitor, and regulate their learning in terms of its cognitive, affective, and behavioral aspects to reach their learning goals, leading us to conclude that regulating and controlling our learning can lead to better academic performance. Dweck (2010) claimed that the learners trained merely on study skills did not show a significant improvement in their grades, but the ones with growth mindset could achieve this. Adimoto (2015) put forth that pursuing growth mindset about academic achievement prompted adapting mastery goals in addition to effort attribution. Burnette et al. (2013) also stated in their research that implicit theories (in other words mindsets) "...predict distinct self-regulatory processes, which in turn predict goal achievement" (p.655). That is why it was hypothesized that SR might have a mediating role between mindset and academic achievement.

As stated above, mindset affects motivation and motivation affects academic achievement, but being motivated is not adequate on its own. Dweck (2010) also pointed out that those with growth mindset view setbacks and failures as a learning opportunity, causing them to control, monitor and regulate their learning, again making us think that SR might have a mediating role.

In conclusion, in the light of the literature review, it was hypothesized that mindset

affects SR, ASC and directed motivational currents, and these three have an impact on the individuals' academic achievement. The following figure shows the model to be tested:

Figure 15
Hypothesized Structural Equation Model



Some descriptive statistics were presented as can be seen in Table 14.

Table 14
Descriptive Statistics for Dimensions of the Scales

Scale	Dimensions	Minimum	Maximum	Mean	Sd	Skewness	Kurtosis
Mindset	FM	1	5	2.15	0.75	0.847	0.930
	GM	1.38	5	3.89	0.74	-0.561	0.179
Academic Self Concept	AC	2.1	4	3.11	0.31	0.129	0.097
	AE	2.1	4.1	3.02	0.32	0.335	0.288
SR	MC	1.25	5	3.69	0.66	-0.241	0.44
	C	1	5	3.51	0.76	-0.327	0.379
	MA	1.75	5	3.54	0.66	-0.052	-0.200
	MSI	1.13	5	3.60	0.81	-0.27	-0.277
	SI	1.25	5	3.29	0.75	0.041	-0.094
Directed Motivation Currents	DMC1	1.4	5	3.63	0.76	-0.108	-0.225
	DMC2	1.2	5	3.75	0.73	-0.267	0.024

Mindset scale averaged 2.15 for the FM (fixed mindset) sub-dimension and 3.89 for the GM (growth mindset) sub-dimension. The average for the Academic Self Concept scale

was 3.1 in the AC (academic confidence) dimension and 3.02 in the AE (academic effort) dimension. In the self-regulated foreign learning strategy scale, the average for the sub-dimensions was 3.69 for MC (meta cognitive), 3.60 for MSI (meta sociocultural interactive), 3.54 for MA (meta-affective), 3.51 for C (cognitive) and 3.29 for SI (sociocultural interactive). On the Directed motivational currents scale, the dimension mean was 3.63 for w and 3.75 for DMC2. Skewness and kurtosis values, on the other hand, are statistics that provide information about the normality of the score distributions, and if they are between ± 1 , the data distribution is normal (Tabachnick & Fidell, 2013). The scores for all sub-dimensions are normally distributed.

Structural Equation Model Assumptions.

SEM should not be applied to each data and initially, various assumptions should be tested. Continuous variables should show the property of normal distribution. Necessary assumptions in the mediation model are that there should be a statistically significant relationship between dependent and independent variables and independent and mediating variables. In addition, there should not be a high level of correlation between the independent variables in the model, and there should not be a multi-collinearity problem between the independent and dependent variables (Baron & Kenny, 1986; Tabachnick & Fidell, 2013). Multicollinearity is when the level of correlation between two variables is greater than 0.90 (Cokluk et al., 2010). The relationship between all variables in the measurement model was obtained with the Pearson correlation coefficient and is shown in Table 15.

Table 15
Pearson Correlation between Dimensions Table

	FM	GM	AC	AE	MC	C	MA	MSI	SI	DMC1	DMC2
FM	1	-,683**	0,023	,123*	-,237**	-,136**	-,215**	-,109*	-,126*	-,104*	-,123*
GM	-,683**	1	0,04	0,003	,278**	,273**	,297**	,175**	,189**	,203**	,189**
AC	0,023	0,04	1	,364**	,140**	,134**	,114*	0,071	-0,045	0,076	-0,019
AE	,123*	0,003	,364**	1	0,049	0,024	-0,038	0,047	-0,089	0,063	0,001
MC	-,237**	,278**	,140**	0,049	1	,664**	,691**	,629**	,474**	,396**	,396**
C	-,136**	,273**	,134**	0,024	,664**	1	,575**	,592**	,506**	,348**	,363**
MA	-,215**	,297**	,114*	-0,038	,691**	,575**	1	,569**	,467**	,434**	,427**
MSI	-,109*	,175**	0,071	0,047	,629**	,592**	,569**	1	,601**	,329**	,345**
SI	-,126*	,189**	-0,045	-0,089	,474**	,506**	,467**	,601**	1	,301**	,298**
DMC1	-,104*	,203**	0,076	0,063	,396**	,348**	,434**	,329**	,301**	1	,797**
DMC2	-,123*	,189**	-0,019	0,001	,396**	,363**	,427**	,345**	,298**	,797**	1

** $p < .01$; * $p < .05$

According to Table 15, a significant positive correlation was found between Mindset FM sub-dimension and ASC AC dimension ($p < .05$). However, there was no statistically significant relationship between FM sub-dimension and AE, and between GM sub-dimension and ASC sub-dimensions. While a negative correlation was found between Mindset FM sub-dimension and self-regulated and DMC sub-dimensions, there was a positive correlation between GM sub-dimension and self-regulated and DMC sub-dimensions ($p < .05$). While there is a positive correlation between ASC AC sub-dimension and self-regulated scale MC, C and MA ($p < .05$), there is no relationship between MA and MSI sub-dimensions ($p > .05$). There was no significant correlation between the ASC AE sub-dimension and the self-regulated scale and DMC sub-dimensions ($p > .05$). There was a positive and statistically significant relationship between the sub-dimensions of the self-regulated scale and DMC scales ($p < .05$), and a negative and significant relationship was found between the emotional accessibility of the parents and the sub-dimensions of well-being ($p < .05$). ASC sub-dimensions are not related to other scale sub-dimensions or are at a low level.

Although the collected quantitative data gave an idea on the DMC of the participants, in order to have a deeper understanding of the language learners' DMC and to come up with more reliable source of information, collected qualitative data were also analyzed based on qualitative content analysis via NVIVO.

In the next stage of the research, after having a clear idea of the participants' mindset, SR, ASC and directed motivational currents (DMC), the qualitative responses of the participants were also analyzed to have a deeper understanding of the link between their experience of DMC and their wish to experience DMC again and the participants' SR and mindset. In order to increase the reliability of the study, the coding was carried out by the researcher again, which increased the intrarater reliability and to increase the interrater reliability, the coding was carried out by another researcher. Then, the coding values were computerized and Kappa value was calculated. Finally, different coding was crosschecked, and a consensus was reached on the categorization and coding of the data.

Table 16 shows the Kappa value belonging to the coding of reasons for the desire to experience DMC again.

Table 16

Kappa value for interrater reliability (reasons for the desire to experience DMC again)

		Symmetric Measures			
		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Measure of Agreement	Kappa	.962	.015	23.26	.000
N of Valid Cases		231			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

And Table 17 demonstrates the agreement between the two raters for the coding of how the participants' DMC experience started.

Table 17

Kappa value for interrater reliability (how DMC experience started)

Symmetric Measures

		Asymptotic		Approximate
		Value	Standard Error ^a	Approximate T ^b Significance
Measure of Agreement	Kappa	.946	.019	26.499 .000
N of Valid Cases		187		

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Cohen determined the value ranges for the interpretation of agreement between the raters and the values are as follows (see Table 18):

Table 18

Agreement interpretation of Kappa values

Value	Interpretation
≤ 0	None
0.01–0.20	Slight
0.21–0.40	Fair
0.41– 0.60	Moderate
0.61–0.80	Substantial
0.81–1.00	Near Perfect

Based on this table and the value calculated as a result of the Kappa analysis in SPSS, it can be stated that the coding agreement of the two raters are almost perfect and statistically significant. ($\kappa = 0.96$ and 0.95 and $p = .00 < .05$)

The final phase of the research includes the analysis, comparison and interpretation of both quantitative and qualitative research data collected to be able to seek answers to the research questions of the research study.

Chapter 4

Findings, Comments and Discussion

In this section, the findings related to the research problems discussed within the scope of the research are given.

Findings

Research Question 1

What is the common mindset of Turkish EFL learners in preparatory classes based on their current proficiency levels of English?

To respond to the research question, initially responses to each item in the instrument was computerized. As it was in most of the resources in literature, the data was categorized by assigning each participant to a certain category (Aronson et al., 2002; Blackwell et al., 2007; Claro et al., 2016; Dweck et al., 1995; Hong et al., 1999). For the current study, due to having a 5-point Likert scale, the participants with a mean mindset score of 0-2.0 were assigned to the fixed mindset group, those with a mean mindset score of 3.0-5.0 were categorized as growth mindset group and the rest of them (those with a mean score of 2.0-3.0) were categorized as mixed mindset group. Table 19 shows the distribution of the participants mindset categories based on their mean mindset scores:

Table 19

Frequency table demonstrating participants' mindset categories

mindset_categories		Frequency	Percent
Valid	fixed mindset (0-2)	1	.3
	mixed mindset (2-3)	132	37.2
	growth mindset (3-5)	222	62.5
	Total	355	100.0

As it can be seen when the above table is analyzed, of all 355 participants, 222 of them were found to have growth mindset, 132 of them were found to have mixed mindset and 1 of them was found to have a fixed mindset. The percentages of these categories were 65.5%, 37.2% and 0.3% respectively. After revealing that most students seem to have growth mindset, there emerged a need to investigate the mean scores in detail to be able to understand whether these participants have very high levels of growth mindset or not. Therefore, further analysis was conducted, and the computerized data were analyzed by conducting descriptive statistics on SPSS 23 and the overall mindset score findings were tabulated as follows (see Table 20).

Table 20

Descriptive Statistics for the Participants' Common Mindset

	Minimum	Maximum	Mean
Mindset_score	1.50	5.00	3.02

As can be seen on the table above, the mindset scores of the 355 participants range from 1.50 to 5.00 (1 indicating the fixed mindset and 5 indicating the growth mindset). The mean score of the collected data is 3.02, which means the mindset score of the participants were categorized as growth mindset only with a slight level of deviation from the mixed mindset with a standard deviation of 0.31.

Then, to demonstrate the mindset score of the participants in relation to their proficiency levels, one way ANOVA was conducted, and Table 21 shows the findings of the analysis:

Table 21

Descriptive Statistics for Mindset Score Values based on English Proficiency Levels

	N	Mean	Std. Deviation	Minimum	Maximum
Elementary	197	2.99	.28	1.50	4.06
Pre-intermediate	114	3.07	.30	2.31	4.25
Intermediate	44	3.05	.43	2.44	5.00
Total	355	3.02	.31	1.50	5.00

It was expected that elementary proficiency level students have the minimum mindset score, followed by pre-intermediate and intermediate students, and when the

minimum and maximum values were analyzed, one can consider it to be so. However, when the mean scores are compared, one can easily see that mean scores are very close to each other (for elementary level $\mu=2.99$, for pre-intermediate level $\mu=3.07$ and for intermediate level $\mu=3.05$).

Table 22 demonstrates different proficiency level students' mindset scores:

Table 22

ANOVA Results for different proficiency level students' mindset scores

ANOVA					
Mindset_score	Sum of				
	Squares	df	Mean Square	F	Sig.
Between Groups	.564	2	.28	2.97	.05
Within Groups	33.43	352	.10		
Total	34.00	354			

In addition, the difference between different proficiency level groups was found not to be statistically significant ($p=0.05$)

Research Question 2

Is there a statistically significant relationship between participants' growth or fixed mindset and their academic achievement in language learning...

2a. when gender is the control variable?

2b. when current English proficiency level is the control variable?

Due to the violation of the normal distribution assumption, the non-parametric version of the Pearson correlation test, which is Spearman correlation test, was conducted, and the findings are as follows (see Table 23):

Table 23

Spearman Correlation Test Results for The Correlation between Mindset and Academic Achievement

Correlations

			Mindset_score	Midterm_score
Spearman's rho	Mindset_score	Correlation	1.000	.05
		Coefficient		
		Sig. (2-tailed)	.	.38
		N	355	355
	Midterm_score	Correlation	.05	1.000
		Coefficient		
		Sig. (2-tailed)	.39	.
		N	355	355

The findings revealed that there is no correlation between the mindset the participants have and their midterm exam scores and as can be seen at the table, the results are not statistically significant ($p=0.383>0.05$). Depending on this finding, it can be deduced that there seems to be no relationship between the language learners' mindset and their academic achievement in language learning for the present study.

To be able to respond to the sub research questions, further analyses were conducted via SPSS 23.

2a. when gender is the control variable?

Table 24 demonstrates the partial correlation results for mindset and academic achievement when gender is the control variable:

Table 24

Partial Correlation Results for Mindset and Academic Achievement When Gender is the Control Variable

Correlations				
Control Variables			Mindset_score	Midterm score
Gender	Mindset_score	Correlation	1.000	-.040
		Significance (2-tailed)	.	.453
		df	0	343

Partial correlation analysis was conducted to figure out whether the interplay between the midterm score and mindset score was affected by the gender of the participants and if so, to eliminate the impact of it. The findings of the partial correlation analysis revealed that the relationship between the midterm score and mindset score of the participants was not significant when gender of the participants was the control variable ($p=.0453>0.05$).

