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T.C.
BAHCESEHIR UNIVERSITY
GRADUATE SCHOOL
DEPARTMENT OF FOREIGN LANGUAGES EDUCATION

ACADEMIC PROCRASTINATION, FOREIGN LANGUAGE ANXIETY,
AND MINDFULNESS AMONG TURKISH EFL STUDENTS: A MIXED
METHODS STUDY

MASTER'S THESIS
NEZAHAT KAYRA ŞENKANAT

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BAHCESEHIR UNIVERSITY

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ABSTRACT

ACADEMIC PROCRASTINATION, FOREIGN LANGUAGE ANXIETY, AND MINDFULNESS AMONG TURKISH EFL STUDENTS: A MIXED METHODS STUDY

Şenkanat, Nezahat Kayra

Master's Program in English Language Education

Supervisor: Asst. Prof. Fatoş Uğur Eskiçırak

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This thesis deals with the relationship between academic procrastination, foreign language anxiety, and mindfulness. It also focuses on the levels of procrastination, anxiety, and mindfulness as well as the differences based on gender and proficiency among a sample of 807 students at the preparatory school of a foundation university in Turkey. To collect data, the Aitken Academic Procrastination Inventory, Foreign Language Classroom Anxiety Scale, and Mindful Attention and Awareness Scale were used. Following the quantitative questionnaire, semi-structured focus group interviews were held with 20 students to gain further insight into their experiences. According to the analyses, it was found that students had low levels of procrastination with moderate levels of anxiety and mindfulness. No significant difference was found in relation to gender; however, language anxiety and mindfulness differed according to students' proficiency. Tasks that included speaking were the most procrastinated and anxiety-provoking ones for students. Research findings were discussed in the light of previous studies in the literature. Limitations, implications, and future suggestions were also mentioned.

Keywords: Academic Procrastination, Foreign Language Anxiety, Mindfulness, Higher Education, English Language Teaching

ÖZET

YABANCI DİL OLARAK İNGİLİZCE ÖĞRENEN TÜRK ÖĞRENCİLERİNDE AKADEMİK ERTELEME, YABANCI DİL KAYGISI VE FARK'ANDALIK: KARMA YÖNTEMLİ BİR ÇALIŞMA

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Bu tez, akademik erteleme, yabancı dil kaygısı ve fark'andalık arasındaki ilişkiyi ele almaktadır. Aynı zamanda, bir vakıf üniversitesinin hazırlık okulunda okuyan 807 öğrenci örnekleminde, erteleme, kaygı ve farkındalık düzeyleri ile cinsiyet ve yeterliliklere göre farklılıkları da incelemektedir. Veri toplamak için Aitken Akademik Erteleme Envanteri, Yabancı Dil Sınıf Kaygısı Ölçeği ve Bilinçli Farkındalık Ölçeği kullanılmıştır. Nicel anketin ardından, öğrencilerin deneyimleri hakkında daha fazla fikir kazanmak amacıyla 20 öğrenciyle yarı yapılandırılmış odak grup görüşmeleri yapılmıştır. Analizlere göre, öğrencilerin düşük düzeyde erteleme davranışına sahip olduğu, ancak orta düzeyde kaygı ve fark'andalık gösterdiği bulunmuştur. Cinsiyet ile ilgili anlamlı bir değişim saptanmamış; ancak, öğrencilerin yeterliliklerine göre dil kaygısı ve fark'andalık seviyelerinde farklılık gözlemlenmiştir. Konuşma becerisi içeren görevler, çeşitli nedenlerden dolayı en çok ertelenen ve kaygı uyandıran görevler olmuştur. Araştırma bulguları, literatürdeki önceki çalışmalar ışığında tartışılmıştır. Ayrıca, sınırlılıklar, uygulamalar ve öneriler de belirtilmiştir.

Anahtar Kelimeler: Akademik Erteleme, Yabancı Dil Kaygısı, Fark'andalık, Yüksek Öğrenim, İngiliz Dili Eğitimi



To My Family

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LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
API	Aitken Procrastination Inventory
EFL	English as a Foreign Language
ELT	English Language Teaching
FLA	Foreign Language Anxiety
FLCAS	Foreign Language Classroom Anxiety Scale
L1	First Language. Referring to Turkish in this study
L2	Second language. Referring to English in this study
M	Mean
MAAS	Mindful Attention and Awareness Scale
SD	Standard Deviation
SLA	Second Language Acquisition
SPSS	Statistical Package for the Social Sciences

Chapter 1

Introduction

This chapter provides a brief overview of the research, focusing on academic procrastination, foreign language anxiety, mindfulness, and related correlations. It highlights the persistent issue of procrastination and anxiety in foreign language education, particularly in university preparatory schools. It also outlines the study's objectives, research questions, and importance. Finally, the chapter briefly defines the key terms utilized frequently in the study.

1.1 Theoretical Framework

Procrastination, as outlined by Sirois and Pychyl (2013), is a prevalent and concerning failure in self-regulation, which refers to the voluntary delay of important tasks despite knowing the adverse outcomes (p. 115). This behavior involves postponing tasks unnecessarily, often causing discomfort or negative consequences (Klingsieck, 2013, p. 25). Academic procrastination, as a type of procrastination, specifically pertains to delaying tasks or assignments related to learning, such as writing papers or studying for exams (Steel & Klingsieck, 2016, p. 37).

Multiple factors contribute to academic procrastination or exacerbate its effects. Generally, several studies have noted that individuals tend to procrastinate tasks that they perceive as challenging, stressful, tedious, or uninteresting (Blunt & Pychyl, 2000; Solomon & Rothblum, 1984). However, while task aversion is crucial, it alone is insufficient to explain procrastination.

Certain theories of procrastination conceptualize this behavior as a self-regulation failure, wherein individuals postpone dreaded tasks in favor of more immediately gratifying activities and better mood (Sirois & Pychyl, 2013; Tice & Bratslavsky, 2000). Sirois and Pychyl (2013) proposed that procrastinators delay tasks to alleviate the negative emotions associated with them. Rather than focusing on the long-term benefits of completing a task, they seek instant relief from negative feelings (pp. 118-121). Consequently, procrastination serves as a short-term mood repair to avoid unpleasant states, ultimately impeding long-term goal attainment (Sirois, 2004, p. 279).

Anxiety stands out as the most extensively researched emotion and psychological aspect in the realm of foreign language learning since it is an intense experience frequently observed in classrooms (MacIntyre, 2017, p. 11). Foreign language anxiety (FLA), initially proposed by E. K. Horwitz, M. B. Horwitz, and Cope (1986), encompasses a complex interplay of self-perceptions, beliefs, feelings, and behaviors specific to language learning, stemming from the distinctive nature of the language acquisition process (p. 128). More precisely, MacIntyre and Gardner (1994) defined FLA as the sensation of tension and apprehension particularly associated with second language environments (p. 284).

Horwitz et al. (1986) argued that FLA triggers adverse emotional reactions and a mental block against learning even for those who are good learners in other subjects (p. 125). Anxiety heightens the affective filter, as proposed by Krashen (1982, as cited in Horwitz et al., 1986, p. 127), diminishing the learners' receptiveness to language input. Consequently, learners struggle to comprehend immediate target language (L2) messages, hindering the language learning process. Krashen further elucidated that anxious language learners experience cognitive blockages, often leading to poor performance or teacher's inaccurate assessment (p. 127). This emphasizes the significance of the affective filter in second language acquisition (SLA), asserting that learners' emotional disposition toward L2 significantly influences the learning process.

Research also indicates that poor emotional self-regulation, as a critical factor contributing to procrastination and FLA, correlates with inadequate mindfulness (Cheung & Ng, 2019; Sirois & Tosti, 2012; Evans, Baer & Segerstrom, 2009). Mindfulness, defined as heightened awareness and attention to the present moment, encompasses recognizing current emotional or psychological experiences, and maintaining a neutral and observant stance against them (Brown & Ryan, 2003, pp. 822-839). Essentially, mindfulness entails mental flexibility, enabling individuals to reside in the present moment, discern new phenomena, and refrain from displaying biases (Langer, 2000, p. 220).

Promoting emotional self-regulation to address procrastination indeed holds promise through mindfulness. Theories and evidence suggest that the awareness cultivated in mindfulness fosters attention control and healthy emotion regulation,

including amplifying positive emotions and attenuating negative ones, such as anxiety (Tang, Hölzel & Posner, 2015, pp. 216-219). Within mindfulness, thoughts and emotions are observed and accepted as mental phenomena without exaggeration or automatic reaction (Bishop et al., 2004, p. 232). This state of mindfulness reduces reactivity to negative thoughts and emotions, enabling individuals to engage in goal-oriented behaviors (Pappamihiel, 2002; Ryan & Deci, 2006).

Although it originated in Buddhism (Kabat-Zinn, 1994, p. 7), mindfulness has gained attraction across various fields, including medicine, psychology, and education. Consequently, numerous studies have explored its effects across different domains. In general, mindfulness has been linked to stress reduction (Shapiro, Brown & Biegel, 2007), decreased rumination (Ramel, Goldin, Carmona & McQuaid, 2004), increased autonomy (Brown & Ryan, 2003), and enhanced self-regulation (Chambers, Lo & Allen, 2008).

In language education, mindful learners are able to engage more actively in tasks and enhance concentration (Mofian, Khoshsima, Fadardi & Pagnini, 2019; Rad, Samadi, Sirois & Goodarzi, 2023). Mindfulness has also been identified as a strategy for managing academic stress and anxiety (Fallah, 2017; Thomas, 2022; Önem, 2015). According to Langer (1993), mindful learning fosters open-mindedness, creativity, and enables students to perceive the world from different perspectives (p. 44).

1.2 Statement of the Problem

The motivation for undertaking this study arose when the researcher, working at a Turkish university preparatory program, recognized that her students struggled with completing their tasks, which often led them to procrastinate to the point that they would miss deadlines. This was especially the case in assignments that required individual effort and productive language skills, such as giving presentations and writing essays.

Students bear various responsibilities throughout their academic journeys, which determine their educational success to some extent. Academic procrastination is, indeed, a prevalent issue affecting a significant portion of college students and their achievements. Steel's (2007) meta-analysis revealed that up to 95% of college students

procrastinate occasionally, while nearly half do so consistently and problematically (p. 65). In a study conducted by McCown and Roberts (1994, as cited in Kandemir, 2010) with 1543 university students, it was also found that the majority of students considered academic procrastination to be a significant problem and source of stress. They, additionally, mentioned that procrastination could hinder academic success pronouncedly (p. 25). In the Turkish context, according to a study (Uzun-Özer, 2005) with 784 university students, over half of them exhibited academic procrastination behavior. A later study (Uzun-Özer & Saçkes, 2011) also revealed that 62% of students sometimes engage in procrastination behavior, while 38% do so frequently. All these research studies have highlighted how widespread academic procrastination is and emphasized the importance of further investigation into this issue.

Like many other aspects of life, students face various challenges, such as critical exams, assignments, and expectations from teachers and parents. For university preparatory schools in Turkey, this period represents a transition for students; many leave home for the first time to study in a different city while stepping into young adulthood from adolescence. Additionally, they must contend with periodic assessments in English and a significant proficiency exam that they are required to pass to proceed to their chosen departments. On top of these academic pressures, students are expected to participate in various tasks, with speaking and writing being the two most crucial.

These factors may contribute to significant stress and anxiety among students, which can negatively impact their progress and performance in the target language (Onwuegbuzie, Bailey, & Daley, 1999). Furthermore, the effects of anxiety can extend beyond the classroom, with some learners never using L2 again, even after graduation (Dewaele, 2007, p. 392). In addition, it is widely accepted that anxiety is a leading cause of procrastination with many studies suggesting that students with high anxiety levels exhibit more procrastination than those with low anxiety levels (Aitken, 1982; Solomon & Rothblum, 1984; Senecal, Koestner & Vallerand, 1995; Newbegin & Owens, 1996; Liu, 2006; Batumlu & Erden, 2007).