2b. when current English proficiency level is the control variable?

Table 25 indicates the partial correlation results for mindset and academic achievement when English proficiency level is the control variable:

Table 25

Partial Correlation Results for Mindset and Academic Achievement When English Proficiency Level is the Control Variable

Correlations				
Control Variables			Mindset_s core	Midterm score
Level of English	Mindset_score	Correlation	1.000	-.029
		Significance (2-tailed)	.	.590
		df	0	343

Another partial correlation analysis was conducted to figure out whether there was a significant correlation between participants' mindset scores and midterm scores when their current level of English is the control variable. The results of the analysis revealed that the correlation between students' mindset scores and midterm scores was not statistically significant. ($p=0.590>0.05$)

Research Question 3

Which variable (SR, ASC or directed motivational currents) is the most significant predictor of participants' fixed mindset, growth mindset and academic achievement in language learning?

With the purpose of responding to research question 3, it was necessary to conduct multiple regression analysis, however, due to the violation of the assumptions, it was not possible to conduct this analysis. The collected data did not meet the assumption for correlation of the variables included in the research question.

Research Question 4

What is the relationship between the mindset of participants and affective factors such as SR, ASC, and directed motivational currents?

SEM Findings

Structural equation models were tested in two stages, and first of all, confirmatory factor analysis was performed in the measurement model and the model data fit was tested. The model data fit results obtained as a result of confirmatory factor analysis are shown in Table 26.

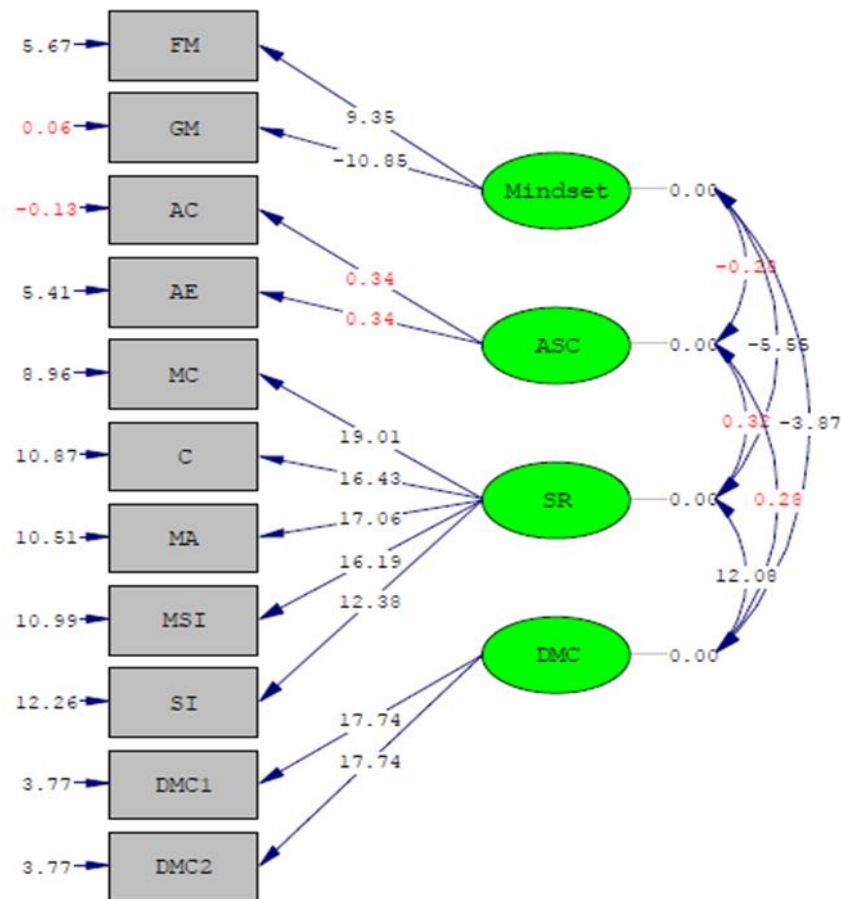
Table 26

Model Data Fit Values Regarding the Measurement Model

Index	Value
X2/sd	2.76
RMSEA	.071
CFI	.97
NFI	.95
IFI	.97
SRMR	.041
GFI	.95

First of all, the chi-square/sd value was checked and (104.90/38) was obtained as 2.76 and it shows perfect fit, while RMSEA is 0.071 and shows good fit. The other model data fit indices are generally excellent (RMSEA=0.071, CFI=.97, NFI=.95, IFI=.97, SRMR=.041, GFI=.95). The measurement model is shown in Figure 16.

Figure 16
Measurement Model I (T values)



Chi-Square=104.90, df=38, P-value=0.00000, RMSEA=0.071

Although the model data compatibility of the measurement model was ensured, the factor loads related to the ASC sub-dimensions were less than 1.96 and were not statistically significant. The correlation between latent variables is shown in Table 27.

Table 27*Table for Correlation among Latent Variables*

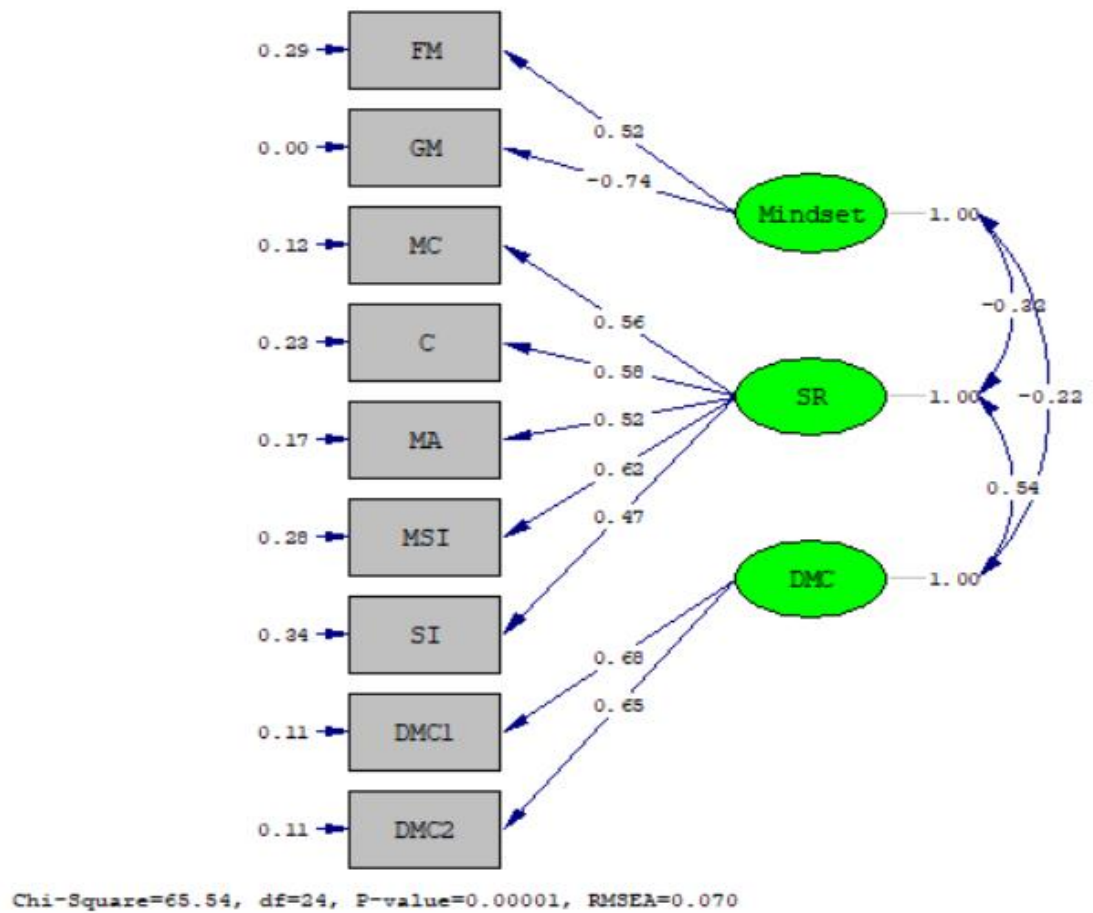
	Mindset	ASC	SR	DMC
Mindset	1			
ASC	-0.01	1		
SR	-0.32**	0.05	1	
DMC	-0.22*	0.01	0.54**	1

* $p < .05$; ** $p < .01$

There was no significant relationship between ASC and mindset, SR and DMC latent variables ($p > .05$). A negative correlation was obtained between Mindset and SR and DMC, and a positive correlation was obtained between SR and DMC. Since there is no significant relationship between ASC, one of the independent variables, and SR, which is the mediating variable, and mindset, which is the dependent variable, it did not provide a mediation assumption, and therefore the ASC latent variable and its sub-dimensions were not included in the SEM model. The standard values of the measurement model obtained by subtracting the ASC are shown in Figure 17.

Figure 17

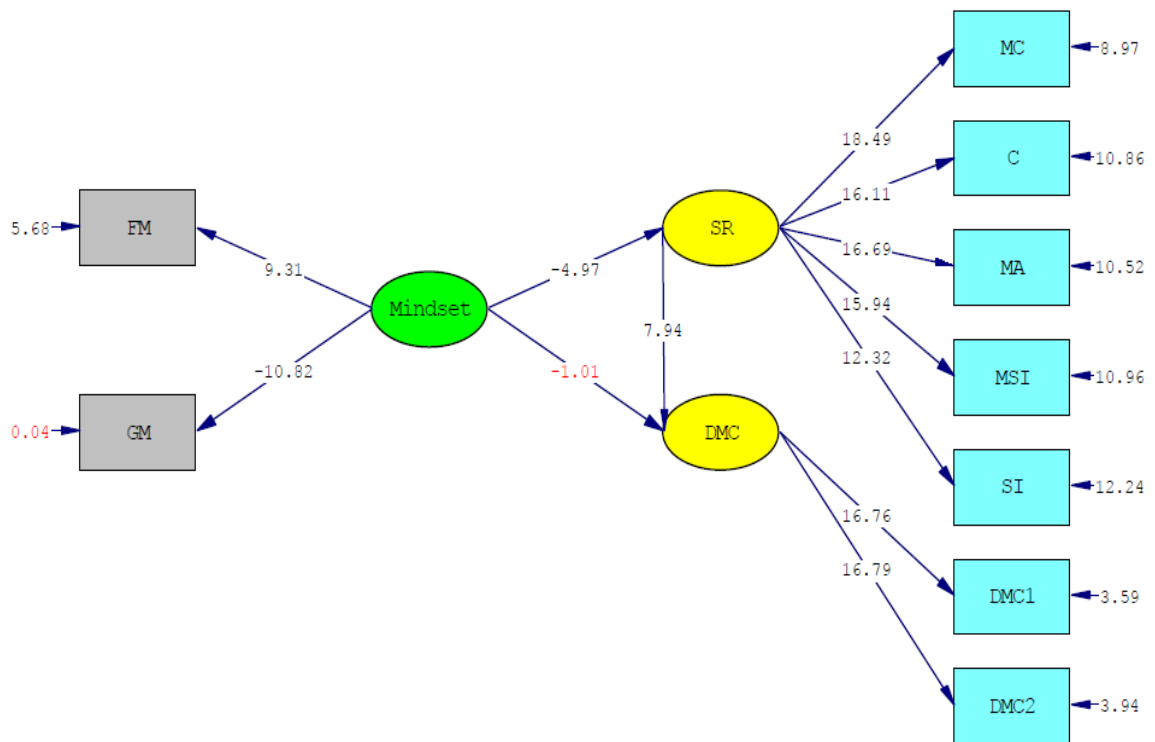
Final Measurement Model Standard Path Coefficients Graph



Path coefficients for Mindset scale sub-dimensions were between 0.52 and -0.74, between 0.47-0.62 for SR and 0.68 and 0.65 for DMC sub-dimensions. Model data fit indices are excellent ($\chi^2/df=2.73$; RMSEA=0.070, CFI=.98, NFI=.97, IFI=.98, SRMR=.033, GFI=.96).

The second stage, the structural model, was tested using the final measurement model. First, it was tested whether the regression coefficients in the model were significant and the T values in the structural equation model established in Figure 18 are shown. Accordingly, all T values are statistically significant as they are greater or less than the critical value of ± 1.96 .

Figure 18
SEM Path Factors T Values



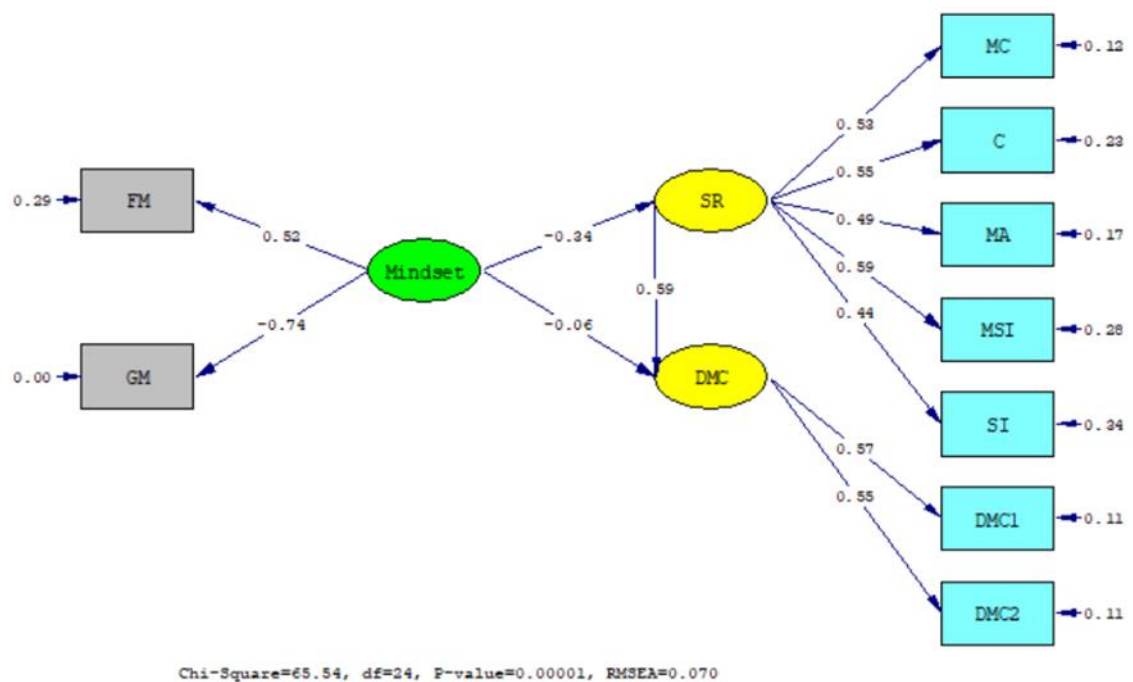
Chi-Square=65.54, df=24, P-value=0.00001, RMSEA=0.070

The t value for the path coefficient between mindset and DMC for the SEM model created in Figure 18 is between ± 1.96 and is not statistically significant. The t values of the path coefficients between SR, mindset and DMC are statistically significant as they are outside the range of ± 1.96 ($p < .05$). Model data fit is shown in Table 28:

Table 28*Model Data Fit Table (Final SEM Model)*

Index	Values
X2/sd	2.73
RMSEA	.070
CFI	.98
NFI	.97
IFI	.98
SRMR	.033
GFI	.96

The model-data fit obtained as a result of the SEM model was obtained in perfect fit ($\chi^2/sd=2.73$; RMSEA=0.070, CFI=.98, NFI=.97, IFI=.98, SRMR=.033, GFI=.96). It was obtained as the same as the fit values obtained in the measurement model.

Figure 19*Structural Model of Standardized Path Coefficients*

The effect of mindset latent variable on SR latent variable was obtained as -0.34. 10% of the variability in the SR latent variable is explained by mindset. A 1-unit increase in Mindset points causes a 0.34-unit decrease in SR points. The resulting structural equation is;

$$SR = -0.34 * \text{Mindset}; R^2 = 0.10$$

The effect of the SR variable on the DMC latent variable was 0.59. 29% of the variability in the DMC latent variable is explained by SR. A 1 unit increase in SR points gives a 0.59 unit increase in DMC points. The effect of Mindset on DMC is -0.06, which is not statistically significant. The resulting structural equation is;

$$DMC = 0.59 * SR; R^2 = 0.29$$

The approach suggested by Baron and Kenny (1986) was used for mediation. According to this approach, when the mediating variable (SR) was not in the model, the correlation coefficient between the independent (mindset) and the dependent (DMC) latent variable (-0.22), which was -0.06 when the mediating variable was included in the model, lost its statistical significance. In other words, the level of relationship between the dependent and independent latent variable at the beginning lost its effect with the mediator variable. Therefore, SR has a full mediating role in the effect of mindset on DMC.

Research Question 5

What kind of directed motivational currents experience have the participants had and how do they relate to mindset?

Before responding to the current research question, it can be better to provide some statistical data as background knowledge. Table 29 demonstrates the number of participants who thought they had experienced DMC while doing a project and while learning a language.

Table 29*Frequency of the participants who have experienced DMC while doing a project*

I have personally experienced this type of intense motivation while doing a project.			
	Frequency		Percent
Strongly disagree		16	4.5
Disagree		51	14.4
Undecided		78	22.0
Agree		118	33.2
Strongly agree		92	25.9
Total		355	100.0

As the table suggests, 118 people agree that they have experienced DMC while doing a project whereas 92 people strongly agree that they have experienced DMC while doing a project, making the total number of people to have experienced DMC while doing a project 210. 78 people were undecided about whether they have experienced DMC or not while doing a project and the rest of the participants (67 of them) stated that they have not experienced DMC.

Another question was intended to respond to the question “How many of the participants have experienced DMC while learning a language?” and Table 30 illustrates the findings:

Table 30*Frequency of the Participants Who have Experienced DMC While Learning a Language*

I have personally experienced this type of intense motivation specifically while learning a language.			
	Frequency		Percent
Strongly disagree		30	8.5
Disagree		89	25.1
Undecided		101	28.5
Agree		94	26.5
Strongly agree		41	11.5
Total		355	100.0

As it can be seen at table 30, 94 people agreed and 41 people strongly agreed that they have experienced DMC while learning a language whereas 89 people disagreed and 30 people strongly disagreed with the statement, making the total number of people to have

experienced DMC while learning a language 135 and not to have experienced 119. The number of participants who were undecided was found out to be 101.

The participants were also asked to give information about where and when they experienced DMC while learning a language. Table 31 is a frequency table which indicates the findings of the data analysis:

Table 31

Frequency Table Showing Where and When the Participants Experienced DMC While Learning a Language

The place where participants experienced DMC while learning a language			
		Frequency	Percent
	At school	100	28.2
	At university	87	24.5
	At a private course	10	2.8
	On my own	57	16.1
	Total	254	71.5
Missing	System	101	28.5
	Total	355	100.0

The frequency table shows that the participants who experienced DMC at school outnumbered the rest of the groups with 100 participants. Following it, the most crowded second group was composed of those who experienced DMC at university with 87 participants. 57 participants indicated that they had an experience of DMC on their own and 10 participants stated that they had this experience when they were on their own. The total number of respondents was 254 as 101 people did not choose any of these options due to not experiencing DMC while learning a language.

When responses to the question of how this intense motivation process started for them, Table 32 emerged:

Table 32*Themes of How the Intense Motivation Process of Participants Started*

Themes	Number of References
Self-motivation	51
Exams	45
For future goals	42
To learn English	19
Influence of someone else	16
Sports	6
No information	8

The table above indicates that the most common way an intense motivation began among the participants was through self-motivation. Of all the 187 references, self-motivation category outnumbered the other categories with 51 references. To exemplify the responses to the open-ended question, the following statements can be given: participant 44 stated that “I felt that I was worse than others, I had to be better than them, so I started to motivate myself.” Another participant (participant 21) said that “I said to myself I will do this job and the motivation process has started”. The first participant maintained something similar by saying that “I was attracted by the ideal that I created in my mind, and this is how this process started”. As can be understood from the given responses, the participants created their own long-term, intense, intrinsic motivation.

The second most common code preferred by the participants was exams, especially important ones like university entrance exams, with 45 participants. For instance, participant 37 indicated that “I started such a process while preparing for the university exam”. The 7th participant also stated, “It started with the university exam, and it has been going on for a few months as I will be studying a foreign language in my department.” Another participant (participant 18) stated “My motivation started for YKS (University Entrance Exam) in the last year of high school, and it was a process where I recovered from time to time even though it fell”. Considering that exam is the second most common initiator of DMC, it can be deduced

that more exam-like activities or making students aware of the importance of activities can trigger their DMC experiences.

Following these two categories was future goals with 42 participants. Many participants stated that they experienced such a long-term intense motivation when they aimed at reaching their goals or wanted to make their dreams come true. Here are examples of some of the responses of the participants to this open-ended question about how their DMC experiences started: "I had to work towards my goals. And I went through such motivational processes many times. I have seen its success" (participant 15). "If what I have decided to work for will really serve me for the rest of my life and add something to me, I will try to achieve it even if it is difficult" (participant 30). "I had goals for the future. I realized that I had to make these happen..." (participant 2).

The fourth most preferred way how such an intense motivation began was to learn English with 19 participants. Some of their statements are as follows: "An example of this would be to improve my English learning, which is a mixture of success and curiosity. I've been trying for years to speak like my mother tongue" (participant 4), "I left the city and regional planning department last summer because I wanted to study mathematics. I was normally someone who was never motivated to learn a foreign language. When I learned that my department was 100% English, I really wanted to learn English for the first time and I started working with high motivation (participant 11), There were languages that interested me and that I enjoyed listening to, and I didn't want to be limited to just listening, I wanted to speak and studied on my own (participant 6). Now that all the participants were prep class students who will be taught in English for the upcoming 4 years, it is interesting that it is the fourth initiator of intense motivation with 20 participants indicating it as a way their intense motivation started.

The participants also mentioned the influence of other people on their experience of intense motivation, such as their family members, close friends, or teachers. The total number of those participants is 16. Participant 8 mentioned that "After a long planning

process with my close friend group, we prepared a program for ourselves and started to study. It was a satisfying and motivating process for us as it was motivating to do the same activity at the same time". "It started thanks to a teacher who took my math class in middle school. My motivation for the mathematics lesson, as it instilled and made me love mathematics, has not changed over the years", participant 9 said. Participant 11 said "Since my brother is an English teacher, it was easy for me to understand how I was improving, and this gave me motivation".

6 of the participants mentioned their taking up sports experience as an initiator of their DMC processes whereas 8 people preferred not to give information or to state that they have no idea about it.

Research Question 6

What is the most common reason for the desire to experience Directed Motivational Currents again and are the findings in line with the findings of participants' mindset as in Structural Equation Modelling analysis?

Of all the participants, 231 of them indicated they would like to experience DMC again. Considering that motivation is the trigger for the commencement of exerting effort to reach a goal (which is learning for education), it became a necessity to try to comprehend why participants would like to experience DMC to interpret whether it is because they have growth mindset or whether their SR skills are high.

The responses of the participants in the study by Muir (2016) created these four themes in her original study which was her PhD dissertation as outcome based reasons, process based reasons, intrapersonal reasons and general reasons.

In the current study, the responses of the participants were coded using NVIVO program and the following themes emerged when the data were analyzed. Table 33 which was created based on the coding of the responses given as elaboration of the reasons for the desire to experience DMC again demonstrates the number of references for each code.

Table 33
Coding of Reasons Why Participants Would Like to Experience DMC Again

Theme	Sub-theme	Frequency
reasons associated with achievements and positive outcomes		74
	progress-based	2
positive emotional loading	increased level of positive emotionality	40
	increased level of self-related beliefs	13
	intensive effort	13
	existence of progress in goal achievement	5
self-regulated strivings		4
	efficient time management	2
	self-development	
dedication to goal		16
unprecedented intensity of motivation		12
increased motivational momentum		10
other reasons		22

To exemplify some of the responses, participant 5 stated his/her reason as “the total concentration and dedication at that time gave birth to a sense of accomplishment.”, participant 12 wrote “Because it was a time when I was able to achieve what I could not achieve before.”, and participant 17 added “such motivation also brings success”. Some students emphasize the importance of this type of motivation on the outcome they would like to reach with the following words: participant 33 explained his/her reason with the following words: “Because I think that this kind of motivation fuels us and helps us move forward with goal-oriented and firm steps.”, participant 54 stated “In this type of motivation process, I become more efficient, and it is easier to achieve what I want.”, another student (participant 95) said that “When I am motivated like this, I can achieve everything better...” and participant 92 further explained “No matter how tiring it is to be in projects, I continue to do this with great pleasure, as I know that it will be good for me”. Whereas individuals who hold a fixed mindset regard merely the outcome as significant (just like a student who cheats so that s/he gets a higher score), the individuals who responded to the query by stating an

outcome-based reason consider motivation as a must to reach the outcome all by their very own effort.

Because the question asking for the reason why the participants would like to experience DMC again was an optional question, not all the participants responded to it, and therefore the total number of references was 220. Among these responses, 77 of them were reasons associated with achievements and positive outcomes, making it almost one third of the references.

The second most common type of response was positive emotional loading, with the subthemes increased level of positive emotionality, increased level of self-related beliefs, intensive effort, and existence of progress in goal achievement. This these reflects the impact of DMC on the participants' emotional states and the fact that they attribute these positive feeling to why they would like to experience DMC again. These include responses such as "These kinds of motivations excite me. It also increases my self-confidence. It's an honor to be able to achieve something" (participant 1). Participant 3 adds that "The kind of motivation I experienced was about commitment to an idea. I had to believe it would make it happen, and I had to do it. And the total concentration and dedication at that time gave birth to a sense of accomplishment. And it was one of the best feelings I've ever had". Similarly, participant 23 mentions the positive feeling arising thanks to DMC by stating that "I felt really happy. It is really nice to feel that you have succeeded". Another participant explains that even failure will not cause him/her to experience negative feelings with the impact of DMC by stating that "I am sure that even if I fail, I will feel comfortable" (participant 31). Participant 12 explains how DMC made him/her feel by maintaining that "Intensive work makes me happy, I can get efficiency. Although the long-term wears me out, the result encourages me not to give up.", and participant 43 adds why s/he would like to experience DMC again with the following words: "I feel special and powerful". Participants mostly described this type of experience by using adjectives such as exciting, engaging, entertaining, refreshing, and compelling.