Indeed, feeling anxious in a language classroom is expected, with studies indicating that approximately half of English as a Foreign Language (EFL) learners

experience some degree of anxiety while learning L2 (Horwitz et al., 1986; Aida, 1994). However, while all university students encounter anxiety at some point in their lives, the intensity of this emotion and how they cope with it differs (Horwitz et al., 1986, p. 131). Therefore, it is required to investigate the role of individual resources in dealing with such emotional experiences.

Mindfulness has been theoretically and empirically established as an influential factor in anxiety management (Brown & Ryan, 2003; Morgan & Katz, 2021). Previous research has also indicated a negative correlation between mindfulness and procrastination (Flett, Haghbin & Pychyl, 2016; Cheung & Ng, 2019). Mindfulness enhances awareness of emotions and sensations when facing unpleasant tasks, potentially facilitating cognitive, affective, and behavioral control relevant to the task (Evans et al., 2009). Mindfulness has also been proposed to alleviate anxiety associated with challenging tasks and promote persistence in achieving goals (Sirois & Tosti, 2012). By accepting rather than reacting to negative emotions, learners may resist the urge to procrastinate and maintain task persistence by reducing anxiety related to aversive tasks (p. 246).

Thus, it is of utmost importance that educational institutions and instructors must acknowledge the significant burdens students carry, strive to reduce emotional barriers by recognizing anxiety-inducing factors, and foster students' willingness to engage and produce in the target language. This also highlights the importance of researchers identifying individual differences and psychological variables linked to academic procrastination and FLA.

However, despite the growing body of literature in neuroscience and psychology, there remains a noticeable gap in understanding the relationship between academic procrastination and FLA. Moreover, as mindfulness is a relatively novel concept in language education, there is limited research investigating its impact on learners' anxiety and procrastination within language education. Therefore, further exploring the interplay between these constructs would enrich our comprehension of language education and enable the development of valuable interventions to mitigate undesirable outcomes.

1.3 Purpose of the Study

This study aims to investigate the relationship between academic procrastination, foreign language anxiety, and mindfulness among Turkish EFL students in the higher education context. The researcher also intends to observe potential differences in these variables in terms of students' gender and proficiency. Lastly, this study attempts to find out students' perceptions about their procrastination habits and experiences of anxiety related to L2 learning. Given that there is insufficient evidence in the literature for the links between these constructs, the current study aims to fill this gap.

1.4 Research Questions

In line with the issues and considerations mentioned above, this study aims to answer the following research questions:

- 1) What are the levels of academic procrastination, foreign language anxiety, and mindfulness among Turkish EFL students?
- 2) Do academic procrastination, foreign language anxiety, and mindfulness scores differ according to gender and language proficiency?
- 3) Is there a significant relationship between academic procrastination, foreign language anxiety, and mindfulness levels of learners?
- 4) What are learners' opinions about academic procrastination and foreign language anxiety in terms of:
 - a) common tasks and situations of their experience
 - b) reasons for their occurrence

1.5 Significance of the Study

Academic procrastination remains a pertinent and increasingly vital area of research. It garners significant attention because of its direct link to fundamental academic responsibilities spanning from early schooling to higher education, such as exam preparation, assignment completion, administrative paperwork, and engagement in classroom activities. As previously mentioned, delaying these tasks can lead to

various psychological and physical problems, which may result in poor academic performance (Howell & Buro, 2009; Solomon & Rothblum, 1984; Sirois & Pychyl, 2013). Given the unique nature of each student, the reasons behind procrastination may vary, along with numerous associated factors. Therefore, identifying the underlying causes of academic procrastination is crucial for initiating studies aimed at reducing this behavior and implementing procedures to mitigate its adverse effects.

Besides, overlooking emotions is a substantial error when dealing with human beings, especially students. Learners cannot solely be defined by their cognitive abilities. In educational settings, teachers must address not only students' intellects but also their emotional well-being in order to cultivate their overall educational progress. Exploring the link between anxiety and procrastination can thus aid researchers in comprehending how this emotion influences or arises from procrastination behavior. Identifying such connections and understanding their interrelation may assist in determining which emotion to target in order to combat students' self-destructive behaviors and which regulatory techniques to use in the process.

Considering the recent findings in the field, mindfulness emerges as a potential solution to the aforementioned conclusions in educational settings. Given that mindfulness can be practiced as an emotion regulation strategy, many studies suggest its positive influence on reducing anxiety and procrastination (Motie, Heidari, Bagherian & Zarani, 2019; Flett et al., 2016; Sirois & Tosti, 2012; Fallah, 2017; Shen, 2022). This study aims to further reveal the impact of mindfulness on procrastination and anxiety in order to help researchers tailor and implement suitable interventions in future studies.

To the best of the researcher's knowledge, there has been limited interdisciplinary investigation into the intersection of mindfulness, procrastination, and anxiety in education, particularly in Turkey. Moreover, no studies found in the literature have so far focused on these concepts together in an English Language Teaching (ELT) context. Thus, considering findings from other disciplines, it could be valuable to explore the relationship among these variables through the lens of L2 teaching and learning.

Given the growing significance of academic procrastination and FLA, especially in emerging educational formats, such as distance education, hybrid learning, and blended learning, which have become increasingly prevalent after the pandemic in 2019, this study is anticipated to serve as a recommendation for future research. By shedding light on the current state, offering insights for future inquiries, and highlighting deficiencies in the field along with necessary actions, this study aims to provide valuable guidance for future studies.

1.6 Definitions

Procrastination:	“the act of needlessly delaying tasks to the point of experiencing subjective discomfort” (Solomon & Rothblum, 1984, p. 503)
Academic Procrastination:	“tendency to nearly always or always put off academic tasks, and to nearly always or always experience problematic levels of anxiety associated with this procrastination” (Rothblum, Solomon, & Murakami, 1986, p. 387).
Anxiety:	“subjective, consciously perceived feeling of apprehension and tension, accompanied by or associated with activation or arousal of the autonomic nervous system” (Spielberger, 1966, p. 17)
Foreign Language Anxiety:	“a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (Horwitz et al., 1986, p. 128).
Mindfulness:	“paying attention in a particular way: on purpose, in the present moment, and nonjudgementally” (Kabat-Zinn, 1994, p. 7).

Chapter 2

Literature Review

2.1 Procrastination

Even 3000 years from today, there are still records of procrastination. It is known that the famous Babylonian King Hammurabi voiced complaints about procrastination to the Roman Emperor Marcus Aurelius and had deadlines set in the laws (Knaus, 2002, as cited in Akkaya, 2007, p. 1). Traces of procrastination can also be found in the military documents of ancient Rome and Greece but there is evidence that they used this word in both a positive and negative sense (Steel, 2007, pp. 66-67). In ancient Egypt, there were also two verbs that meant ‘to procrastinate.’ While the first verb indicated the benefits of avoiding unnecessary tasks, the other verb defined the failure to complete tasks that need to be done to survive as a harmful habit (Ferrari, Johnson & McCown, 1995, p. 4).

As the importance of the workforce has begun to rise, especially since the Industrial Revolution, procrastination has evolved into a behavior that needs to be reduced, along with more negative connotations of the word (Ferrari et al., 1995). The term ‘procrastination’, as we use it today, comes from the Latin verb “procrastinare.” “Pro” refers to moving forward, while “crastinus” means to leave things until tomorrow (De Simone, 1983, as cited in Ferrari et al., 1995, p. 4). According to Milgram (1992, as cited in Ferrari et al., 1995), procrastination arises particularly in societies where technology is advanced, and structured living is considered essential; hence, it is a problem of the modern age (p. 3). However, the fact that procrastination had already been mentioned before the Industrial Revolution indicates that it is not a solely modern phenomenon.

Solomon and Rothblum (1984) defined procrastination as “the act of needlessly delaying tasks to the point of experiencing subjective discomfort” (p. 503). According to Milgram (1991, as cited in Kandemir, 2010), procrastination is a way of life that involves inadequate decision-making, prioritizing, scheduling, or adhering to a schedule, which becomes a source of personal concern and distress in one or more areas of life (p. 15). Procrastination is intentionally not engaging in a behavior or task

despite knowing that the outcome of not doing so will be negative, and without considering other options (Ellis & Knaus, 1977, pp. 7-8). Procrastination is a tendency to completely avoid or delay responsibilities, decisions to be made, or tasks that need to be done (Haycock, McCarthy & Skay, 1998, p. 317). Moreover, Steel (2007) relates procrastination to the notion of voluntariness and defines it as “an intended course of action despite expecting to be worse off for the delay” (p. 66).

While the majority of research defines the concept of procrastination negatively, some highlight its positive aspects as well. For instance, Chu and Choi (2005) categorize procrastinators into two groups: active and passive. Active procrastinators intentionally procrastinate because they prefer working under pressure, which they consider a motivation-increasing method, and they finish their tasks on time. In contrast, passive procrastinators are individuals who unintentionally delay their work due to a lack of self-control, cannot finish it on time, and experience negative consequences due to this behavior. Although both may exhibit the same level of procrastination, active procrastinators are more likely to complete tasks successfully by reaching the desired outcome than passive procrastinators, who are indecisive and anxious about not taking action due to past failures (p. 247).

2.1.1 Dimensions of procrastination. Researchers indicate that procrastination behavior is composed of different components rather than having a single structure (Solomon & Rothblum, 1984, p. 509). When definitions in the literature related to procrastination are examined, it is observed that procrastination is a complex phenomenon consisting of cognitive, emotional, and behavioral dimensions (Fee & Tangney, 2000; Ferrari et al., 1995; Solomon & Rothblum, 1984).

Accordingly, the behavioral aspect of procrastination is concerned with self-regulatory failures in starting, executing, or finishing a task (Senecal et al., 1995, p. 609). In this case, the planned task may take longer than required or be avoided in favor of another task that brings more enjoyment. According to researchers who emphasize the behavioral dimension, procrastination is the “result of the discrepancy between intention and actual behavior to the extent that it produces negative affect in the procrastinator” (Binder, 2000, p. 5). From a behavioral aspect, procrastinators may

have valid goals, be able to make plans, and get organized accordingly; however, they fail at following through and executing their plans (Knaus, 2002, p. 36).

In the affective dimension of procrastination, the focus is on the subjective discomfort while initiating or sustaining a behavior (Burka & Yuen, 1983, p. 156). Researchers emphasize that procrastinators experience feelings such as helplessness, regret, shame, sadness, resentment, disappointment, and anger (Burka & Yuen, 1983; Binder, 2000). It is also indicated that anxiety is the negative emotion that is associated most with procrastination (Uzun-Özer, 2005, p. 73) and that anxiety can vary from person to person or situationally (Huberty, 2004, as cited in Erdoğan, 2016, p. 29).

The cognitive dimension of procrastination focuses on individuals consciously choosing to procrastinate despite its negative effects and within a certain purpose (Erdoğan, 2016, p. 15). In this sense, cognitive variables such as unrealistic expectations about oneself and their performance, irrational thinking patterns, or perfectionist personality traits can be reasons for procrastination (Haycock, 1993; Ellis & Knaus, 1977; Kağan, 2010). Therefore, attaching irrational meanings or absolutistic demands to a task, such as 'I must do my assignment perfectly or I will fail' or 'I am inadequate in this,' increases anxiety levels and, consequently, leads the individual to avoid fulfilling their responsibility (Ellis & Knaus, 1977, pp. 15-16). The cognitive, affective, and behavioral mechanisms, together, may lead to the habit of procrastination, which follows experiencing self-doubt and debating to procrastinate, making a promise to do it later, and engaging in escapist activities to avoid unpleasant feelings, getting an extension or quitting after the avoidance process, and repeating the cycle of procrastination despite swearing to never do it again (Knaus, 2002, p. 111).