The emerging theme for the third most chosen reason for the wish to experience DMC again was self-regulated strivings, with the subthemes efficient time management, and self-development. To exemplify, participant 7 stated that “Because I think that this kind of motivation fuels us and helps us move forward with goal-oriented and firm steps.”, emphasizing the significance of motivation on the steps that one takes. Participant 9 mentioned the role of motivation by stating that “....there's nothing I can't do after working”. Another participant focused on the time management s/he could achieve thanks to DMC with the following words: “I managed my time well, I don't kill my time, and I really learned something”. Participant 23 mentioned the impact of DMC on him/her by saying “It allows me to work more efficiently and with determination”.

The fourth theme to emerge as the qualitative data were analyzed was dedication to goal. 16 of the participants stated their reasons of the desire to experience DMC as regarding it as a means of achieving their goals. For instance, participant 7 stated that “I have a goal and I feel like I'm living for that goal”. Likewise, other participants in this category stated similar sentences like “... to reach/achieve my goals/dreams”, which indicates that they regard DMC as a means of realizing their dreams, and reaching their goals. ,

12 participants who caused the theme ‘unprecedented intensity of motivation’ to emerge stated sentences which emphasized the unique nature of the DMC experience, and the fact that this kind of experience was so rare. To give an example, participant 10 maintained that “when I can't be motivated in the things I need to do, I feel like I'm dying while doing that job.”, and participant 10 wrote “...because when I can't be motivated in the things I need to do, I feel like I'm dying while doing that job, which is inefficient”. Other responses include statements such as “Because I need this kind of motivating stuff for the rest of my life.” (participant 7), and “Because I feel that my motivation drops when I can't do something...” (participant 2).

The sixth theme was increased motivational momentum, which means the participants whose responses fell into this category mentioned the DMC experience to be the

Discussion

Numerous scholarly inquiries have been dedicated to the examination of participants' mindsets (Castella et al., 2015; Dweck et al., 1995; Dweck & Leggett, 1988; Gallardo et al., 2019; Macnamara & Rupani, 2017a; Viña, 2022; Wulandari, 2021; Yeager & Dweck, 2012). These investigations have revealed that the mindset held by students can wield a substantial influence on their language acquisition endeavours. Learners possessing a growth mindset tend to demonstrate heightened perseverance in the face of challenges, a propensity for embracing risks, and an inclination to actively seek learning opportunities. Moreover, they are more inclined to derive motivation from the inherent challenge of acquiring a new language and firmly believe in the potential for enhancing their linguistic skills through concerted effort.

Conversely, individuals with a fixed mindset are predisposed to surrendering more readily in challenging situations, displaying a tendency to evade demanding tasks, and harbouring the belief that language acquisition is not within their realm of competence. Additionally, they are more likely to be motivated by external incentives, such as grades or external approval, and hold the conviction that their linguistic abilities are confined to certain limits.

The referenced studies collectively underscore the significance of fostering a growth mindset among students to bolster their language learning journeys. This can be achieved through the provision of constructive feedback, encouragement of risk-taking, and helping learners recognize mistakes as valuable learning opportunities. Equally important is the establishment of a nurturing and supportive learning environment, designed to mitigate the fear of failure.

The current research asserts that the majority of the participants harbour a growth mindset, albeit with slight deviations from those classified as having a mixed mindset. In other words, based on this finding, it is not expected that participants would exhibit every indicator associated with a growth mindset or display all the qualities typically attributed to

such a mindset, as their mindset scores only marginally diverged from those with a mixed mindset.

Another purpose of this study was to investigate the relationship between mindset and academic achievement in language learning. In addition, the study was not able to find a significant relationship between the pursued mindset type of the participants and their academic achievement. The results of this study suggest that the relationship between the participants' mindset, and academic achievement scores in language learning were not statistically significant. This finding does not seem to be consistent with previous research on the relationship between mindset and academic achievement in other domains, such as math and science, which prove that individuals with growth mindset tend to attain higher scores and better academic achievement. There are several studies which analyze the relationship between mindset of the participants and their academic achievements (Aronson et al., 2002; Blackwell et al, 2007; Campbell et al., 2021; Garofalo, 2016; Good et al., 2003, 2012; Henderson and Dweck, 1990; Mueller and Dweck, 1998). Most of the studies provided evidence that there was a positive correlation between the participants' growth mindset scores and academic scores in the field of maths (Barlow ve Reddish, 2006; Blackwell et al., 2007; Boaler, 2013; Bonne and Johnston, 2016; Claro et al., 2016; Costa and Faria, 2018; Daly et al., 2019; Gunderson et al., 2017), grammar (Claro et al., 2016; Williams et al., 2011), and in terms of grade point average (Gonida et al., 2006; Kennett and Keefer, 2006; Ollfors and Andersson, 2007; Paunesku et al., 2015). Normally, the possible relationship was supposed to be a positive correlation between mindset scores and midterm scores, and there are several possible explanations for the positive relationship between mindset and academic achievement in language learning.

First, students with a growth mindset are more likely to believe that they can improve their language skills through hard work and effort. This belief can lead to increased motivation and persistence in the face of challenges, which can ultimately lead to better academic achievement. Second, students with a growth mindset are more likely to be open

to feedback and new learning experiences. This openness to learning can help students to acquire new language skills more effectively. Third, students with a growth mindset are more likely to take risks and try new things in the language classroom. This risk-taking can lead to increased learning and achievement (Dweck, 2006).

However, the findings of this study seem to contradict with some of the previous literature and the most likely reason for is because in the current study, participants were not asked about their previous language learning experiences, or whether they were aware of the concept of mindset or they had been trained on this issue. In Turkey, the number of weekly course hours spent for teaching and learning English are never as intense as the prep class education until the students start university, which may result in a feeling of failure for some students. Having not experienced success due to lack of studying intensely, not had adequate number of English courses, not been aware of the concept of mindset, so that they could exert more effort for attaining their pre-determined goals, it was expected that the participants did not have very high scores in terms of mindset and the study was not able to find a statistically significant relationship between mindset scores and academic achievements of the participants. Depending on the findings, one can conclude that comparing student scores for longer periods of time, and by giving a mindset training as an intervention could create more positive outcomes regarding both mindset scores and academic scores. Being exposed to language courses for longer hours, the participants may commence experiencing the feeling of success, which in turn can have a positive effect on their mindset, as well. Even for the current study, recording participant scores for longer periods of time and with the help of mindset training could bring about very different findings. Therefore, it is essential that the study is replicated under different circumstances, for instance, with a longitudinal or experimental study.

Although the findings of the current study contradict with these research studies, there are also several studies which could not support the fact that there is a positive correlation between the participants' mindset scores and their academic achievements,

whose findings are in line with the current study. For instance, the research study of Macnamara and Rupani (2017b) reached a similar finding of the present study, revealing that mindset was not able to predict the academic achievement of the participants. The findings presented no evidence for supporting the interplay between participants' mindset and their academic achievement, in contrast to the general expectation that the more growth mindset the participants have, the higher their academic achievement would be. Xu and Wang (2022) also emphasize that there may be limited impact of mindset on motivation and strategy use with the following statement "Despite the important role growth mindsets play in second/foreign language (L2) writing, insight into its influence on motivation and strategy use in L2 writing contexts has been limited". Burnette et al. (2020) also stated that in their research the treatment was found out not to have a significant impact on academic achievement despite indirectly improving grades via value. The research by Mokhithi and Campbell (2019) found that mindset scores did not significantly predict engineering students' performance in an introductory calculus course. Likewise, Muenks, et al. (2020) found in their meta-analysis of 60 studies that growth mindset interventions had a small but statistically insignificant effect on academic achievement. Lastly, Özdamar (2021) found that no correlation existed between mindset and L2 proficiency level of participants.

It is important to note that these studies were conducted with different populations and in different contexts, so the results may not be generalizable to all students. However, they do suggest that the relationship between mindset and academic achievement is not as clear-cut as once thought. More research is needed to better understand the role of mindset in academic achievement.

The findings of this study have several implications for language learning pedagogy. First, teachers should emphasize the importance of a growth mindset in the language classroom. This can be done by providing students with opportunities to learn about growth mindset and by creating a classroom environment that is supportive of growth mindset. Second, teachers should provide students with feedback in a way that is supportive of growth

mindset. This means providing feedback that is specific, actionable, and focused on improvement. Third, teachers should create opportunities for students to take risks and try new things in the language classroom. This can be done by assigning challenging tasks, providing opportunities for peer feedback, and creating a classroom environment that is safe for mistakes.

The findings of this study suggest that a growth mindset may be an important factor in academic achievement in language learning. By emphasizing the importance of growth mindset in the language classroom, teachers can help students to achieve their full potential in language learning.

In addition to the findings discussed above, there are a few limitations to this study that should be noted. First, the sample size was relatively small, which limits the generalizability of the findings. Second, the study was conducted in a single context, which may limit the external validity of the findings. Third, the study only examined the relationship between mindset and academic achievement at one point in time, which may have created the biggest impact on the results of the study. Future research should examine the relationship between mindset and academic achievement over time to determine whether the relationship is causal.

Despite these limitations, the findings of this study provide valuable insights into the role of mindset in academic achievement in language learning. These findings can be used to inform language learning pedagogy and to assist students to achieve their full potential in language learning.

The relationship between mindset and gender is a complex and multifaceted issue. There is some evidence to suggest that women may be more likely to have a growth mindset than men. For instance, Shaw, et al. (2016) found that women were more likely than men to have a growth mindset in context of STEM fields. Another study by Kamins, et al. (2018) also reached a similar finding that women were more likely than men to have a growth mindset, but the effect size was small. Özdamar (2021) also found in her research study that women

were more likely than men to agree with statements such as "I can always improve my language skills" and "I can learn new languages even if I'm not good at them at first." However, it is important to note that this study was conducted with a small sample of Turkish university students, so the findings may not be generalizable to other populations. More research is needed to better understand the relationship between mindset and gender in language learning. The meta-analysis by Muenks, et al. (2020) is a valuable resource for understanding the relationship between mindset and gender. It provides strong evidence that there is no overall difference in mindset between men and women. However, it is important to note that the meta-analysis did not examine the relationship between mindset and gender in specific contexts.

Whereas the finding of this analysis contradicts with some of the studies, there are also several studies which support the finding that there is no significant relationship between gender and mindset score of the participants. Some studies have found no significant gender differences in mindset. For example, one meta-analysis of 60 studies found that there was no overall difference in mindset between men and women. Macnamara and Rupani (2017b) conducted consecutive studies with 450 participants, the first of which revealed that females tend to pursue a growth mindset more than their male counterparts. However, the following two research studies were not able to find a link between the gender of the participants and their mindset scores. The study was also interesting in terms of demonstrating that mindset score could not predict academic achievement of the participants in a statistically significant way. Spinath et al. (2003) also researched the impact of personality traits and intelligence on mindset among 592 adults. The results showed that females tend to believe more that intelligence can be improved, and although the difference between females and males was not large, it was statistically significant. In the Turkish context, Beyaztaş and Hymer (2018) conducted a large-scale study with 1350 participants, the findings of which reported that there was not a statistically significant link between the gender and the mindset of the participants for children. However, as for adults, it was found out that women tend to pursue

more of a growth mindset when compared with their men counterparts. Oldaç (2022) was not able to find a statistically significant relationship between the participants' gender and their mindset scores in her study conducted with 162 English teachers working at geographically different parts of Turkey and worked at different institutions.

Numerous factors contribute to the connection between mindset and gender, as elaborated below:

Gender Stereotypes: Notably, stereotypes about intelligence and capability tied to gender have a significant influence on mindset development. For instance, young girls exposed to affirmative role models and encouraging messages about their intellectual potential are more prone to adopt a growth mindset.

Cultural Influences: The cultural context also plays a pivotal role in shaping the relationship between mindset and gender. Societies where women traditionally encounter perceptions of lower intelligence than men may tend to foster fixed mindsets among women.

Individual Variability: The interplay between mindset and gender can differ among individuals. Certain women may exhibit a greater likelihood of possessing a growth mindset, just as variability exists among men.

Furthermore, it is essential to recognize that mindset is a malleable trait, capable of development and change. A comprehensive understanding of the interrelation between gender and mindset has the potential to create more equitable educational settings, empowering all students to achieve their utmost potential.

While the cited studies offer valuable insights, it is crucial to acknowledge that they represent only a fraction of the existing research. Therefore, further investigations are necessary to unravel the intricate interplay between mindset and gender in various contexts. It is noteworthy, however, that available evidence suggests the possibility of modest gender disparities in mindset, with women potentially showing a higher inclination toward adopting a growth mindset compared to men. This underscores the necessity for more comprehensive

research to elucidate the multifaceted impact of gender and mindset on academic achievements and other outcomes across diverse scenarios.

One of the primary objectives of the research inquiry was to examine the potential connection between one's mindset and their level of proficiency in English language. There are a few research studies which have found mixed results on the relationship between mindset and language proficiency level (Castella, et al., 2015; Dweck, et al, 1995; Dweck & Leggett, 1988; Macnamara & Rupani, 2017b; Yeager & Dweck, 2012). Some studies have found a positive relationship, such that learners with a growth mindset tend to have higher language proficiency levels than learners with a fixed mindset. Other studies have found no relationship, or even a negative relationship, between mindset and language proficiency level. It is important to note that the studies cited above have used different measures of mindset and language proficiency and have been conducted with different populations of learners. This makes it difficult to draw firm conclusions about the relationship between mindset and language proficiency. More research is needed to clarify this relationship.

The current study's findings indicated that there is no statistically significant association between these two variables. Therefore, there is insufficient evidence to suggest that an individual's mindset directly influences their capacity to acquire a new language. These results were consistent with the correlation analysis conducted in this study.

Several explanations can be considered for this outcome. Firstly, it is plausible that the sample size utilized in this study may not have been sufficiently large to detect a statistically significant relationship, assuming one does exist. Secondly, the measures employed to assess mindset and language proficiency in the study might not have been sensitive enough to capture the intricacies of these constructs. Another possibility is the potential complexity and nonlinearity of the relationship between mindset and language proficiency, which this study might not have adequately captured.

Despite the absence of a statistically significant relationship, it is essential to note that this study does not exclude the possibility that mindset could still have an indirect role in language acquisition. This indirect influence could manifest by affecting factors such as

motivation or effort. Furthermore, it is crucial to acknowledge that the generalizability of the study's findings may be limited to specific populations. Future research is necessary to delve further into the intricate relationship between mindset and language proficiency.

Additional considerations regarding the lack of a statistically significant relationship between mindset and language proficiency level involve the potential variation in importance across different facets of language learning. For instance, mindset might play a more substantial role in grasping grammar and vocabulary compared to acquiring conversational skills. Additionally, the significance of mindset may differ among learners, with those possessing higher motivation and a strong desire to learn a new language potentially being less impacted by their mindset than those with lower motivation or weaker enthusiasm.

Finally, it is plausible that the association between mindset and language proficiency is influenced by other variables, such as age, language aptitude, and prior language learning experiences. Future research should aim to explore these possibilities in greater detail to shed more light on this complex relationship.

Similar to previous research, the current study underscores that SR serves as a mediating factor in the correlation between mindset and DMCs. This signifies that SR acts as the conduit through which mindset exerts its influence on DMCs (Duckworth & Gross, 2014). In essence, in line with Dweck's proposition (2006), students exhibiting a growth mindset are more inclined to possess robust SR abilities, subsequently leading to elevated DMCs. This stems from the belief among students with a growth mindset that they can surmount challenges and attain their objectives, thereby motivating them to persist in the face of setbacks. Moreover, they are more prone to employ effective learning strategies, encompassing goal setting, planning, and monitoring their progress. Conversely, students harbouring a fixed mindset tend to demonstrate limited SR skills, leading to lower DMCs. This is a consequence of the fixed mindset inducing the perception that challenges are insurmountable, reducing their motivation to persevere. Furthermore, they are more disposed to relinquish efforts upon encountering setbacks (Yeager & Dweck, 2012a).

The pivotal role of SR as a mediator in the relationship between mindset and DMCs suggests that interventions targeted at enhancing SR capabilities can aid in the cultivation of a growth mindset and increase the likelihood of experiencing DMCs. This, in turn, has the potential to enhance academic accomplishments (Yeager & Walton, 2011).

The study conducted by Blackwell, Trzesniewski, and Dweck (2007) proposed a model to define the causal relationship between theories of intelligence and performance with the help of the analysis of several mediators, which clarified the long-term impact of mindset. Those who hold a growth mindset give more importance to effort and learning goals, make effort-related attributions towards failure, and produce more effort-related solutions as a remedial strategy after a failure.

Directed Motivational Currents (DMCs) denote extended periods characterized by robust and persistent motivation directed towards the realization of a precisely defined target objective or vision (Henry, et al. 2015). These phases are distinguished by a resolute sense of purpose, heightened endeavour, and a proliferation of positive affect. Research has demonstrated that DMCs exert a favourable influence on constructive learning outcomes within the context of English as a Foreign Language (EFL) education.

Mindset pertains to an individual's convictions concerning the innate nature of intelligence. Specifically, a growth mindset reflects the conviction that intelligence can be cultivated through conscientious effort and educational endeavours, whereas a fixed mindset posits intelligence as static and impervious to change. The adoption of a growth mindset has been empirically linked to favourable learning outcomes within the sphere of EFL (Dweck, 2006).

SR encapsulates the capacity to govern one's cognitive processes, emotional responses, and behavioural actions towards the attainment of designated objectives. It constitutes a pivotal element of DMCs (Henry et al., 2015). Scholarly investigation has revealed SR's intermediary role in the association between DMCs and educational achievements within the realm of EFL.

The current investigation illuminated an indirect connection between mindset, and DMC, mediated by SR. These findings underscore the potential of DMCs to foster constructive learning outcomes in EFL through the cultivation of self-regulatory capacities, thus facilitating learners' capacity to surmount challenges and endure in the face of difficulties.

One of the most significant findings of the content analysis was that reasons associated with achievements and positive outcomes are the most common theme among the given responses, which means that the participants regard the experience of DMC as a tool to achieve being successful. When the responses of those who put forth reasons associated with achievements and positive outcomes, which were the most common ones, were analyzed, it becomes more obvious that the wish to experience DMC again can be relevant to a growth mindset and SR, which demonstrates that the findings of SEM analysis is in line with the analysis results of the collected qualitative data. To exemplify, most of the participants stated that they would like to experience DMC again so that they can become more successful. It can be stated that only those who believe that their actions will have an impact on the results they will get see motivation as a necessity to have. Therefore, it is expected that the individuals who attribute motivation with the ultimate success they will have pursue a growth mindset. Taking the two types of behavior defined by Dweck (1986), which are adaptive patterns of (mastery-oriented) behavior and maladaptive behavior, it can be stated that as the most common responses are the ones categorized as success-related reasons, those participants do not wish to give up when faced with a challenge, which is a characteristic of those holding growth mindset.

It is also noteworthy that there is an emerging theme as self-regulated strivings. When it is analyzed deeply, one can easily see that students mention features of self-regulated learning such as time management or learning strategies like meta-affective strategies. In addition to being relevant to salient facilitative structure, it is also directly relevant to SR, which was found to have a mediating role between mindset and DMC. In

conclusion, it can be deduced that participants mostly regard DMC as a tool for better self-regulated learning on the way to achieve better academic outcomes, and only those who pursue a growth mindset is likely to hold such a belief.

The findings of this examination resonate with prior scholarship concerning DMCs, SR, and mindset in the EFL domain. These results corroborate the assertion that DMCs wield substantial influence as catalysts for constructive transformations in EFL learners. Nonetheless, it is imperative to acknowledge the intermittent nature of DMCs, which can be arduous to sustain. Consequently, the development of strategies to stimulate and perpetuate DMCs within EFL learners is of paramount significance.

Several strategies geared towards invigorating DMCs in EFL learners encompass:

Facilitating the formulation of distinct and attainable language acquisition objectives. Supplying learners with opportunities to taste success within their language learning journey. Cultivating an environment conducive to positive learning, underscored by support and encouragement. Imparting SR techniques to learners, including goal setting, strategizing, and time allocation. By nurturing DMCs and promoting self-regulation among EFL learners, the realization of their language acquisition ambitions can be facilitated, alongside the cultivation of an enduring ardour for lifelong learning.

Chapter 5

Conclusion and Suggestions

In this chapter, conclusion and suggestions of the current study are presented along with the pedagogical implications and suggestions for further research.

Based on the findings of the research, the conclusions that can be reached can be summarized as follows:

The participants of the current study were found out to have growth mindset mostly. However, when the mean score of all participants were analyzed, it was found that the mean score demonstrated results slightly different from mixed mindset, which means their growth mindsets need improvement.

The current research was not able to find a significant relationship between the participants' mindset scores and midterm scores despite further analysis was conducted by using gender and proficiency level of English as control variables. According to this finding, it can be stated that the link between academic achievement and mindset can be further investigated, especially with an experimental study including a kind of mindset intervention.

Due to the violation of the assumptions, the research question which seeks the most significant predictor of participants' mindset and academic achievement of the variables SR, ASC and DMC was not able to be addressed with the use of regression. Therefore, it is better the study be replicated in a different setting with a different sample.

When the structural equation model which aimed to shed light on the interplay between mindset, ASC, SR, DMC and ASC was analyzed, it was found that academic achievement and ASC did not have a significant influence on the model, therefore, they were excluded from the model. The emerging model put forth that mindset has an impact on the participants' SR and DMC, and SR has an effect on DMC. To clarify, SR has a full mediating role, without which the significance of the relationship between mindset and DMC losses its significance.

According to findings of the content analysis conducted to respond to the final research question, it was found out that the reasons for the wish to experience DMC was mostly outcome-based ones, followed by process-based reasons, intrapersonal reasons, and general reasons. It can be concluded that most of the participants view motivation as a way of attaining their pre-determined goals and because they would like to do it through motivation and by exerting effort, and they do not plan to give up when faced with a challenge, one can state that they have mastery-oriented goals (Dweck, 1986) attributed with growth mindset.

The aim of the research study was to determine the structural interactions among Mindsets, DMC dispositions and ID characteristics (affective factors: ASC, academic achievement) of tertiary level EFL learners in Turkish higher education context. It should be clarified that since the aforementioned ID factors were not investigated in relation to Mindsets and DMC experience thus far, the discussion will have to be grounded on the studies about L2 motivation and speculate relying on their findings in a broad sense.

The findings documented evidence for the mindsets and affective facets of L2 learners' DMC disposition and supported the significant role of mindsets in explaining individual likelihood of experiencing a DMC.

It was revealed that learners with certain affective factors (in particular growth mindset) may have a dispositional advantage to engage with individual-level DMC practices in the context of L2 learning.

Further Research

This research has thrown up many questions in need of further investigation. Further work needs to be done to establish whether language learners' mindset changes over time with an intervention (a treatment or education on mindset), so that students' mindset can be changed from fixed mindset to growth mindset to facilitate more efficient language learning experience. If the debate is to be moved forward, a better understanding of students' mindset on each language skill such as listening, speaking, reading, and writing needs to be developed instead of language learning mindset in general, which was not the focus of the

present study. Determining these can give English teachers and instructors alike a better idea of what skills (even subskills) can seem more problematic for language learners so that required steps can be taken to eliminate these problems.

As the present study emphasized the relation between SR and mindset in language learning, further research in this field regarding the role of training on mindset on changing students' SR would be of great help in shedding light on how to foster language learning with the simultaneous use of data on SR and mindset.

Further research in the field of language learning regarding the role of teacher mindset would be of great help in investigating the impact of teacher mindset on student mindset. There are limited number of research exploring this issue. Therefore, more information on the relationship between teacher and student mindset would help us to establish a greater degree of accuracy on this matter and depending on the possible findings of these studies, a need to train teachers on mindset before students may occur.

Regarding directed motivational currents, the present study explores the which participants experienced DMC and if they did and if they would like to experience it again, the underlying reasons for this are analyzed in relation to mindset. However, future research which aims to explore how DMC affect participants' academic achievement and what can be the triggering factors to initiate a directed motivational current to provide sustained and long-lasting motivation to reach the predetermined goal can be a valuable contribution to the field of language learning.

Because analysis of structural equation modelling revealed that ASC of the participants is not directly related to other variables which can also be called as affective factors (mindset, SR and directed motivational currents), more research can be needed to analyze the underlying cause of this issue.

The findings of the present study also provide the following insights: a longitudinal study with an intervention investigating the change on participants' mindset, SR, ASC and directed motivational currents over time can assist researchers better understand the

working principle of these affective factors which play a significant role in language learning process.

There is a complex interplay between mindset and language learning, which makes it essential to conduct further research to comprehend which mechanisms play a part in it. On the other hand, it is evident that a person's mindset plays a significant role in their motivation, SR and finally their achievement in mastering a foreign language. By facilitating a growth mindset and heartening learners to conduct effective learning strategies, teachers can maximize their opportunities of success in addition to assisting their language learners feel success.

Upcoming research should attempt to shed light on what other factors like cultural or social factors interact with mindset, SR, ASC and directed motivational currents. Moreover, future research can also investigate the impact of these variables on language learning achievement and outcomes. It can also be interesting to research the interaction between and effect of these variables over time in different language learning settings.

In closing, I hope the current study can lay the ground for initiating further discussions on the multifaceted nature of Mindsets, DMCs and accelerate the baby steps taken toward these largely uncharted territories. This promising line of research may not only shed light on the interrelations between the aforementioned factors, but also enrich our overall understanding of the complexity behind L2 motivational processes.

Pedagogical Implications

The current research findings are significant for language teachers and learners alike due to its implications. To begin with, the study indicated that although most participants seem to have growth mindset, the fact that their mindset scores were barely above mixed mindset participants make us reach the conclusion that it is teachers' responsibility to foster growth mindset in a way like using mindset intervention, or challenging activities and while giving feedback praising student effort rather than the outcome.

When how the participants' DMC experiences started was analyzed, the current study revealed that most of the participants stated that it was through self-motivation, followed by

exams, future goals, learning English and influence of other people. Therefore, it can be concluded that increasing student intrinsic motivation, making them have a certain goal of learning, giving them a reason to learn English, and creating a positive impression on them is very likely to create more opportunities of experiencing DMC. Sak (2021) also emphasizes that “it could be of benefit if learners are engaged in the DMC-related practices that demand time-management, daily- planning, punctuality, and attentiveness” (p. 13), further explaining that this can also contribute to the learners’ SR skills.