2.1.2 Theories explaining procrastination. There are several theories that have tried to explain procrastination behavior. However, it is best to emphasize that there is no widely accepted theory of procrastination as every approach has a unique perspective, and they complement each other rather than singling out alternative explanations.

2.1.2.1 Psychoanalytic theory. As the oldest theory that thoroughly explains procrastination behavior, the psychoanalytic approach interprets the tendency to procrastinate as avoiding tasks as a result of experiencing anxiety (Ferrari et al., 1995, p. 22). According to this theory, tasks will be postponed because they threaten the ego. Anxiety arises as a warning sign of this threat when a person faces potential dangers and goals that cannot be realized. In order to escape from such distressing situations, they turn to procrastination as a defense mechanism (Ferrari et al., 1995, p. 22). In short, according to psychoanalytic theory, procrastination is a defense mechanism the ego develops to protect itself against subjective threats.

2.1.2.2 Psychodynamic theory. Following psychoanalysis, theorists emphasized the role of past social experiences and environmental factors in fueling the procrastination characteristic of people. According to the psychodynamic approach, the tendency to procrastinate represents childhood traumas or problems experienced in the parenting process, which encompasses negative feelings toward one's family (Balkis, 2006, p. 21). Psychodynamic theorists suggest that emotions from early childhood experiences, particularly traumas, are influential in shaping personality development and cognitive processes in adulthood because they are often expressed symbolically rather than directly (Van der Kolk, 1987, as cited in Ferrari et al., 1995, p. 23).

One of the pioneers of the psychodynamic approach, Missildine (1964, as cited in Ferrari et al., 1995), used the phrase 'chronic procrastination syndrome' to indicate that the characteristic of procrastination stems from faulty child-rearing practices (p. 23). According to Missildine, children raised in families with high expectations of achievement strive to gain their parent's love and approval, and when they fail, they experience anxiety and unworthiness. When faced with a task in adulthood that requires them to display their abilities, children from high-achieving families will behave in the same way as they did in childhood, reliving the emotions they experienced in the past (pp. 23-24).

Spock (1971, as cited in Ferrari et al., 1995) suggests that children, when they fail at a task, are subconsciously exposed to their parent's anger and, in response, delay their behavior toward future goals. As adults, when they need to accomplish a task,

they remember the parental attitudes from their childhood and become chronic procrastinators who cannot finish any task as a reaction to their parent's desires to force them toward success (p. 24). Research examining the reasons for procrastination shows that individuals raised by success-oriented, overly controlling parents who set very high goals for their children are more prone to procrastination, as are individuals raised by parents who are too permissive or believe their children do not have the capacity to succeed (Akkaya, 2007, pp. 15-16).

2.1.2.3 Behaviorist theory. Behaviorist theorists emphasize that learning develops through establishing a connection between stimuli and behavior and that procrastination behavior emerges through its reinforcement by previous experiences of procrastination (Kağan, 2010. p. 21). According to this theory, procrastination is a learned behavior that can be explained through several learning theories.

According to classical learning theory, rewards and punishments direct behavior, and individuals can be conditioned to procrastinate when they receive reinforcements with different frequencies (Ferrari et al., 1995, p. 26). In other words, the individual exhibits a behavior, and the exhibited behavior either leads them to a reward or enables them to avoid punishment. For example, an individual may achieve success by procrastinating a task until the last minute. In that case, this behavior will not create a sense of discomfort for them when they don't receive any negative reaction in the form of reprimands or punishment from external stimuli. Hence, procrastination behavior is reinforced, and they will continue to behave in the same way. Ainslie (1975) also states that people often choose earlier-smaller reinforcements (specious) over later-larger ones since short-term rewards give immediate pleasure (p. 492). Such habits inhibit the accomplishment of long-term objectives and trap the person in a vicious cycle of the pursuit of instant gratification, which, as a result, increases the aversiveness of the task, and continues to reoccur in future tasks (Ferrari et al., 1995, p. 32).

According to contemporary learning theory, procrastination is an act of avoidance or escape (Ferrari et al., 1995, p. 28). Escape conditioning emerges when an individual terminates the task they are working on. Avoidance conditioning emerges when an individual makes excessive efforts to avoid starting a task (p. 29). When

looking at the relationship between stimulus and response, a task or responsibility that was previously perceived as neutral can turn into a learned behavior due to the negatively-perceived external stimuli. For instance, Solomon and Rothblum's (1984) study found that university students tended to procrastinate on the tasks they disliked and did not enjoy doing. An internal trigger, like fear or anxiety, might also be the discriminative cue controlling the avoidance or escape behavior (Burka & Yuen, 1983, pp. 91-95). Extremely anxious students may put off completing their assignments because avoiding anxiety linked to the study is more reinforcing than studying itself (Ferrari et al., 1995, p. 29).

2.1.2.4 Cognitive theory. Although relatively new, cognitive theories are much more popular for explaining behaviors and psychological concepts, including procrastination. Advocates of cognitive theory see the roots of procrastination in irrational fears and self-criticism (Ferrari et al., 1995, p. 35). According to this view, every individual has different thought systems and perception management strategies for the problems around them. These thoughts are divided into rational and irrational ones. According to Ellis and Knaus (1977), a belief is irrational if it distorts reality, leads to unhealthy emotions and maladaptive behavior, and prevents people from reaching their goals (p. 27). The three core irrational beliefs include a) approval (*'I must be competent, achieving and lovable or I am worthless'*), b) judgment (*'People must always treat me kindly and fairly or they are evil'*), and c) comfort (*'I must always live under good conditions or life is awful'*) (Ellis, 2003, pp. 236-237).

When individuals indulge in such irrational beliefs, and their rigid desires are not fulfilled, they tend to perceive the situation to be worse than it actually is (awfulizing), or blame themselves, others, and current conditions (depreciation). Consequently, they turn to activities in which they can be relieved from such discomfort (Dryden, 2000, pp. 30-31). The cognitive-behavioral approach also explains procrastination through the ABC model. When faced with an (A) activating event (e.g., an exam), individuals' irrational (B) belief systems (e.g., inadequacy) lead to unwanted affective and behavioral (C) consequences (e.g., anxiety, blame), and as a reaction to negative emotions, they exhibit irrational behavior (e.g. procrastination) to escape from adversities (Ellis & Knaus, 1977, pp. 26-30)

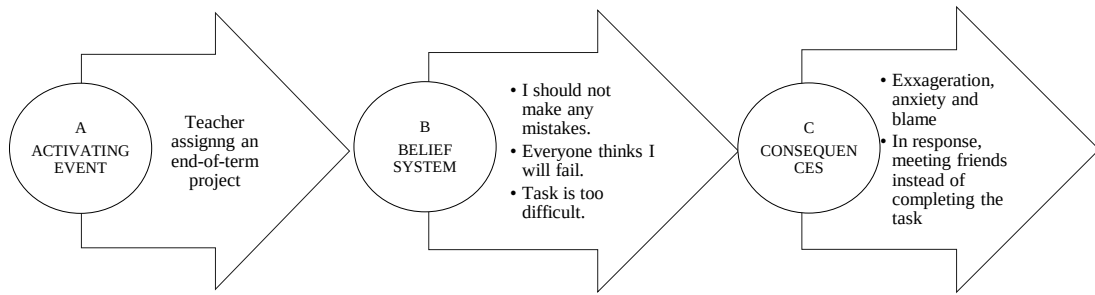


Figure 1. An example of the cognitive-behavioral model of procrastination

Burka and Yuen (1983) also explained procrastination as a strategic action to protect fragile self-esteem and self-worth. Procrastination of a task included the delay in the assessment of the individual's competence as well. In this sense, postponing is considered to be a coping disorder for overcoming difficult situations (pp. 19-27).

Ellis and Knaus (1977, as cited in Balkis, 2006, pp. 24-26), through their clinical studies, observed that individuals who procrastinate experience anxiety, depression, feelings of worthlessness, and low self-esteem repeatedly in a vicious cycle. It was stated that individuals may exhibit procrastination behavior to escape from these negative emotions. Thus, these three concepts, irrational beliefs, low self-esteem, and incapability to make decisions, are also believed to be interrelated.

Howell and Buro (2009) examined the multifaceted relationship between college students' beliefs in their abilities, achievement goals, and procrastination behavior. It was concluded that individuals' beliefs in the immutability of their abilities led to a tendency to procrastinate. In contrast, perceiving their abilities as changeable and improvable influenced them to persist more determinedly in reaching personal goals, view failures as opportunities for growth, and be less prone to procrastination.

2.1.2.5 Short-term mood regulation. According to meta-analyses by Steel (2007, p. 65), voluntarily postponing tasks indicates a breakdown in self-regulation. This self-regulatory failure mainly occurs when individuals face tasks that they perceive as aversive, boring, or meaningless, which leads to discomfort and negative mood. As Sirois and Pychyl (2013) describe, procrastination is the "primacy of short-term mood repair over long-term goal pursuit" (p. 116). When the rewards of a task are deemed out-of-reach, or the task itself is found to be tedious and difficult, people may go through negative emotions and lose motivation for task engagement. In other

words, procrastination is the failure in self-regulation and -control required to complete a task.

Tice and Bratslavsky (2000) put forth the key role of emotion regulation in controlling one's behavior. They claim that trying to regulate the short-term mood may result in a decrease in self-control in different areas of life (p. 149). When feeling bad, people resort to ways to improve their mood, such as overconsumption of food and shopping for redundant items, all of which they normally resist through self-control. When a task causes anxiety and worry, procrastination also becomes a strategy to avoid negative moods, and prevents people from controlling their impulse to avoid their responsibility by "giving in to feel good" (Tice & Bratslavsky, 2000, p.149). The study by Tice, Bratslavsky, and Baumeister (2001, pp. 61-63) showed that participants who experienced a negative mood procrastinated more or did not prepare for the task at all.

Short-term mood regulation focuses on the present self, which does not always consider the consequences of actions for the future self (Tappolet, 2010, as cited in Sirois & Pychyl, 2013, p. 117). The future self, then, has to repair negative moods that are initiated and enhanced by procrastination itself. In this sense, procrastination occurs as a reaction to the negative mood in order to defend the present at the cost of the future self, who will need to pay the price of past actions or inactions (p. 116). However, prioritizing short-term mood usually leads individuals to feel worse later on, let alone hindering performance due to last-minute rush (p. 117).

2.1.3 Types of procrastination. When the literature is reviewed, different interpretations regarding the types of procrastination can be found. By generalizing the definitions of procrastination, two main tendencies emerge; dispositional and situational procrastination.

Dispositional procrastination is defined as the delay in taking action and being prone to procrastination, or as a tendency to procrastinate, leaving intended goals for later. Also named "chronic procrastination" and "procrastination as a personality trait," it includes procrastination in decision-making and routine tasks, as well as neurotic and compulsive procrastination (Kağan, 2010, p. 2). Procrastination in routine activities refers to the inability to perform tasks that need to be done on time in the daily schedule (Balkis, 2006, p. 10). Procrastination in decision-making, on the other

hand, is defined as instability in making decisions and organizing events in one's life (Effert & Ferrari, 1989, as cited in Balkis, 2006, p. 10). Neurotic procrastination expresses a tendency to procrastinate in important life events (Ellis & Knaus, 1977, p. 112), while in compulsive procrastination, the individual chronically postpones the decision-making and action-taking processes (Ferrari, 1991, p. 456).