It can be suggested that language teachers design activities which encourage growth mindset, facilitate SR, and promote ASC while teaching. They are also likely to give opportunities to students to have intrinsic motivation towards learning a language and increase their likelihood of experiencing directed motivational currents towards language learning, as well. It is also crucial that teachers create an environment which fosters learners’ SR skills and autonomy, so that they can be independent learners with growth mindset and enjoy the experience of learning. To have better learning outcomes in the field of language learning, educators and policymakers can provide the alignment of policies and programs with the working principles of these factors in language learning.

There are several studies conducted to identify the impact of growth mindset interventions developed by researchers on learners. For instance, the study conducted by Aronson (2002) involved two groups from the undergraduates of Stanford University, the experiment group being the part of an education which emphasized that there are different types of intelligences, and it should not be discouraging if one shows poor performance or fails whereas the control group did not receive any treatment. The findings revealed that those in the experiment group obtained higher scores at the end of the academic term and were more advantageous in academic studies. This research is important in terms of validating the findings of the research studies mentioned earlier, proving that even informing the participants about growth mindset has considerable impact on their mindset (Aronson et al, 2002).

As Keenan's (2018) pre-test and post-test experimental design study conducted with a single group of participants revealed that activities supporting the idea of growth mindset resulted in increased academic self-efficacy among the learners, it became obvious that it is teachers' duty to create an atmosphere where the principles of positive psychology are applied, students are informed about growth mindset, SR is promoted, likelihood of experiencing DMC is increased, challenges are provided and learner autonomy is fostered so that learners can feel the sense of success and better outcomes can emerge during and after the learning process. Even giving feedback is a crucial aspect of promoting student success because it should be the effort which is praised rather than the grade that a student gets.

Failure of those who pursue a fixed mindset is attributed to their belief that they are unable to do anything to alter their intelligence and comprehension level (Yeager and Dweck, 2012b) and their indifference to the subjects that they will not succeed in (Usher, 2009). If students lack interest in the subjects, then it is more likely that they will have learning gaps that are difficult to compensate in time. Therefore, teachers should look for ways of making students believe that they can be successful, and they have the potential of improving their intelligence and skills and contributing to students' growth mindset to expect them to have better academic performance outcomes.

In conclusion, fostering growth mindset, promoting SR, enhancing ASC, and creating a convenient context where it is more likely for learners to experience directed motivational currents is vital for bringing about better learning outcomes for both students and teachers. Better comprehension of these variables and their interplay could shed light on effective language learning strategies and treatments with the purpose of creating better language learning outcomes and encourage lifelong language learning.

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APPENDIX-A Consent form (Gönüllü Katılım Formu)

Değerli katılımcı, bu çalışma, Yabancı Dil Öğreniminde Sabit Zihniyet ve Zihniyetinin Etkisi (The Impact of Growth and Fixed Mindset in Foreign Language Learning) başlıklı bir araştırma çalışması olup Hacettepe Üniversitesi İngiliz Dili Eğitimi Anabilim dalında yürütmekte olduğum doktora tezim için veri toplama amacını taşımaktadır. Çalışma, Öğr. Gör. Emel KULAKSIZ tarafından, Prof. Dr. Hacer Hande UYSAL danışmanlığında yürütülmektedir ve sonuçları ile dil öğrenmede sabit zihniyet ve gelişim zihniyetinin ve diğer duyuşsal faktörlerin etkisi ortaya konacaktır ve elde edilen veriler doğrultusunda dil öğrenme sürecinin olumlu yönde gelişimi amaçlanmıştır.

- Bu çalışmaya katılımınız gönüllülük esasına dayanmaktadır.
- Çalışmanın amacı doğrultusunda, anket ve bazılarınızla mülakat yapılarak sizden veriler toplanacaktır. Görüşme anında konuşulanların not alınması zor olduğu için izin verdiğiniz takdirde ses kayıt cihazı kullanılacaktır.
- İsminizi yazmak ya da kimliğinizi açığa çıkaracak bir bilgi vermek zorunda değilsiniz ve araştırmada katılımcıların bilgileri gizli tutulacaktır.
- Çalışmada özel sorular (politik görüş, cinsel yönelim, din vb.) sorulmayacaktır. Cevaplamak istemeyeceğiniz, özel olduğunu düşündüğünüz sorular olursa cevap vermeyebilirsiniz
- Araştırma kapsamında toplanan veriler, sadece bilimsel amaçlar doğrultusunda kullanılacak, araştırmacının amacı dışında ya da bir başka araştırmada kullanılmayacak ve gerekmesi halinde, sizin (yazılı) izniniz olmadan başkalarıyla paylaşılmayacaktır.
- İstemeniz halinde sizden toplanan verileri inceleme hakkınız bulunmaktadır.
- Sizden toplanan veriler korunacak ve araştırma bitiminde arşivlenecek veya imha edilecektir.
- Veri toplama süreçlerinde size rahatsızlık verebilecek herhangi bir soru veya talep olmayacaktır. Yine de katılımınız sırasında herhangi bir sebepten rahatsızlık hissederseniz çalışmadan istediğiniz zamanda ayrılabilirsiniz. Çalışmadan ayrılmanız durumunda sizden toplanan veriler çalışmadan çıkarılacak ve imha edilecektir.

Gönüllü katılım formunu okumak ve değerlendirmek üzere ayırdığınız zaman için teşekkür ederim. Çalışma hakkındaki sorularınızı aşağıdaki iletişim bilgilerini kullanarak araştırmacıya iletebilirsiniz.

***Bu araştırma için Hacettepe Üniversitesi Etik Komisyonundan izin alınmıştır.**

Bu çalışmaya tamamen kendi rızamla, istediğim takdirde çalışmadan ayrılabileceğimi bilerek katılıyorum ve verdiğim bilgilerin bilimsel amaçlarla kullanılmasını kabul ediyorum.

Katılımcı Öğrenci:

Adı, soyadı:

Adres:

Tel:

İmza:

Sorumlu arařtırmacı:

Prof. Dr. Hacer Hande UYSAL
Hacettepe Üniversitesi Eđitim Fakóltesi,
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Arařtırmacı:

Öđretim Görevlisi Emel KULAKSIZ
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APPENDIX-B Questionnaires in English

Dweck Mindset Instrument (DMI)

Directions: Read each sentence below and then mark the corresponding box that shows how much you agree with each sentence. There are no right or wrong answers.

1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree					
1. You have a certain amount of linguistic intelligence, and you really can't do much to change it.	1	2	3	4	5
2. Your linguistic intelligence is something about you that you can't change very much.	1	2	3	4	5
3. No matter who you are, you can significantly change your linguistic intelligence level.	1	2	3	4	5
4. To be honest, you can't really change how intelligent you are in terms of language learning.	1	2	3	4	5
5. You can always substantially change how intelligent you are in terms of language learning.	1	2	3	4	5
6. You can learn new things, but you can't really change your basic linguistic intelligence.	1	2	3	4	5
7. No matter how much linguistic intelligence you have, you can always change it quite a bit.	1	2	3	4	5
8. You can change even your basic intelligence level in language learning considerably.	1	2	3	4	5
9. You have a certain amount of talent for language learning, and you can't really do much to change it.	1	2	3	4	5
10. Your talent for language learning is something about you that you can't change very much.	1	2	3	4	5
11. No matter who you are, you can significantly change your level of talent for language learning.	1	2	3	4	5
12. To be honest, you can't really change how much talent you have for language learning.	1	2	3	4	5
13. You can always substantially change how much talent you have for language learning.	1	2	3	4	5
14. You can learn new things, but you can't really change your basic level of talent for language learning.	1	2	3	4	5
15. No matter how much talent you have for language learning, you can always change it quite a bit.	1	2	3	4	5
16. You can change even your basic level of talent for language learning considerably.	1	2	3	4	5

Liu and Wang's Academic Self-Concept Scale

1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree					
1. I can follow the lectures easily.	1	2	3	4	5
2. I daydream a lot in lectures.	1	2	3	4	5
3. I am able to help my course mates in their schoolwork.	1	2	3	4	5
4. I often do my course work without thinking.	1	2	3	4	5
5. If I work hard, I think I can get better grades.	1	2	3	4	5
6. I pay attention to the lecturers during lectures.	1	2	3	4	5
7. Most of my course mates are smarter than I am.	1	2	3	4	5
8. I study hard for my tests.	1	2	3	4	5
9. My lecturers feel that I am poor in my studies.	1	2	3	4	5
10. I am usually interested in my course work.	1	2	3	4	5
11. I often forget what I have learned.	1	2	3	4	5
12. I will do my best to pass all the courses this semester.	1	2	3	4	5
13. I get frightened when I am asked a question by the lecturers.	1	2	3	4	5
14. I often feel like quitting the degree course.	1	2	3	4	5
15. I am good in most of my courses.	1	2	3	4	5
16. I am always waiting for the lecture to end and go home.	1	2	3	4	5
17. I always do poorly in course works and tests.	1	2	3	4	5
18. I do not give up easily when I am faced with a difficult question in my course work.	1	2	3	4	5
19. I am able to do better than my friends in most courses.	1	2	3	4	5
20. I am not willing to put in more effort in my course work.	1	2	3	4	5

Self-Regulated Foreign Language Learning Strategy Questionnaire (Srfllsq).

When I learn English, . . .

1: Never or almost never true of me 4: Somewhat true of me 2: Somewhat untrue of me 5: Always or almost always true of me 3: Neutral Metacognitive					
1. I think of the relationships between what I already know and new things I learn in English.	1	2	3	4	5
2. I first skim an English passage, then go back and read carefully.	1	2	3	4	5

3. I look for opportunities to read as much as possible in English.	1	2	3	4	5
4. I write notes, messages, letters, or reports in English.	1	2	3	4	5
5. I plan my schedule so I will have enough time to study English.	1	2	3	4	5
6. I pay attention when someone is speaking English.	1	2	3	4	5
7. I make summaries of information that I hear or read in English.	1	2	3	4	5
8. I try to find out how to be a better learner of English.	1	2	3	4	5

Cognitive

9. I connect the sound of a new English word and an image or picture of the word to help me remember the word.	1	2	3	4	5
10. I use the English words I know in different ways.	1	2	3	4	5
11. I find the meaning of an English word by dividing it into parts that I understand.	1	2	3	4	5
12. I use new English words in a sentence so I can remember them.	1	2	3	4	5
13. I use new English words in a sentence so I can remember them.	1	2	3	4	5
14. I try to find patterns (grammar) in English.	1	2	3	4	5
15. I try not to translate word for word.	1	2	3	4	5

Meta-affective

16. I notice if I am tense or nervous when I am studying or using English.	1	2	3	4	5
17. I encourage myself as I learn English so that I can learn what I would like.	1	2	3	4	5
18. I read in English as a leisure-time activity.	1	2	3	4	5
19. I organize my English language learning so that I always enjoy doing it.	1	2	3	4	5
20. I plan my English language learning so that I can perform better.	1	2	3	4	5
21. I have more success learning English when I feel like doing it.	1	2	3	4	5
22. I give myself a reward or treat when I do well in English.	1	2	3	4	5
23. I try to relax whenever I feel afraid of using English.	1	2	3	4	5

Meta-sociocultural-interactive

24. I try to learn about English-language cultures and/or other cultures through English.	1	2	3	4	5
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25. I look for people I can talk to in English.	1	2	3	4	5
26. I look at English-language TV shows, movies or websites to get to know the cultures of English native speakers and/or other cultures through English.	1	2	3	4	5
27. I choose leisure activities where I encounter English-language cultures and/or other cultures through English as well.	1	2	3	4	5
28. I plan what I want to find out about the cultures of English speakers and/or other cultures through English.	1	2	3	4	5
29. I practise English with my peers.	1	2	3	4	5
30. I look for similarities and differences between my own culture and the cultures of English native speakers and/or other cultures through English.	1	2	3	4	5
31. Getting to know English-language cultures helps me to learn the language.	1	2	3	4	5

Sociocultural-interactive

32. I start conversations in English.	1	2	3	4	5
33. I make up new words in English if I do not know the right ones.	1	2	3	4	5
34. When I speak with highly proficient speakers of English, I think it is important to get acquainted with their culture.	1	2	3	4	5
35. I encourage myself to speak English even when I feel afraid of making a mistake.	1	2	3	4	5

Directed Motivation Currents (DMC) Disposition Questionnaire

Understanding Long-term Motivation

Part 1

We find accounts on the internet of people being totally absorbed in VERY INTENSE PROJECTS which motivate them for weeks or even months at a time.

These people say things like:

- "I think about this project day and night-I feel like it's taken over my life."
- "I'm amazed I've been able to stay focused for so long, I'm so enjoying it that putting in all the work feels so easy!"
- "I never thought I could achieve so much!"
- "My friends can definitely see that something special is happening to me, they say they've never seen me so motivated!"
- "I wish I could experience this type of motivation while working towards all my goals!"

Please answer the questions by marking the appropriate answer.

1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree					
1. I recognize this type of intense motivation.	1	2	3	4	5
2. I have personally experienced this type of intense motivation while doing a project.	1	2	3	4	5

3. I have personally experienced this type of intense motivation specifically while learning a language.	1	2	3	4	5
----------------------------------------------------------------------------------------------------------	---	---	---	---	---

4. How often do you think you have experienced a project of this kind of motivational intensity?

- () I have NEVER experienced this type of motivation. **(If NEVER, participant directed to part IV.)**
- () I have experienced this type of motivation ONCE, but NOT QUITE AS INTENSE as above.
- () I have experienced this type of motivation SEVERAL TIMES, but NOT QUITE AS INTENSE as above.
- () I have experienced this type of motivation ONCE to a SIMILAR LEVEL OF INTENSITY as above.
- () I have experienced this type of motivation SEVERAL TIMES to a SIMILAR LEVEL OF INTENSITY as above.