Situational procrastination is the behavior that an individual exhibits only in specific areas of life. One may procrastinate in a single or some life domains (e.g., paying bills, doctor appointments, or preparing for an exam) but not in others (Hen & Goroshit, 2018, as cited in Behnagh & Ferrari, 2022, p. 1098). Therefore, the distinction between dispositional and situational procrastination behavior lies in the fact that situational procrastination is present only in certain situations. In this case, procrastination is “a domain-specific maladaptive behavior tendency” (Behnagh & Ferrari, 2022, p. 1098). Although people may procrastinate circumstantially, or situationally, this does not mean that everyone is a chronic procrastinator (Ferrari, 2010, as cited in Behnagh & Ferrari, 2022, p. 1099).

Situational procrastination is further divided into “general procrastination” and “academic procrastination.” General procrastination is experiencing difficulty in completing recurring life events on time and represents disruptions in life routines (Kandemir, 2010, p. 5). On the other hand, academic procrastination is when students delay tasks and responsibilities given in schools without any reason until they experience anxiety (Solomon & Rothblum, 1984, p. 503).

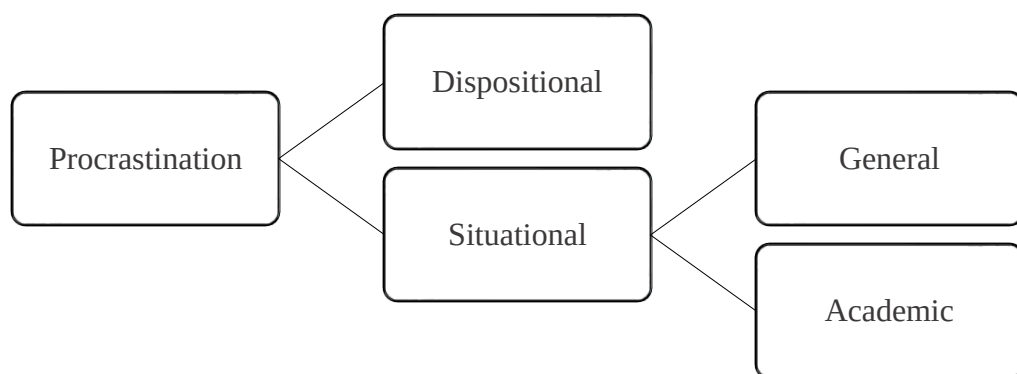


Figure 2. Types of procrastination

When the definitions of procrastination are examined, it can be seen that not every delay is procrastination, and for procrastination behavior to occur, the frequency, severity, and the individual's intention are important. In this study, academic procrastination among the types of procrastination is addressed.

2.1.4 Academic procrastination as a type of procrastination. Academic procrastination is included within the scope of situational procrastination. While procrastination behavior can occur in many daily life routines, academic procrastination has been studied as a distinct type due to its frequent occurrence in academic settings.

Academic procrastination is a commonly observed issue that negatively affects students' academic achievements by involving the delay of essential academic tasks, such as preparing for exams, completing term papers, handling school-related administrative tasks, and fulfilling participation requirements. Burka and Yuen (1983, as cited in Balkis, 2006, p. 12) define academic procrastination as the failure to complete school-related tasks on time, which leads to distress and psychological discomfort in students. Rothblum et al. (1986) also define academic procrastination as individuals, either always or generally, delaying tasks that need to be done and feeling anxious due to this delay (p. 387). According to Senecal et al. (1995), academic procrastination is characterized by individuals experiencing high levels of stress due to not completing academic tasks on time and then further delaying these tasks after experiencing stress (pp. 607-608). Knaus (2001, as cited in Uzun-Özer, 2005, p. 10) describes academic procrastination as prioritizing less important tasks over the more important ones.

Ferrari and Tice (2000) noted that individuals who procrastinate on academic tasks often prefer to engage in alternative activities rather than dealing directly with the procrastination behavior (p. 78). They direct their energy more towards leisure activities, such as socializing and using the internet for enjoyment, making it harder for them to build the necessary study discipline for learning.

2.1.4.1 Consequences of academic procrastination. It has been observed that procrastination has detrimental effects on the procrastinator, which manifests in academic, psychological, physical, and emotional dimensions. Additionally, the repetition of the procrastination cycle in several tasks and situations leads to the habituation of this behavior (Farran, 2004, as cited in Balkis, 2006, p. 20).

One of the most significant consequences of academic procrastination is academic failure. Academic procrastination inevitably leads to a decline in academic performance when considering the inability to fulfill school-related responsibilities and the reduction of time devoted to learning (E. Duru, S. Duru & Balkis, 2014, pp. 1281-1282). Previous researchers have examined the relationship between procrastination and individual performance and found that procrastinators display lower performance compared to others (Steel, 2007; Knaus, 2000; Klassen et al., 2010). In addition, academic procrastination behavior may affect other academic-related behaviors such as falling behind in classes and academic responsibilities, increased school absenteeism, and dropping out of courses or school (Knaus, 2000; Kim & Seo, 2015).

Academic procrastination not only harms academic success, motivation, and behavior but also affects psychological well-being. Therefore, individuals may face anxiety, lack of enjoyment, distress, and depression as consequences of this behavior (Beswick, Rothblum & Mann, 1988; Solomon & Rothblum, 1984; Senecal et al., 1995). While individuals may initially perceive procrastination as relieving, in the long term, it can increase anxiety levels and reduce life satisfaction (Sirois & Tosti, 2012, p. 238). In a study (Ferne et al., 2017) where procrastination was explained according to some personal and psychological variables, it was found that procrastination affects the self-concept and self-efficacy states of students.

Regarding emotional consequences, there is evidence that procrastination is associated with several negative emotions, such as shame and guilt (Fee & Tangney, 2000; Burka & Yuen, 1983; Ellis & Knaus, 1977). Also, when past procrastination instances are remembered or when trying to catch up with previously postponed work, individuals may experience heightened levels of anxiety (Lay, 1986; Ferrari, 1991; Solomon & Rothblum, 1984). Recognizing the piling work that needs to be completed

but has not may result in self-blame, which consequently causes more stress and anxiety (Burka & Yuen, 1983, pp. 10-11). In short, these findings indicate that such procrastination behaviors are self-defeating for the future in terms of making healthy, long-term, and reasonable decisions.

2.1.4.2 Factors influencing academic procrastination. Different definitions of procrastination have led to its explanation for various reasons. In this section, academic procrastination will be examined under internal and external reasons that influence it.

In terms of internal causes of academic procrastination, the most common response is fear of failure. Solomon and Rothblum (1984) identified the fear of failure as the primary reason for academic procrastination. Feeling inadequate in an irrational manner is also considered to be linked to the fear of failure (Knaus, 2000, p. 159). Students may sometimes have thoughts of being incompetent to fulfill their responsibilities or feel academically inadequate, triggering fears of failure in academic life. This, in turn, results in avoiding the task altogether as an avoidance behavior (Ferrari et al., 1995, as cited in Sirois, 2004, p. 271). Fear of negative evaluation (Saddler & Buley, 1999) and overestimations about the task (Ferrari et al., 1995) have also been found to lead to academic procrastination.

Another irrational thought associated with procrastination is perfectionism, which is also positively correlated with the fear of failure (Onwuegbuzie, 2004; Solomon & Rothblum, 1984). Perfectionism is generally defined as a personality trait found in individuals who have excessively high standards accompanied by overly self-critical evaluation tendencies (Yurtseven & Akpur, 2018, p. 97). Perfectionists put unrealistic demands on themselves and set irrational standards for tasks, ultimately failing to achieve what they initially aimed for. Previous findings have shown a close relationship between perfectionism and procrastination (Closson & Boutilier, 2017; Çakıcı, 2003; Solomon & Rothblum, 1984; Akkaya, 2007).

Another internal reason that has been attributed to procrastination is the lack of motivation. The absence of personal interest in the task at hand leads individuals to engage in other activities instead of actively dealing with the task, resulting in procrastination due to a lack of motivation (Steel, 2007, p. 70). Similarly, Tuckman

(1991, p. 479) also mentioned that procrastinators have difficulty motivating themselves in voluntary tasks even when there are positive reinforcements.

Students' academic procrastination behavior has also been linked to poor self-regulation and self-control. Research indicates that students with adequate self-regulation are less likely to exhibit procrastination (Steel, 2007, p. 70). Those who lack self-regulatory skills fail to employ strategies to organize, monitor, and control their studies effectively; instead, they tend to prioritize other activities or irrelevant goals (Pintrich, 2000, pp. 461-485). Additionally, the inadequacy in time management, study habits, unwillingness to study, and lack of orientation toward achievement are also found to be reasons for procrastination (Duru, Duru & Balkis, 2014; Senecal et al., 1995; Milgram, Marshevsky & Sadeh, 1994).

When the concept of time and the phenomenon of procrastination are examined, research indicates that procrastination stems from inadequate time management (Lay, 1986; Kağan, 2010; Aitken 1982). Procrastination is associated with lacking habits to manage time, determine priorities, and work efficiently. Procrastinators also tend to underestimate the passage of time during tasks (Aitken, 1982, pp. 107-109), or they may even overestimate the time they need to complete a task, which makes them delay the start (Burka & Yuen, 1983, as cited in Lay, 1986, p. 493). Therefore, they cannot plan their activities effectively or adhere to their plans when they do make them, and they drift aimlessly from one task to another.

Another study by Johnson and Bloom (1995) with university students has found that those with a low sense of responsibility, determination, and persistence tend to delay their academic tasks as well. Being responsible indicates how much control, persistence, and discipline an individual possesses. Schoolwork, including preparing assignments and studying for exams, requires a responsible and determined approach. An individual who does not exhibit such a personality trait may demonstrate academic procrastination by failing to adopt disciplined attitudes, exercise self-control, or show determination to fulfill their duties; instead, they act with carelessness and impulsivity (p. 131).

Furthermore, previous studies have shown that procrastination is highly correlated with negative emotions. Many of them have found a significantly positive

relationship between academic procrastination and anxiety (Aitken, 1982; Senecal et al., 1995; Erdoğan, 2016; Solomon & Rothblum, 1984). It was proposed that a student experiencing high levels of stress will lack the physical and mental energy required for endurance and persistence against obstacles, making it likely for them to engage in academic procrastination (Aitken, 1982, pp. 99-100). Tice and Baumeister's (1997) study discusses that students who procrastinate academically tend to have low stress and better health at the start of a term, but they encounter increased stress and anxiety as the term progresses. Moreover, shame and guilt are also identified as both motives and outcomes of procrastination (Burka & Yuen, 1983; Fee & Tangney, 2000). Essentially, individuals engage in procrastination to evade undesirable feelings and shield themselves from negative judgments (Fee & Tangney, 2000, p. 171).

In terms of external factors affecting academic procrastination, it can be said that the perception of social support related to the environment is influential. Individuals growing up in unhealthy domestic environments or weak parent-child relationships can explain academic procrastination behavior (Ferrari et al., 1995, pp. 23-25). A study by Ferrari and Olivette (cited in Ferrari et al., 2005, p. 25) found that those who described their parents as more authoritarian or indecisive procrastinated more as a passive-aggressive strategy to cope with their home dynamics. Moreover, school experiences also affect students' academic procrastination levels. Hussain and Sultan's (2010) study with 500 university students and 40 teachers revealed the reasons for procrastination as social and familial problems, negative attitudes towards teachers, not receiving guidance from teachers, negative feedback regarding assignments, and lack of coordination among classmates. Lay, Knish, and Zanatta (1992) also emphasize that academic procrastination stems from working in inappropriate environments.

Additionally, procrastination has been associated with the characteristics of the task. Individuals often tend to avoid or postpone tasks that lack stimulation or are perceived as unpleasant, difficult, and frustrating (Milgram et al., 1994, p. 147). Boredom is believed to play a crucial role in procrastination tendency by making it difficult to maintain focus on the intended activity (Blunt & Pychyl, 2000, p. 161). Overcoming boredom and frustration requires a level of self-control and emotional regulation to suppress emotions and thoughts irrelevant to the task (Kuhl, 1994, as cited in Blunt & Pychyl, 2000, p. 161). However, such negative emotions are often

managed by engaging in distracting activities such as watching videos or playing games, which reinforce procrastination (Sirois & Pychyl, 2013, p. 121).

In studies examining whether gender variable makes a difference in academic procrastination, contradicting results have been found. In some research, it has been revealed that female students tend to have lower levels of academic procrastination than male students (Senecal et al., 1995; Balkıs, 2006; Uzun-Özer, 2005), while others found females had higher levels (Rothblum et al., 1986; Solomon & Rothblum, 1984). In addition to these, many studies have found that gender does not have a significant effect on university students' academic procrastination scores (Flett, Blankstein, Hewitt & Koledin, 1992; Haycock et al., 1998; Ferrari, 1991; Milgram et al., 1994; Kachgal, Hansen & Nutter, 2001).

Regarding proficiency and achievement, Kandemir (2010) stated that senior students procrastinated more than sophomore students and that procrastination increased as students continued their academic careers. On the other hand, some other studies found a negative relationship between procrastination and academic achievement. In a study with 984 students, Balkıs (2006) identified that those with lower GPA scores tend to procrastinate more. Şenlik (2020) and Mocan's (2022) studies also concurred with this result by stating that academic procrastination is more prevalent in less academically successful students.

It is also important to recognize that individuals might also choose to delay their tasks intentionally to take advantage of the adaptive benefits of postponement (Chu & Choi, 2005, p. 247). Procrastination can be used to help stabilize one's energy and provide short-term relief from the feeling of compulsion (Tice & Baumeister, 1997, p. 457).

In conclusion, although correlational studies on academic procrastination have been limited, in these studies, procrastination has usually been observed as a multidimensional complex phenomenon arising from adverse conditions, thoughts, and emotions. Individually or in combination, all these factors can contribute to academic procrastination, which represents a significant challenge to students' academic success and overall well-being.

2.2 Anxiety

Anxiety has been one of the leading subjects of research in the fields of psychology and psychiatry since the 19th century. With nearly 30% of individuals experiencing anxiety at various stages of their lives, it is one of the most prevalent mental disorders (Muskin, 2023).

The origin of the word “anxiety” comes from the Ancient Greek “anxietas,” which was used to describe worry, distress, uneasiness, fear, and curiosity (Kaya & Varol, 2004, p. 32). Since anxiety is experienced alongside various and multifaceted emotions, it is often confused and interchangeably used with phobia, stress, and, in particular, fear. In addition to these uses, terms such as concern, worry, uneasiness, and distress are also commonly used to describe anxiety (Budak, 2000, as cited in Erdoğan 2016, p. 27).

Although anxiety and fear are related concepts, they carry different meanings. Fear is the “basic, autonomic response to a specific object, situation, or circumstance that involves a recognition (perception) of actual or potential danger” (Clark & Beck, 2012, p. 14). In other words, it is a fitting, present-focused, and short-term reaction to a distinctly recognizable and particular threat. Anxiety, on the other hand, generally refers to a much longer-lasting, complex emotional state, often triggered by fear (p. 15). It is “considered a future-oriented, long-acting response broadly focused on a diffuse threat” (American Psychological Association, n. d.). In other words, anxiety differs from fear mostly in its lack of a definable external threat source as the source of anxiety is artificial threats produced by the mind rather than actual existing dangers. In this sense, anxiety can last much longer than fear since individuals experiencing anxiety tend to be preoccupied with potential negative events, like an upcoming exam, rather than their current circumstances (Clark & Beck, 2012, p. 15). In essence, anxiety is “a complex cognitive, affective, physiological and behavioral response system” triggered by the anticipation of a future threat that is “perceived to be unpredictable [and] uncontrollable” (Clark & Beck, 2010, p. 5).

Anxiety has both psychological and physiological dimensions. However, individuals may not always realize that the psychological aspects of anxiety (e.g., emotions, mental experiences, and thoughts) are intertwined with physiological states

(Gözütok, 2023). When faced with a situation that triggers anxiety, individuals may exhibit bodily responses such as sweating palms, increased heart rate, rapid breathing, and nausea. As anxiety arises, the body goes into alarm mode, and the individual further develops anxiety in response to this alarm. Therefore, one may struggle to find a solution to their discomfort without realizing that anxiety could be the source of their distress (p. 20).

The symptoms of anxiety vary depending on the situation and the person. Clark and Beck (2012, pp. 16-18) exemplify the physical, emotional, cognitive, and behavioral symptoms of anxiety, as shown in Figure 3.

Physical Symptoms	Cognitive Symptoms	Emotional Symptoms	Behavioral Symptoms
- Increased heart rate, palpitations - Shortness of breath, rapid breathing - Chest pain or pressure - Sweating, hot flashes - Nausea, diarrhea - Trembling - Tingling, numbness in the arms, legs - Weakness, loss of balance, fainting - Muscle tension - Dry mouth	- Fear of negative evaluation - Lack of focus, mental confusion - Weakness in memory - Loss of objectivity - Fear of losing control - Fear of injury, death - Decreased creativity - Weakness in problem solving skills - Detachment from reality	- Feeling nervous, tense, wound up - Feelings of fear - Being edgy, jumpy - Impatience - Frustration	- Escape or flight response - Freeze response - Avoidance of threat cues or situations - Search for safety - Difficulty in speaking - Restlessness, agitation - Hyperventilation

Figure 3. Symptoms of anxiety (Clark & Beck, 2012, pp. 16-18)

Napoli (2010, as cited in Gözütok, 2023, p. 21) expressed that the determinant of how challenging situations will affect an individual's life is how they respond to them. In this regard, it is important not to always view anxiety as inherently harmful or negative, as it is a natural response to stress and can serve a beneficial role at times. Essentially, anxiety can act as a warning sign, prompting us to recognize and prepare for potential dangers (Clark & Beck, 2010, p. 6). It is a common emotional state that is present in everyone, but it should remain within normal limits. When anxiety is at a healthy level, it can drive motivation, foster success, and serve as a defense mechanism against life's threats; however, it can have adverse effects on one's well-being if it surpasses the normal range (Cüceloğlu, 2016, as cited in Koçali, 2020, p. 11).

In conclusion, anxiety, which signifies a general sense of discomfort, is a normal human experience. However, its intensity, frequency, and consequences vary from person to person, making it a subjective emotional state.

2.2.1 Types of anxiety. Anxiety is most broadly categorized into two dimensions: trait and state anxiety. Trait, or chronic, anxiety is characterized by internal origins rather than direct environmental threats. It arises when individuals perceive a situation as stressful or dangerous or feel that their worth is threatened (Basowitz et al., 1955, as cited in Spielberger, 1966, p. 13). Trait anxiety is prominent when the individual is susceptible to experiencing anxiety in every situation (Levitt, 1980, as cited in Newbegin & Owens, 1996, p. 521). It is a characteristic of personality that reflects an individual's predisposition to experiencing anxiety, setting individuals apart from one another (Spielberger, 1966, p.18). In individuals experiencing chronic anxiety, symptoms such as impaired behavior and perception, attention deficits, decreased performance, avoidance of personal relationships, and withdrawal may be observed (Cüceloğlu, 2005, as cited in Erdoğan, 2016, p. 35).

State anxiety, on the other hand, is the emotional reaction that is triggered when one perceives a particular situation as threatening, regardless of the presence or absence of an objective danger (Spielberger, 1966, p. 13). Thus, it is a subjective emotional state that manifests as a perceived experience of danger, whether real or imagined. When the source of stress is removed, or the perceived threat is no longer seen as threatening, state anxiety levels decrease (Barnes et al., 2002, as cited in Erdoğan, 2016, p. 34). In other words, it differs from state anxiety in that the emotion is not constant and does not reflect the person's general tendency. However, a high level of trait anxiety can make people more prone to state anxiety (Spielberger, 1966, pp. 15-16).

A more recent term, "situation-specific anxiety" highlights the enduring and complex nature of certain anxieties, such as public speaking and test anxiety (MacIntyre & Gardner, 1991, p. 90). Each situation is viewed as unique, meaning an individual might feel anxious in one situation but not in others. Consequently, situation-specific anxieties are related to state and trait anxiety but reflect the likelihood of experiencing anxiety in a specific, well-defined situation (p. 90). These

specific forms of anxiety tend to arise consistently through time; however, they can differ according to the situation (p. 87).

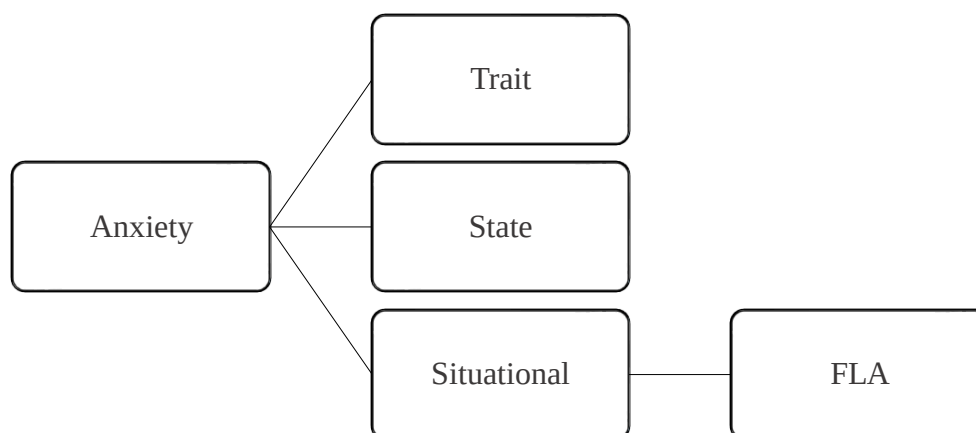


Figure 4. Types of anxiety

2.2.2 Foreign language anxiety. It is suggested that the process of foreign language anxiety is linked more to situational anxiety. This is because, in SLA, anxiety reoccurs in every instance where the learner is required to use the language, such as speaking activities and written assignments (Horwitz et al., 1986, p. 125). Likewise, MacIntyre and Gardner (1991, p. 112) argue that adopting a situation-specific stance is a more effective research approach to understanding FLA, as learners experience anxiety in various aspects of the language learning environment.

Although the causes of experiencing difficulties in learning a foreign language have long been studied, there is still debate about the nature of FLA and its components, and there is no consensus (Young, 1991, p. 426). Foreign language anxiety can be broadly defined as “the feeling of tension and apprehension specifically associated with second language contexts, including speaking, listening, and learning” (p. 284). Thus, it is an anxiety specific to the process of learning a foreign language and is experienced when the target language is used (MacIntyre, 2017, pp. 14-15).

Moreover, Horwitz et al. (1986) define FLA under three subdimensions: communication apprehension, test anxiety, and fear of negative evaluation.