Part II

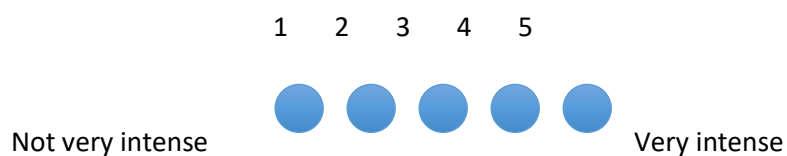
About Your Experience of This Type of Intense Motivation

(If you have experienced this more than once, please choose the most memorable one. This can be from ANY context (not only language learning).)

1. How long did this experience last?

- () Less than 1 month () 4-6 months
- () 1-2 months () Longer than 6 months
- () 2-4 months

2. Please mark on the scale below how intense your motivation felt throughout this period?



3. Would you mind writing a few sentences how intense this period of motivation began? Thank you!

Please answer the following two questions ONLY if you have experienced this type of intense motivation in the context of LANGUAGE LEARNING.

4. How would you rate your proficiency level at the time you experienced this type of intense motivation?

- Beginner Upper-intermediate
 Pre-intermediate Advanced
 Intermediate

5. Please tick the below statement which was most appropriate to you at the time you experienced this

- I was studying the language at school
 I was studying the language at university
 I was studying the language at a private course
 I was studying the language on my own

Part III**About your intense motivational project**

1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree					
1. When looking back now, I have very good memories of this time.	1	2	3	4	5
2. During this time I was able to work more productively than I usually can.	1	2	3	4	5
3. I surprised myself with how much I was able to do.	1	2	3	4	5
4. Many times it felt like a real struggle to keep going.	1	2	3	4	5
5. This experience helped me to achieve all I had wanted to and more.	1	2	3	4	5
6. I think something special happened to me during this experience- it was an amazing time.	1	2	3	4	5

7. Would you like to experience this type of motivation again? Yes No**8. Would you mind telling us why? Thank you!**

1 = Strongly disagree 2 = Disagree 3 = Neither agree nor disagree 4 = Agree 5 = Strongly agree					
1. At the time, this project became a central part of my life.	1	2	3	4	5
2. The people around me could see that I was experiencing something special.	1	2	3	4	5
3. It didn't feel like hard work at the time- I was just caught up in the flow.	1	2	3	4	5
4. I remember thinking about my goal all the time.	1	2	3	4	5
5. I often imagined myself achieving my final goal.	1	2	3	4	5
6. It was a really enjoyable experience.	1	2	3	4	5

Part IV

1. Have you seen this type of intense motivation in people around you? (For example in friends, family, students or colleagues)

() Yes

() No

() Not sure

2. If yes, please think of one memorable example and write a few short sentences about what happened. Thank you!

3. P.S. Please use the space below if there is anything additional you would like to say about your experience or this type of intense motivation in general.

APPENDIX-C Questionnaires in Turkish

Dweck Zihniyet Anketi

Yönerge: Aşağıdaki her cümleyi okuyunuz ve her birine ne kadar katıldığınızı gösteren kutucuğu işaretleyiniz. Doğru veya yanlış cevap yoktur.

1 = Hiç Katılmıyorum 2 = Katılmıyorum 3 = Kararsızım 4 = Katılıyorum 5 = Kesinlikle Katılıyorum	1	2	3	4	5
1. Belirli bir miktar dil zekasına sahibsiniz ve bunu değiştirmek için gerçekten çok şey yapamazsınız.					
2. Dil zekan kendin hakkında çok değiştiremeyeceğin bir şeydir.					
3. Kim olursan ol, dil zeka seviyeni önemli oranda değiştirebilirsin.					
4. Dürüst olmak gerekirse, dil öğrenme konusunda ne kadar zeki olduğunu gerçekten değiştiremezsin.					
5. Dil öğrenme konusunda ne kadar zeki olduğunu daima önemli oranda değiştirebilirsin.					
6. Yeni şeyler öğrenebilirsin ancak temel dil zekanı gerçekten değiştiremezsin.					
7. Ne kadar dil zekasına sahip olursan ol, bunu daima biraz değiştirebilirsin.					
8. Dil öğrenmedeki temel zekanı bile bir hayli değiştirebilirsin.					
9. Dil öğrenme için belirli miktarda bir yeteneğin vardır ve bunu değiştirmek için çok bir şey yapamazsınız.					
10. Dil öğrenme yeteneğin kendin hakkında değiştirmek için çok bir şey yapamayacağın bir şeydir.					
11. Kim olursan ol, dil öğrenme yeteneğinin seviyesini önemli oranda değiştirebilirsin.					
12. Dürüst olmak gerekirse, dil öğrenme konusunda ne kadar yeteneğin olduğunu değiştiremezsin.					
13. Dil öğrenmedeki yeteneğini daima önemli oranda değiştirebilirsin.					
14. Yeni şeyler öğrenebilirsin, ancak temel dil becerini gerçekten değiştiremezsin.					
15. Dil öğrenme için ne kadar yeteneğin olursa olsun, bunu daima biraz değiştirebilirsin.					
16. Dil öğrenmedeki temel yetenek seviyeni bile bir hayli değiştirebilirsin.					

Liu ve Wang'ın Akademik Öz-kavram Ölçeği

1 = Hiç Katılmıyorum 2 = Katılmıyorum 3 = Kararsızım 4 = Katılıyorum 5 = Kesinlikle Katılıyorum					
1. Dersleri kolaylıkla takip edebilirim.	1	2	3	4	5
2. Derslerde çok hayale dalarım.	1	2	3	4	5
3. Okul derslerinde ders arkadaşlarıma yardım edebilirim.	1	2	3	4	5
4. Genelde ödevlerimi düşünmeden yaparım.	1	2	3	4	5
5. Sıkı çalışırsam daha iyi notlar alabileceğimi düşünüyorum.	1	2	3	4	5
6. Dersler sırasında derslere dikkatimi veririm.	1	2	3	4	5
7. Çoğu ders arkadaşım benden daha zekidir.	1	2	3	4	5
8. Sınavlarım için sıkı çalışırım.	1	2	3	4	5
9. Hocalarım derslerimde zayıf olduğumu hissediyor.	1	2	3	4	5
10. Genelde ödevlerimle ilgiliyim.	1	2	3	4	5
11. Sıklıkla ne öğrendiğimi unuturum.	1	2	3	4	5
12. Bu dönem bütün derslerimden geçmek için elimden gelenin en iyisini yapacağım.	1	2	3	4	5
13. Hocalar tarafından bana soru sorulunca korkarım.	1	2	3	4	5
14. Sıklıkla lisansı bırakma duygusu içine girerim.	1	2	3	4	5
15. Derslerimin çoğunda iyiyim.	1	2	3	4	5
16. Daima dersin bitmesini ve eve gitmeyi bekliyorum.	1	2	3	4	5
17. Ödevlerimde ve testlerde daima kötü performans sergiliyorum.	1	2	3	4	5
18. Ödevlerimde zor bir soruyla karşılaşıncaya kolaylıkla pes etmiyorum.	1	2	3	4	5
19. Derslerin çoğunda arkadaşlarımdan daha iyi olabiliyorum.	1	2	3	4	5
20. Derslerimde daha fazla çaba göstermek için istekli değilim.	1	2	3	4	5

Self-Regulated Foreign Language Learning Strategy Questionnaire (Srfllsq)

İngilizce öğrenirken ben, . . .

1: Benim için asla veya neredeyse asla doğru değil 4: Benim için biraz doğru					
2: Benim için biraz yanlış			5: Benim için daima ya da neredeyse daima doğru		
3: Kararsızım					
Biliş ötesi					
1. İngilizce 'de zaten bildiğim şeylerle yeni şeyler arasındaki bağlantıyı	1	2	3	4	5

düşünürüm.					
2. İngilizce metne önce göz gezdirir, sonra geri döner ve dikkatlice okurum.	1	2	3	4	5
3. İngilizce 'de mümkün olduğunca okumak için fırsatlar ararım.	1	2	3	4	5
4. İngilizce notlar, mesajlar, mektuplar ya da raporlar yazarım.	1	2	3	4	5
5. Programımı planlarım, böylece İngilizce çalışmaya vaktim kalır.	1	2	3	4	5
6. Birisi İngilizce konuşurken dikkat kesilirim.	1	2	3	4	5
7. İngilizce 'de okuduğum veya duyduğum bilgileri özetlerim.	1	2	3	4	5
8. Nasıl daha iyi bir İngilizce öğrencisi olabileceğimi bulmaya çalışırım.	1	2	3	4	5

Bilişsel

9. Yeni bir İngilizce kelimeyi, hatırlamama yardımcı olması için kelimenin sesini, bir şekil ya da resimle ilişkilendiririm.	1	2	3	4	5
10. Bildiğim İngilizce kelimeleri farklı şekillerde kullanırım.	1	2	3	4	5
11. Yeni bir İngilizce kelimenin anlamını onu anladığım parçalara bölerek bulurum.	1	2	3	4	5
12. Yeni İngilizce kelimeleri cümle içinde kullanırım, böylece onları hatırlayabilirim.	1	2	3	4	5
13. İngilizce'de kalıplar (dilbilgisi) bulmaya çalışırım.	1	2	3	4	5
14. Kelime kelime çevirmemeye çalışırım.	1	2	3	4	5

Meta-duyuşsal

15. İngilizce çalışırken ya da kullanırken gergin ya da stresli olursam fark ederim.	1	2	3	4	5
16. İngilizce öğrenirken kendimi cesaretlendiririm böylece istediğim şeyleri öğrenebilirim.	1	2	3	4	5
17. Boş zaman aktivitesi olarak İngilizce okurum.	1	2	3	4	5
18. İngilizce öğrenmemi organize ederim böylece her zaman bundan zevk alırım.	1	2	3	4	5
19. İngilizce öğrenmemi planlarım böylece daha iyi performans sergilerim.	1	2	3	4	5
20. İngilizce öğrenmeyi istediğimde daha başarılı olurum.	1	2	3	4	5
21. İngilizce'de başarılı olursam kendime bir ödül ya da şeker veririm.	1	2	3	4	5
22. Ne zaman İngilizce kullanmaktan korksam kendimi rahatlatmaya çalışırım.	1	2	3	4	5

Meta-sosyokültürel-etkileşimli

23. İngiliz dili kültürlerini ve İngilizce aracılığıyla diğer kültürleri öğrenmeye çalışırım.	1	2	3	4	5
24. İngilizce konuşabileceğim kişiler ararım.	1	2	3	4	5
25. Anadili İngilizce olanların kültürlerini ve/veya İngilizce sayesinde diğer kültürleri öğrenmek için İngiliz dili TV şovlarına, filmlere ve web sitelerine bakarım.	1	2	3	4	5
26. İngiliz dili kültürleriyle ve/ veya İngilizce aracılığıyla diğer kültürlerle karşılaşabileceğim boş zaman aktiviteleri seçerim.	1	2	3	4	5
27. İngiliz dilini konuşanlar hakkında ve / veya İngilizce aracılığıyla diğer kültürler hakkında ne bulmak istediğimi planlarım.	1	2	3	4	5
28. Arkadaşlarımla İngilizce pratik yaparım.	1	2	3	4	5
29. Kendi kültürümle anadili İngilizce olanların kültürleri arasında ve /veya İngilizce aracılığıyla diğer kültürler arasında benzerlik ve farklılıklar ararım.	1	2	3	4	5
30. İngiliz dili kültürlerini tanımak dili öğrenmeme yardımcı olur.	1	2	3	4	5

Sosyokültürel-etkileşimli

31. İngilizce sohbet başlatırım.	1	2	3	4	5
32. Doğrusunu bilmiyorsa İngilizce kelimeler uydururum.	1	2	3	4	5
33. Yüksek ustalıktaki İngilizce konuşanlarla sohbet ederken onların kültürüne aşina olmanın önemli olduğunu düşünüyorum.	1	2	3	4	5
34. Hata yapmaktan korktuğumda bile kendimi konuşmak için cesaretlendiririm.	1	2	3	4	5

Hedefli Motivasyon Eğilimleri Anketi (DMC)

BÖLÜM I

Uzun süreli motivasyonu anlama hakkında

Lütfen aşağıdaki tabloda yer alan soruları cevaplamadan önce aşağıdaki açıklamayı dikkatlice okuyunuz.

İnternette, haftalarca ya da aylarca tüm dikkatlerini birtakım projeler ya da görevlere verip çok yoğun motivasyon yaşayan insanların hikayelerini bulabiliyoruz.

Bu insanlar genellikle şu gibi şeylerden bahsetmektedirler:

- “Bu projeyi gece gündüz düşünüyorum- ve onun tüm hayatımı ele geçirdiğini düşünüyorum!”
- “Bu kadar uzun süre odaklanmış kalabildiğime ben bile hayret ediyorum, o kadar çok eğleniyorum ki onunla, bu kadar çok çalışmak hiç zor gelmiyor!”
- “Hiç bu kadar başarı elde edebileceğimi düşünmemiştim!”
- “Arkadaşlarım bendeki değişikliği açıkça fark edebiliyorlar, ve beni bu zamana kadar hiç bu kadar motive olmuş görmediklerini söylüyorlar!”
- “Keşke bütün hedeflerim için çalışırken böyle motive olsam!”