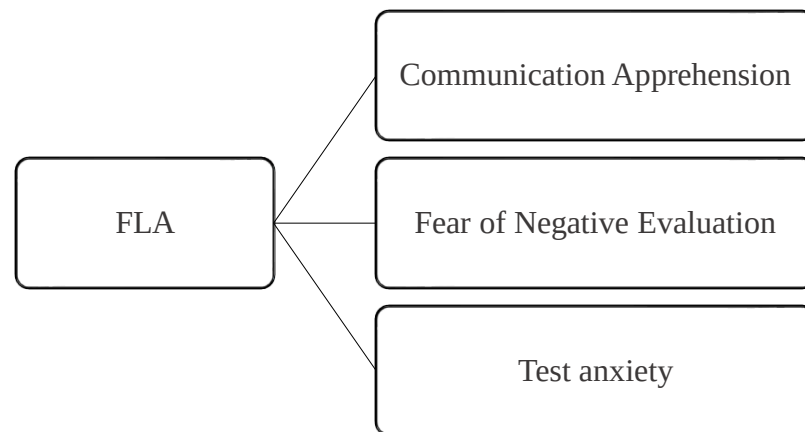


Figure 5. Components of foreign language anxiety (Horwitz et al., 1986, p. 127)

Communication apprehension comprises the incapability to successfully express one's thoughts and ideas. According to Horwitz et al. (1986, p. 127), individuals who struggle with speaking in pairs or groups, speaking in public, or listening to and learning spoken messages experience communication apprehension. They highlight that such individuals face greater challenges in a foreign language learning environment due to their limited control over communicative situations and the constant feeling of being observed (p. 127). Consequently, learners who have apprehension about communicating in the target language tend to refrain from participating in speaking activities due to their negative feelings associated with these (Mejias, R. L. Applebaum, S. J. Applebaum & Trotter, 1991, p. 88).

The second component of FLA is fear of negative evaluation which is defined as “apprehension about others’ evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively” (Horwitz et al., 1986, p. 128). This fear is not limited to a testing situation and can occur in various social settings, too. In the language class, it can stem from both the presence of the teacher and the peers (p. 128). A language learner with a diminished self-concept may feel vulnerable as they expose themselves to potential negative evaluations from both the teacher and other students. According to Aida (1994, p. 157), learners who fear negative evaluation often withdraw from language activities by remaining passive and may even stop attending classes altogether.

Finally, test anxiety primarily arises during evaluative situations. The distinctive nature of exams in foreign language learning, including their frequency and intensity, significantly contributes to anxiety among EFL students (Horwitz et al., 1986, p. 128). Moreover, language assessments often involve more than traditional written exams, incorporating interactive assessments between teacher and student, or among students themselves. Horwitz et al. (1986) suggest that students with higher test anxiety set unrealistic goals and view anything less than perfect as a failure (pp. 127-128). They also argue that oral tests simultaneously increase both test and oral communication anxieties (p. 128). Additionally, some researchers have found that students who are in highly evaluative contexts or who are exposed to new or unclear exam formats report higher levels of language anxiety (Daly, 1991; Young, 1991).

Horwitz et al. (1986) also state that FLA is not limited to these three components but rather is “a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process” (p. 128).

2.2.2.1 Causes of foreign language anxiety. According to Young (1991), the causes of FLA can generally be condensed into six primary factors, originating from three main sources: the learner, the educator, and instructional methods. The six major factors are 1) interpersonal and personal anxiety, 2) perceptions of foreign language acquisition, 3) classroom dynamics, 4) applying teacher-centered approaches, 5) educators’ beliefs about language instruction, and 6) language assessments (p. 427). More recently, MacIntyre (2017) suggested three primary factors contributing to FLA: 1) academic causes (e.g. pronunciation errors, teaching, and testing styles), 2) cognitive causes (e.g. perceived competence, personality traits, and low self-esteem), and 3) social causes (e.g. fear of being judged, cultural differences, and competitiveness) (p. 21).

It is widely accepted that the primary cause of language anxiety is learners’ unrealistic or faulty beliefs about language learning (Horwitz et al., 1986; Price, 1991; Zhang & Zhang, 2022). For instance, students are often highly concerned about forming accurate sentences and having perfect pronunciation. They also tend to think that language learning is merely about direct translation and that achieving fluency in

a foreign language should take only two years (Young, 1991, p. 428). On the other hand, some learners believe that they lack the capacity to learn new languages (Price, 1991, as cited in Altunel, 2018, p. 37). Young (1991, p. 428) states that when such groundless expectations contradict reality, students become highly anxious.

More specifically, perfectionism is identified as a contributing factor to anxiety in foreign language learning. Research on FLA suggests that individuals with high levels of anxiety exhibit greater perfectionistic tendencies due to the significant responsibility they place upon themselves (Gregersen & Horwitz, 2002; Yurtseven & Akpur, 2018). It was also found that highly anxious and perfectionist learners are more likely to fear making mistakes (Yurtseven & Akpur, 2018, p. 107).

In addition, students' self-perceived competence is found to significantly influence their level of anxiety when learning a language (Ohata, 2005; Liu, 2006; Kitano, 2001; Mejias et al., 1991). Highly anxious students tend to underestimate their linguistic abilities, while less anxious students tend to overexaggerate them (McIntyre, Noels & Clément, 1997, p. 266). Moreover, students with higher levels of anxiety tend to have lower expectations of success in language courses, along with lower perceived intellectual and task competence (Onwuegbuzie et al., 1999, p. 229).

A body of research also found that a learner's level of self-esteem correlates negatively with their experience of FLA (Onwuegbuzie et al., 1999; Newbegin & Owens, 1996; Young, 1991). Krashen suggests that individuals with low self-esteem tend to compare themselves with and worry about others' perceptions of them as they constantly seek approval (Young, 1991, p. 427). EFL learners often refrain from speaking, particularly in the presence of classmates or teachers, to safeguard their self-esteem and social standing (Aida, 1994, p. 157), which can also be inferred that FLA stems from the fear of negative evaluations (Horwitz et al., 1986). Liu and Jackson (2008) further emphasize that the fear of making mistakes, rigid correction of errors, and speaking in front of others are significant factors contributing to FLA.

Another significant source of language anxiety stems from classroom procedures, particularly when it involves speaking in front of the class (Young, 1991; Charoensukmongkol, 2019; Kitano 2001). While developing public speaking skills is an essential part of the language learning process, it can result in discomfort alongside

poor performance. Additionally, limited proficiency in a foreign language can further restrict learners' ability to express themselves fully (Aida, 1994, p. 157). Many anxious learners are afraid of making mistakes when speaking in front of their teachers and classmates (Horwitz et al., 1986; Dung & Hung, 2020). This fear can stem from the negative criticism from classmates and thoughts of being considered incompetent or embarrassed (Yurtseven & Akpur, 2018, p. 109) since they compare their performance to that of their peers, teachers, and native speakers (Young, 1991, p. 427). Oral activities, such as giving presentations and answering questions, have indeed been identified as the most anxiety-triggering (Koch & Terrell, 1991; Young, 1991; Daly, 1991; Horwitz et al., 1986; Liu, 2006) as they can raise the affective filter in learners to such a degree that it hinders language learning and prevents them from noticing corrective feedback (Horwitz et al., 1986, p. 127), which is crucial for improving and refining oral production. However, collaborative activities, where learners work in small groups, have been found to reduce anxiety levels while boosting self-confidence (Young, 1991, p. 433).

Furthermore, some researchers suggest that teachers can also be a source of language anxiety for learners (Llinas & Garau, 2009; Liu, 2006; Horwitz et al., 2010; Young, 1991). Factors such as teachers' demeanor and attitudes, how they interact with and provide feedback to learners, their lack of support, unsympathetic behavior instructional and teaching styles, judgmental attitudes, or harsh teaching methods can all contribute to creating anxious language learners (Horwitz et al., 2010, p. 105). On the other hand, instructors who are relaxed, patient, and friendly, who possess a good sense of humor, and who create a comfortable atmosphere for learners to speak in the target language are thought to alleviate anxiety (Young, 1991, p. 432).

Challenging materials can be another source of anxiety for learners. Some researchers have found that students experience heightened language anxiety in highly evaluative situations, particularly when faced with unfamiliar or ambiguous test formats (Daly, 1991, as cited in Young, 1991, p. 429). In addition, Price (1991) noted that "foreign language courses may be more demanding and more difficult than other courses, thus eliciting higher anxiety than other courses" (p. 106). Indeed, unlike other subjects where learners can express themselves freely, learning a foreign language in a classroom setting can lead to discomfort when they encounter unfamiliar language

structures and pronunciation. Ohata (2005, pp. 9-13) states that linguistic (vocabulary, pronunciation, grammar) challenges, differences between native and target language, and lack of knowledge about the subjects are among the factors that cause foreign language anxiety.

Sparks and Ganschow (1991) argue that foreign language anxiety can arise from a learner's insufficient language proficiency or limited command of the language (p. 10). They view foreign language anxiety as a consequence of the difficulties and poor performance associated with acquiring a foreign language (p. 5). In other words, learners who struggle with understanding and using a foreign language are likely to feel anxious about using or producing the language due to their inability to use it effectively. This was supported by previous research which demonstrated that proficient students were more inclined to have lower anxiety (Tianjian, 2010; Arnaiz & Guillén, 2012; Varol, 1990). However, other research found that foreign language anxiety levels increased as the proficiency levels increased (Llinas & Garau, 2009; Batumlu & Erden, 2007; Altunel, 2018; Elkhafaifi, 2005), or that no significant difference in the levels of language anxiety existed across proficiency levels (Dung & Hung, 2020; Liu, 2006).

Regarding gender, there is again a body of mixed results. While some studies found that FLA was experienced more by female students (Arnaiz and Guillén, 2012; Park & French, 2013; Mejias et al., 1991; Koçali, 2020), or by male students (Kitano, 2001; Fariadian, Azizifar & Gowhary, 2014), others also found no significant difference between male and female students in terms of anxiety (Aida, 1994; Batumlu & Erden, 2007; Tianjian, 2010; Zasiiekina & Zhuravlova, 2019; Charoensukmongkol, 2019; Nahavandi & Mukundan, 2013).

As evident from these conflicting findings and perspectives discussed above, language anxiety is a complex and multi-dimensional phenomenon that affects language learning in multiple ways.

2.2.2.2 Effects of anxiety on language learning. FLA can have a facilitating, debilitating, or no effect on the learner. Yet, literature has shown that its effects are mostly debilitating in that it inhibits the L2 acquisition process (Liu, 2006; Horwitz et al., 1986; MacIntyre & Gardner, 1994; Onwuegbuzie et al., 1999). These effects can be categorized into four main areas.

Firstly, language anxiety is often reflected in the behaviors of learners through avoidance in the classroom. Symptoms may include arriving late or missing classes altogether (Aida, 1994, p. 157). Even if they attend lessons, anxious learners might sit at the back to avoid attention or remain silent when asked to participate (Liu & Jackson, 2008, p. 72). They may also struggle with concentration, procrastinate on homework, or miss deadlines (Horwitz et al., 1986, p. 126).

High levels of language anxiety can also affect learners' cognitive abilities, interfering with performance at both the input and output stages of learning (MacIntyre, 2017, p. 17). It can prevent students from processing spoken or written messages, potentially leading to misunderstandings or incomplete comprehension. In the output stage, anxious students may “have more difficulties demonstrating the knowledge they do possess” (MacIntyre & Gardner, 1994, p. 301). Anxious learners may forget words, and refuse to speak due to difficulties with sound discrimination, pronunciation, or grammar usage (MacIntyre & Gardner, 1994, p. 300), resulting in shorter, less complex sentences, more errors, reduced fluency (MacIntyre, 2017, p. 17), and overall performance that can contribute to the teacher's inaccurate assessment (Horwitz et al., 1986, p. 127).

Physically, anxiety may manifest as extreme discomfort during speech, causing learners to "freeze" or go blank. They might show signs of tension such as excessive sweating, trembling hands, dry mouth, muscle tension, or rapid heart palpitations (Horwitz et al., 1986; Young, 1991). They may also appear bewildered or embarrassed about how to respond in class and reflect through exaggerated laughs or nods (Llinas & Garau, 2009, p. 97).

Finally, socio-linguistically, language anxiety can be evident in classroom interactions, especially in culturally diverse settings. Anxious learners may engage in code-switching, preferring to express themselves in their native language when they

feel uncomfortable (Spielmann & Radnofsky, 2001, as cited in Llinas & Garau, 2009, p. 97).

All of these result in a consistent pattern of foreign language anxiety and poor performance. The combination of perceived low achievement and negative emotional responses further reinforces the expectations of anxiety and failure. MacIntyre et al. (1997) describe this vicious cycle as anxious learners failing to notice their progress that would reduce their anxiety and help further improve their performance (p. 278).

2.3 Mindfulness

Although mindfulness has become a highly popular concept in Western countries only recently, it is a practice that dates back thousands of years (Morgan & Katz, 2021, p. 390). The term “mindfulness” originated from the Sanskrit word “smṛti,” which can be translated as “to remember” (Thomas, 2022, p. 36). It is an English rendition of the Pali term “sati,” stemming from an ancient Buddhist tradition associated with awareness, attention, and recollection (Germer, Siegel & Fulton, 2005, p. 5).

Dating back approximately 2500 years in history, mindfulness was initially embraced by many Buddhists to support their spirituality and religious convictions on their path to enlightenment (Burk, 2014, as cited in Thomas, 2022, p. 35). As the mindfulness practice was developed and spread through the world over the years, its name has also evolved in meaning (p. 35). According to Thich Nhat Hanh (1999, as cited in Hyland, 2009), a well-known Buddhist teacher, mindfulness serves as the force that guides us back to the current moment, and it is akin to nurturing the essence of the Buddha within (p. 125).

Initially rooted in Buddhist teachings, mindfulness has evolved into a practice that has spread primarily to the Western world today. Beginning in the 1970s, it had become a secular practice that could be universally applied (Germer et al., 2005, p. 128). Consequently, it began to be utilized in various disciplines, including medicine and clinical studies. Upon examining the relevant literature, it can be said that there are three prominent schools of thought regarding mindfulness. One is proposed by

Kabat-Zinn (1994), another by Langer (1993), and the third by Brown and Ryan (2003).

Much of modern mindfulness today is attributed to Jon Kabat-Zinn, the creator of Mindfulness-Based Stress Reduction (MBSR), being the first example of secular mindfulness-based practices. Kabat-Zinn (1994) defines mindfulness as “paying attention in a particular way: on purpose, in the present moment, and non-judgementally” (p. 7). According to this definition, mindfulness includes the following components: 1) self-regulating one’s awareness, 2) directing attention to internal and external stimuli, 3) cultivating inner observation and metacognitive awareness of one’s thinking processes, and 4) adopting a non-judgmental attitude (Bishop et al., 2004, pp. 232-234).

Ellen Langer (2000), a pioneering figure in the field of mindfulness, broadly defines it as “a flexible state of mind in which we are actively engaged in the present, noticing new things and sensitive to context” (p. 220). In contrast, mindlessness involves lacking some or all of the following characteristics: a) being confined by distinctions made in the past, b) engaging in automatic behavior, and c) operating from a single, rigid perspective (p. 220). As mentioned by Langer, “When we are mindless, our behavior is rule and routine governed; when we are mindful, rules and routines may guide our behavior rather than predetermine it” (p. 220).

In the approach proposed by Brown and Ryan (2003), mindfulness is addressed within the framework of self-determination theory. Accordingly, mindfulness is the observation of the internal and external aspects of present experience with an open and undivided state of mind rather than a cognitive focus on external stimuli (p. 821). In other words, an individual may be aware of numerous stimuli, but with mindfulness, the focus can be deliberately directed and controlled according to individual goals through emotional awareness and self-regulation (p. 843).

Bishop et al. (2004) further developed this concept and proposed that mindfulness consists of two elements: 1) self-regulating attention to the present experience and 2) acknowledging the present moment’s experience with curiosity, openness, and acceptance (p. 232). Accordingly, mindfulness is described as a path of consciousness development that necessitates a reflective approach rather than a

reactive one towards internal and external experiences. In this sense, “acceptance” is not characterized by passivity or surrender (Cardaciotto et al., 2008, as cited in Gözütok, 2023, p. 27). Instead, it signifies the ability to fully experience the present moment without resorting to suppression, and with a high degree of focus on the current experience.

In summary, individuals who are mindless tend to operate on autopilot, lack creativity, and are unaware of the present moment, whereas mindful ones are characterized by heightened awareness of the moment, attentiveness, and flexibility. For instance, when observing a dress, providing detailed descriptions such as “blue, long, cotton, striped” would exemplify mindfulness, while simply stating “it is just a dress” would convey a sense of mindlessness.

2.3.1 Benefits of mindfulness. According to Kabat-Zinn (1994), mindfulness requires disciplined utilization of the mind’s self-regulation skills to maintain continuous attention to the present moment (p. 9). Thus, it enables the transition from a state of mindlessness, characterized by habitual narrow focus, to a state of mindfulness (Lakey, Campbell, Brown & Goodie, 2007). The information processing pathway facilitated by mindfulness prevents individuals from being preoccupied with negative emotions and thoughts, allowing them to respond to experiences with appropriate and balanced reactions rather than automatic, rote, or habitual ones (Bishop et al., 2004, p 232). In other words, mindfulness provides a perspective that allows individuals to notice their ingrained responses and transcend them, becoming less reactive.

According to several empirical studies in psychology, mindfulness is linked with numerous positive effects on individuals across various domains. Increased levels of mindfulness have been associated with several beneficial outcomes, including decreased rumination (Ramel et al., 2004), reduced stress (Shapiro et al., 2007), enhanced cognitive performance (Tang et al., 2017), increased sense of autonomy (Ryan & Deci, 2006), better emotion regulation (Chambers et al., 2008), and overall enhancement of well-being (Brown & Ryan, 2003).

Leary and Tate (2007) also argue that mindfulness can benefit individuals in several ways, listing the most significant benefits as follows:

1. Reducing negative thoughts related to the past or future,
2. Assisting in evaluating the present situation impartially without being attached to or rejecting it,
3. Enhancing ways of effective communication with others, thereby improving prosocial behaviors and positive emotions,
4. Preventing depletion of self-regulation resources (pp. 251-253).

Thus, individuals with high levels of mindfulness can focus solely on the experience of the present moment without dwelling on past challenges or developing anxiety about potential future challenges.

It has been observed that mindfulness not only enhances the control of attentional focus but also improves cognitive skills and executive function. Studies have shown an increase in enhanced working memory capacity (Mrazek et al., 2013), improved creative problem-solving (Gözütok, 2023), and greater cognitive flexibility (Roemer & Orsillo, 2003, as cited in Chambers et al., 2008). Research has also shown that an innate tendency toward mindfulness results in the improved development of a healthy mindset, increased perception of health, and decreased levels of anxiety (Bränström et al., 2011, as cited in Gözütok, 2023, p. 35).

2.3.2 Types of mindfulness. The concept of mindfulness can be used to describe a psychological trait, or a psychological state, which can be developed through mindfulness practices and processes. (Germer et al., 2005, p. 18). In other words, mindfulness has been conceptualized as a state that can arise psychologically, or as an inherent tendency or characteristic (Waszczuk et al., 2015, p. 255). It can be either temporary or enduring in nature, and it has been conceptualized as a skill that can be developed through practice or intervention (Bishop et al., 2004; Brown & Ryan, 2003).

Mindfulness as an innate tendency or characteristic, referred to as dispositional or trait mindfulness, is defined as the intentional, non-judgemental directing of one's attention to the present moment, a skill that may be adopted through genetic and environmental influences (Waszczuk et al., 2015, p. 255). Accordingly, there are various perspectives on mindfulness, considering it either as an inherent trait or a

product of past experiences. When viewed as an inherent characteristic, it is common for the level of trait mindfulness to vary from person to person (p. 255).

Another perspective conceptualizes mindfulness as a psychological state, viewing it as a temporary skill dependent on specific situations and causes within a certain period of time. State mindfulness, also known as situational mindfulness, is a mental state that mostly emerges during mindfulness-based practices and can vary in intensity over time (Brown & Ryan, 2003, p. 839). Bishop et al. (2004) also argue that mindfulness is much closer to a state rather than a trait since for it to be enduring and remain constant over time, it is required to be practiced regularly. They claim that “as long as attention is purposely brought to experience ..., mindfulness will be maintained, and when attention is no longer regulated ..., mindfulness will cease” (p. 234). However, it was found that those who had higher dispositional mindfulness were more likely to experience momentary mindfulness (Brown & Ryan, 2003, p. 839).

It is also believed that regular mindfulness practices enhance this trait through specific exercises and techniques (Kabat-Zinn, 1994, pp. 8-9). In this sense, mindfulness is considered a mental capacity that can be developed through various methods and is seen as a learnable skill. Mindfulness encompasses practices in which mental training is conducted through meditation, mindful attention, or open awareness practices. These practices can reduce unproductive mental habits or automatic thoughts and behaviors linked to a condition (Shapiro et al., 2007, p. 106). However, researchers commonly express that mindfulness can be attained without meditation, focusing attention is a natural human skill, mindfulness is both a state and a trait, and it is not always intentional as it can occur subconsciously (Gözütok, 2023, p. 26).

2.3.3 Mindfulness in education and mindful learning. Mindfulness, as Murray (2009, as cited in Öz, 2017) puts forward, integrates progressive educational concepts into a broader interdisciplinary network of ideas spanning culture, psychology, philosophy, and science, while also addressing certain limitations (p. 17). Within this framework, both mindfulness and pedagogy are viewed as integral components of a holistic educational approach, with mindfulness often referred to as mindful learning.

Weare (2014, as cited in Öz, 2017) characterizes mindfulness as a pedagogical tool, which is the process of developing the ability to focus while fostering qualities like kindness, curiosity, and an open, non-judgmental mindset (p. 18). This approach not only aids learners in developing attention skills but also fosters specific positive attitudes, contributing to their overall success and well-being. Langer (1993) adds to this perspective by suggesting that mindful learning understands that any experience can occur in countless ways, with each occurrence yielding novel information for the students (p. 47).

Being a pioneering figure in the field of mindfulness, Langer's extensive interdisciplinary research spans psychology and its integration into education. Consequently, many contemporary researchers refer to mindful learning as 'Langerian mindfulness,' acknowledging her influential work. Langer (1989, as cited in Öz, 2017, pp. 18-19) identified three key qualities for mindful learning: 1) generation of new categories, 2) receptiveness to novelty, and 3) recognition of diverse perspectives. Subsequently, she expanded upon these qualities, introducing two additional aspects: 4) attentiveness to distinctions and 5) orientation to the present moment (Langer, 1997, as cited in Öz, 2017, p. 19). When a student embodies these characteristics, it suggests that they are engaged in mindful learning.

In recent years, mindful learning and mindfulness practices have become increasingly prevalent across various educational domains. Numerous studies have investigated the levels of mindfulness among students, the effectiveness of mindfulness-based interventions, and their educational benefits for learners of all ages. According to research, higher levels of mindfulness correlate with greater academic success (Charoensukmongkol, 2019) by reducing inhibitions, improving memory, and boosting cognitive functioning (Thomas, 2022). Mindfulness consistently emerges as a positive predictor of motivation for learning, both directly and indirectly (Ersanli & Ünal, 2022; Geng, 2021; Moafian et al., 2019). Regular mindfulness exercises help students 1) search novelties in their environment with curiosity, 2) pay attention and interact with the changes, 3) observe their experiences from different perspectives, and 4) utilize each experience as an opportunity for production (Moafian et al., 2019, p. 5), all of which fosters psychological flexibility, leading to more creative learning approaches.