Aşağıdaki ölçekte yer alan ifadeleri yukarıdaki açıklamaları da göz önünde bulundurarak ne ölçüde karşıladığınızı 1 ile 5 arasındaki rakamlardan birini işaretleyerek belirtiniz.

1 = Hiç Katılmıyorum	2 = Katılmıyorum	3 = Kararsızım	4 = Katılıyorum	5 = Kesinlikle Katılıyorum	
5. Bu kadar yoğun bir motivasyon türü tanıdık geldi.	1	2	3	4	5
6. Bu tür yoğun bir motivasyonu bir proje yaparken ya da bir hedefi gerçekleştirirken bizzat yaşamıştım.	1	2	3	4	5
7. Özellikle İngilizce öğrenme sürecinde bu tür yoğun bir motivasyonu bizzat yaşamıştım.	1	2	3	4	5

8. Ne sıklıkla sizce böylesine yoğun bir motivasyon türünü yaşadığınızı aşağıdaki seçeneklerden birine çarpı işareti (X) koyarak belirtiniz?

() Bu tür bir motivasyonu HİÇ yaşamadım. **(Cevabınız bu seçenekse, lütfen bölüm V' den devam ediniz.)**

() Bu tür bir motivasyonu SADECE BİR KEZ yaşadım, fakat yukarıda anlatıldığı kadar yoğun değildi.

() Bu tür bir motivasyonu DEFALARCA yaşadım, fakat yukarıda anlatıldığı kadar yoğun değildi.

() Bu tür bir motivasyonu SADECE BİR KEZ yaşadım, yukarıda anlatılan yoğunluğa benzerdi.

() Bu tür bir motivasyonu DEFALARCA yaşadım, yukarıda anlatılan yoğunluğa benzerdi.

BÖLÜM II

Bu tür yoğun motivasyon deneyimi hakkında

(Eğer birden fazla kez bu tür bir motivasyona sahip olduysanız, lütfen en çok hatırladığınızı seçip, bu bölümde yer alan soruları onun doğrultusunda cevaplayınız. Bu herhangi bir alanda olabilir, İngilizce öğrenme süreci dışında yaşanmış olanlar da olabilir.)

6. Bu tür yoğun bir motivasyonun ne kadar süre devam ettiğini aşağıdaki seçeneklerden birine çarpı işareti (X) koyarak belirtiniz?

() Bir aydan az

() 4-6 ay

() 1-2 ay

() 6 aydan daha fazla

() 2-4 ay

7. Lütfen bu süreç boyunca ne yoğunlukta motivasyona sahip olduğunuzu aşağıdaki ölçekteki rakamlardan birini işaretleyerek derecelendiriniz!

Çok yoğun değil  Çok yoğun

8. Bu yoğun motivasyon sürecinin nasıl başladığıyla ilgili bir kaç cümle yazabilir misiniz? Teşekkürler!

Aşağıdaki iki soruyu (4. ve 5. soruları) eğer bu tür yoğun bir motivasyonu İNGİLİZCE ÖĞRENME SÜRECİNDE deneyimlediyseniz cevaplayınız.

9. Bu tür yoğun bir motivasyonu deneyimlediğinizde dil yeterlilik seviyeniz ne derecedeydi? Aşağıdaki seçeneklerden birine çarpı işareti (X) koyarak belirtiniz.

- () Başlangıç seviyesi
- () Orta seviye öncesi
- () Orta seviye
- () Orta üstü seviye
- () İleri düzey seviye

10. Bu tür yoğun bir motivasyonu ne zaman deneyimlediğinizi aşağıdaki seçeneklerden

birine çarpı işareti (X) koyarak belirtiniz.

- () Okulda dil öğrenirken
- () Üniversitede dil öğrenirken
- () Özel dil okulunda dil öğrenirken
- () Tek başıma dil öğrenirken

BÖLÜM III

Yoğun motivasyon deneyimi hakkında

1 = Hiç Katılmıyorum	2 = Katılmıyorum	3 = Kararsızım	4 = Katılıyorum	5 = Kesinlikle Katılıyorum	
B. Geriye dönüp baktığımda, bu tür bir deneyimi yaşadığım zamana dair çok iyi izlenimim var.	1	2	3	4	5
C. O süreç boyunca normalden çok daha verimli çalışabiliyordum.	1	2	3	4	5
D. Bu kadarını yapabildiğime ben bile şaşırımdım.	1	2	3	4	5
E. Çoğu zaman aynı motivasyonu sürdürebilmekte zorlandım.	1	2	3	4	5
F. O deneyim bana tüm yapmak istediklerimde ve hatta daha fazlasını başarmamda yardım etti.	1	2	3	4	5
G. O deneyim esnasında bana alışılmadık bir şeylerin olduğunu düşünüyorum- gerçekten büyüleyici bir zamandı.	1	2	3	4	5

H. Bu tür bir motivasyonu tekrar yaşamak ister misiniz? (Aşağıdaki seçeneklerden birine çarpı işareti (X) koyarak belirtiniz.)

() Evet

() Hayır

İ. Kısaca nedenini açıklayabilir misiniz? Teşekkürler!

1 = Hiç Katılmıyorum	2 = Katılmıyorum	3 = Kararsızım	4 = Katılıyorum	5 = Kesinlikle Katılıyorum	
J. O deneyim, onu yaşadığım süre boyunca benim hayatımın merkezinde yer aldı.	1	2	3	4	5
K. Beni tanıyanlar benim alışılmadık bir şeyler deneyimlediğimi fark ediyorlardı.	1	2	3	4	5
L. O esnada hiç zorlanmadım-Kendimi sürecin akışına bırakmıştım.	1	2	3	4	5
M. O deneyim boyunca hedefim hiç aklımdan çıkmıyordu.	1	2	3	4	5
N. Kendimi hep nihai hedefime ulaşmış hayal ediyordum.	1	2	3	4	5
O. Gerçekten hoş bir deneyimdi.	1	2	3	4	5

BÖLÜM IV

4. Tanıdıklarınız arasında bu tür bir motivasyona sahip insanlara şahit oldunuz mu? (Örneğin arkadaşlarında, ailede, sınıf arkadaşlarında ya da diğerlerinde) (Aşağıdaki seçeneklerden birine çarpı işareti (X) koyarak belirtiniz.)
- () Evet
- () Hayır
- () Emin değilim
5. Eğer cevabınız evetse, en iyi hatırladığınız bir tanesini düşünüp birkaç cümleyle bu tür bir motivasyonun ne ile ilgili olduğunu ve nasıl olduğunu anlatabilir misiniz?
6. Lütfen bu tür bir motivasyonla ya da deneyiminizle ilgili genel olarak eklemek istedikleriniz varsa aşağıdaki alanı kullanınız.

APPENDIX-D: Ethics Committee Approval



T.C.
HACETTEPE ÜNİVERSİTESİ REKTÖRLÜĞÜ
Rektörlük

Tarih: 01/04/2021
Sayı: E-35853172-300-00001522396
0001522396



Sayı : E-35853172-300-00001522396
Konu : Emel ŞEN (Etik Komisyon İzni)

1.04.2021

EĞİTİM BİLİMLERİ ENSTİTÜSÜ MÜDÜRLÜĞÜNE

İlgi: 04.03.2021 tarihli ve E-51944218-300-00001477106 sayılı yazı.

Enstitünüz Yabancı Diller Eğitimi Anabilim Dalı İngiliz Dili Eğitimi Bilim Dalı Doktora öğrencilerinden Emel ŞEN'in Prof. Dr. Hacer Hande UYSAL danışmanlığında yürüttüğü "Yabancı Dil Öğretiminde Sabit Zihniyet ve Gelişim Zihniyetinin Etkisi/The Impact of Growth and Fixed Mindset in Foreign Language Learning" başlıklı tez çalışması, Üniversitemiz Senatosu Etik Komisyonunun 23 Mart 2021 tarihinde yapmış olduğu toplantıda incelenmiş olup, etik açıdan uygun bulunmuştur.

Bilgilerinizi ve gereğini saygılarımla rica ederim.

e-imzalıdır
Prof. Dr. Vural GÖKMEN
Rektör Yardımcısı

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APPENDIX-E: Declaration of Ethical Conduct

I hereby declare that...

- I have prepared this thesis in accordance with the thesis writing guidelines of the Graduate School of Educational Sciences of Hacettepe University;
- all information and documents in the thesis/dissertation have been obtained in accordance with academic regulations;
- all audio visual and written information and results have been presented in compliance with scientific and ethical standards;
- in case of using other people's work, related studies have been cited in accordance with scientific and ethical standards;
- all cited studies have been fully and decently referenced and included in the list of References;
- I did not do any distortion and/or manipulation on the data set,
- and **NO** part of this work was presented as a part of any other thesis study at this or any other university.

03 /08/2023

(Signature)

Emel KULAKSIZ

APPENDIX-F: Dissertation Originality Report

03/08/2023

HACETTEPE UNIVERSITY
Graduate School of Educational Sciences
To The Department of English Language Teaching

Thesis Title: Investigating Mindset, Self-Regulation, Academic Self-Concept, DMC, and Academic Achievement in an EFL Setting

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I respectfully submit this for approval.

Name Lastname: Emel KULAKSIZ

Student No.: N13241412

Department: Foreign Language Teaching

Program: English Language Teaching

Status: Masters Ph.D. Integrated Ph.D.

Signature

ADVISOR APPROVAL

APPROVED
Prof. Dr. Hacer Hande UYSAL

APPENDIX-G: Yayınlama ve Fikrî Mülkiyet Hakları Beyanı

Enstitü tarafından onaylanan lisansüstü tezimin/raporumun tamamını veya herhangi bir kısmını, basılı (kâğıt) ve elektronik formatta arşivleme ve aşağıda verilen koşullarla kullanıma açma iznini Hacettepe Üniversitesine verdiğimi bildiririm. Bu izinle Üniversiteye verilen kullanım hakları dışındaki tüm fikri mülkiyet haklarım bende kalacak, tezimin tamamının ya da bir bölümünün gelecekteki çalışmalarda (makale, kitap, lisans ve patent vb.) kullanım hakları bana ait olacaktır.

Tezin kendi orijinal çalışmam olduğunu, başkalarının haklarını ihlal etmediğimi ve tezimin tek yetkili sahibi olduğumu beyan ve taahhüt ederim. Tezimde yer alan telif hakkı bulunan ve sahiplerinden yazılı izin alınarak kullanılması zorunlu metinlerin yazılı izin alınarak kullandığımı ve istenildiğinde suretlerini Üniversiteye teslim etmeyi taahhüt ederim.

Yükseköğretim Kurulu tarafından yayınlanan "**Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge**" kapsamında tezim aşağıda belirtilen koşullar haricince YÖK Ulusal Tez Merkezi / H.Ü. Kütüphaneleri Açık Erişim Sisteminde erişime açılır.

- o Enstitü/Fakülte yönetim kurulu kararı ile tezimin erişime açılması mezuniyet tarihinden itibaren 2 yıl ertelenmiştir. ⁽¹⁾
- o Enstitü/Fakülte yönetim kurulunun gerekçeli kararı ile tezimin erişime açılması mezuniyet tarihinden itibaren ... ay ertelenmiştir. ⁽²⁾
- o Tezimle ilgili gizlilik kararı verilmiştir. ⁽³⁾

03/08 /2023

Emel KULAKSIZ

"Lisansüstü Tezlerin Elektronik Ortamda Toplanması, Düzenlenmesi ve Erişime Açılmasına İlişkin Yönerge"

- (1) Madde 6. 1. Lisansüstü teze ilgili patent başvurusu yapılması veya patent alma sürecinin devam etmesi durumunda, tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu iki yıl süre ile tezin erişime açılmasının ertelenmesine karar verebilir.
- (2) Madde 6. 2. Yeni teknik, materyal ve metotların kullanıldığı, henüz makaleye dönüşmemiş veya patent gibi yöntemlerle korunmamış ve internetten paylaşılması durumunda 3. şahıslara veya kurumlara haksız kazanç; imkânı oluşturabilecek bilgi ve bulguları içeren tezler hakkında tez danışmanın önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulunun gerekçeli kararı ile altı ayı aşmamak üzere tezin erişime açılması engellenebilir.
- (3) Madde 7. 1. Ulusal çıkarları veya güvenliği ilgilendiren, emniyet, istihbarat, savunma ve güvenlik vb. konulara ilişkin lisansüstü tezlerle ilgili gizlilik kararı, tezin yapıldığı kurum tarafından verilir*. Kurum ve kuruluşlarla yapılan işbirliği protokolü çerçevesinde hazırlanan lisansüstü tezlere ilişkin gizlilik kararı ise, ilgili kurum ve kuruluşun önerisi ile enstitü veya fakültenin uygun görüşü üzerine üniversite yönetim kurulu tarafından verilir. Gizlilik kararı verilen tezler Yükseköğretim Kuruluna bildirilir.
Madde 7.2. Gizlilik kararı verilen tezler gizlilik süresince enstitü veya fakülte tarafından gizlilik kuralları çerçevesinde muhafaza edilir, gizlilik kararının kaldırılması halinde Tez Otomasyon Sistemine yüklenir

*Tez danışmanının önerisi ve enstitü anabilim dalının uygun görüşü üzerine enstitü veya fakülte yönetim kurulu tarafından karar verilir.