Hyland (2009) argues that mindfulness is closely tied to the developmental aspects of learning and that incorporating mindfulness into adult education offers an opportunity to reconnect the cognitive and affective dimensions of learning (pp. 124-125). The alignment between cognitive and affective aspects is crucial, as emotional regulation is fundamental to overall well-being. Thus, mindfulness practices aim to help students recognize and regulate their emotions (Chambers et al., 2008, p. 305). Numerous studies have demonstrated that mindfulness assists learners in managing their emotions, leading to greater mental clarity and more positive psychological states (Fallah, 2017; Geng, 2021; Koçali, 2020; Charoensukmongkol, 2016). Effective mindfulness interventions can mitigate the negative impacts of anxiety among learners, thereby enhancing their self-efficacy and confidence (Morgan & Katz, 2021; Önem, 2015; Fibriasari & Tambunan, 2022; Ersanli & Ünal, 2022).

Given that mindfulness encompasses awareness, concentration, reflection, refinement, and meaning-making, it is anticipated that integrating mindful learning into the curricula will foster brighter ideas, nurture creativity, facilitate critical thinking, and promote smooth reflection of one's thoughts. In a world fraught with distractions, stressors, and frequent challenges, the practice of mindfulness can support learners within educational settings.

2.3.3.1 Mindfulness in second language learning. After examining the application of mindfulness in educational settings, SLA communities have turned their attention to investigating its use in language classrooms. Moafian et al. (2019, p. 2) note that although learning a foreign language and practicing mindfulness are traditionally viewed as distinct domains, they are interconnected within a dynamic system. This connection stems from the similarities between the fundamental principles of mindfulness philosophy and the contemporary advancements in language teaching and acquisition.

Learning a language and embracing Langerian mindfulness represent novel experiences as learners embark on encountering and discovering unfamiliar cultures. Individuals who are receptive to novelty are more likely to embrace new patterns during the language learning process (Langer et al., 1989, as cited in Mofian et al., 2019, p. 2). Similarly, language learners who exhibit flexibility are expected to

navigate the learning journey with greater ease, as they can readily adapt to the intricacies of the language system (p. 7).

More specifically, within a language classroom, mindfulness aids students in generating fresh ideas, becoming aware of their thought processes, and engaging in reflective and critical thinking (Wang & Liu, 2016, p. 152). Moreover, self-awareness promoted by mindfulness can lead learners to employ the most effective methods and strategies for improving language skills. It was observed that mindfulness reinforced reading and listening skills in EFL courses by increasing awareness of internal processes and fostering reflective skills (Garretson, 2010, as cited in Koçali, 2020, p. 9). Mindfulness is also recognized as a technique that facilitates mental clarity and a greater flow of ideas in productive skills (Thomas, 2022; Zhang & Zhang, 2022).

In order to effectively acquire a language, some level of attention to the input is necessary; otherwise, learning may not occur. One of the key skills essential for learning a language is the capacity to direct and sustain cognitive activity on specific stimuli over prolonged periods, which can be obtained through mindfulness (Mofian et al., 2019, p. 6). It was found that mindfulness assists learners in concentrating on language tasks more effectively, reducing distractions stemming from internal factors such as stress, anxiety, and depression, as well as external pressures like exams, assignment deadlines, and future expectations (Fallah, 2017; Tasan, Mede & Sadeghi, 2021; Rad et al., 2023). In this sense, it can be said that mindfulness can effectively reduce stress and anxiety levels, thereby resurfacing learners' capacity to learn a language.

As Langer (2000) puts forward, being mindful “leads us to greater sensitivity to context and perspective, and ultimately to greater control over our lives” (p. 220). The literature also shows that mindfulness practice transcends mere concentration-building; it empowers learners of all ages and proficiency levels to proactively address their well-being with maximum benefit in the learning process. When mindfulness strategies are integrated into language learning, they have the potential to elevate learners' engagement, enhance attention, reduce anxiety, and ultimately help them navigate unfamiliar situations with success.

2.3.3.2 Mindfulness, FLA, and academic procrastination. When the issue of procrastination is considered, it has been observed that procrastinators are more prone to short-term mood regulation and tend to avoid long-term goals (Ainslie, 1975; Sirois & Pychyl, 2013). These tendencies indicate that procrastination behavior may potentially be associated with awareness, emotion regulation skills, and impulse control as trying to distance oneself from unwanted thoughts, feelings, and obligations reinforces both procrastination behavior and the anxiety itself (Sirois, 2004, p. 279).

Mindfulness has been recognized as a crucial attribute for self-regulation as it diminishes anxiety (Brown & Ryan, 2003, p. 831) and enables a non-judgemental recognition of differences between present and desired future conditions, which can enhance perseverance on difficult tasks (Evans et al., 2009, p. 381). Maintaining an impartial and unbiased perspective can help individuals avoid becoming consumed by negative thoughts and emotions (Frewen et al., 2008, p. 759), enabling them “to meet situational demands with adaptive responses instead of automatic, rote, and habitual reactions” (Lahey et al., 2007, p. 1699).

More specifically, mindfulness aids individuals in preventing their focus from wandering away from the task at hand to unrelated concerns (Flett et al., 2016, p. 171). As mentioned earlier, high levels of anxiety tend to fragment students’ concentration (Pappamihiel, 2002, p. 329). Therefore, mindfulness can be particularly crucial and advantageous in addressing this issue. In this sense, the ability to sustain awareness of the present moment while attentively engaging in L2 tasks helps students avoid being easily diverted by intervening thoughts that could disrupt their performance (Mrazek et al., 2013, p. 5).

Furthermore, mindfulness can deter students from developing unrealistic self-perceptions of inadequacy and foster learning by reducing anxiety, enhancing focus, and raising awareness of their true competence (Liu, 2016; Charoensukmongkol, 2019; Ersanli & Ünal, 2022). Mindfulness has indeed been suggested as a skill that reduces individuals’ inclination to indulge in habitual negative thoughts that trigger anxiety (Frewen et al., 2008; Langer, 2000). Because mindful individuals typically focus on the present moment, they are less prone to dwelling on past events or worrying about future possibilities (Leary & Tate, 2007, pp. 251-252). Particularly,

this aspect of mindfulness can shield students from being influenced by recurring reactions to previous negative experiences in L2.

When individuals are in a state of mindfulness, all negative thoughts and emotions are typically viewed as “passing phenomenological events that may momentarily capture attention but can then be let go of” (Frewen et al., 2008, p. 759). Consequently, although students may feel anxious during English lessons, those with more mindful mindsets can detach themselves from and readily release the negative emotions that disrupt their focus on tasks. The advantages of mindfulness, which promotes mental clarity and enables people to remain composed (Brown & Ryan, 2003, p. 823), can aid students in sustaining their focus on their tasks and effectively organizing their content while performing in English.

Engaging mindfully in an anxiety-inducing task, thus, entails focusing on moment-to-moment experiences while accepting negative emotions non-judgementally (Bishop et al., 2004, p. 234). This has the potential to help individuals resist the urge to procrastinate and maintain task persistence by alleviating the anxiety triggered by the unpleasant task.

2.4 Related Studies

After examining the literature, it was seen that the investigation of the relationship between academic procrastination, foreign language anxiety, and mindfulness together in a single study is yet to be achieved. However, there are studies focusing on their dual relationships or with other variables. Therefore, in this section, studies related to these concepts and their relationships are discussed both on a local and global scale.

2.4.1 Studies related to academic procrastination and FLA. Having examined studies on academic procrastination and anxiety, it was observed that most studies were conducted in the field of psychology, focusing on trait or state anxiety. Although quite scarce in number, there are also studies addressing academic procrastination in relation to foreign language anxiety.

2.4.1.1 Studies conducted abroad. In a qualitative study (Gregersen & Howitz, 2002), students were observed during a videotaped interview, and their reactions to their own oral performance were analyzed to identify instances of procrastination, perfectionism, and FL anxiety. The findings suggested that anxious learners were more likely to exhibit avoidance and procrastination in language performance due to the fear of negative evaluation, as well as concerns regarding errors. Non-anxious learners, on the other hand, rarely mentioned procrastination or avoidance of work.

In another study, Zasiakina and Zhuravlova (2019) aimed to investigate procrastination, language anxiety, and acculturative stress among 41 international students studying in Ukraine. The results indicated that together, acculturative stress and language anxiety could predict procrastination among learners. Fear of negative evaluation was also found to be a significant and independent predictor of procrastination. Gender differences were not observed in procrastination or anxiety.

A study (Zhang & Zhang, 2022) involving 55 Chinese EFL learners investigated the relationship between academic procrastination, L2 writing anxiety, and writing performance. Descriptive analyses revealed that learners' academic procrastination and L2 writing anxiety were at a moderate level. It was also found that procrastination directly impacted L2 writing performance through L2 writing anxiety. Specifically, procrastination was found to have a significant positive effect on all three dimensions of L2 writing anxiety – somatic anxiety, cognitive anxiety, and avoidance behavior.

2.4.1.2 Studies conducted in Turkey. In the Turkish context, it has been noted that there are very few studies examining the relationship between academic procrastination and anxiety, and only three studies have been found to specifically focus on these concepts in an EFL setting.

Erdoğan (2016) examined the relationship between academic procrastination and anxiety levels in a sample of 276 students attending preparatory classes in a Turkish university. The results indicated a significant positive relationship between anxiety and procrastination. It was also found that male students demonstrated higher procrastination levels than females. However, no significant difference was found in anxiety regarding gender.

Another study (Akpur, 2017) explored the relationship between procrastination, motivation, anxiety, and academic achievement of 211 preparatory school students in Turkey. The findings revealed a significant and positive correlation between FLA and procrastination. However, language anxiety was not found to be a significant predictor of language achievement.

In their study, Yurtseven and Akpur (2018) aimed to assess the predictive role of perfectionism, anxiety, and procrastination in academic performance along with the connections among these variables in a sample of 522 EFL learners. The results showed a notably significant and positive correlation between anxiety and procrastination. The interview results highlighted that the common factors contributing to increased anxiety as fear of making mistakes, low self-esteem, perceived incompetence, peer criticism, and teacher demeanor. Common causes of procrastination included personal attitudes, anxiety, low motivation, obligations, and task complexity.

2.4.2 Studies related to FLA and mindfulness. As previously stated, research concerning mindfulness and foreign language anxiety is also limited. However, there are some global and local studies providing insights into their relationship.

2.4.2.1 Studies conducted abroad. For instance, Fallah (2017) examined the association between mindfulness, self-efficacy, and FLA among 295 Iranian students. The findings indicated a significant negative correlation between mindfulness and FLA. Learners who exhibited higher levels of mindfulness tended to experience lower levels of anxiety and demonstrated greater coping self-efficacy. The study concluded that mindfulness enabled learners to concentrate more effectively on language tasks and performance, as well as on their present circumstances, rather than being distracted by or engaging in mindless task-switching.

The study of Charoensukmongkol (2019) aimed to examine whether the level of mindfulness demonstrated by 333 Thai students influenced the anxiety they experienced in EFL public speaking classes and whether this influence correlated with their performance in giving English presentations. Results indicated that students reporting higher levels of mindfulness tended to experience lower levels of anxiety

during their presentations. Additionally, students with lower anxiety levels tended to achieve higher scores compared to those with higher anxiety.

Morgan and Katz (2021) conducted a study to explore the potential increase in mindfulness scores and reduction of FLA through a mindfulness intervention along with the perspectives of language learners regarding mindfulness meditation as a means to mitigate FLA. Before the intervention, there was a negative correlation between mindfulness and FLA scores in both control and experimental groups. Following the 13-week intervention, the findings were mixed; however, students in the experimental group reported gaining new methods and strategies to manage their anxiety.

The study conducted by Geng (2021) aimed to determine the levels of mindfulness, FLA, and achievement motivation among 300 Chinese university students learning English, as well as the relationship between these variables. According to the findings, there was a significant negative correlation between mindfulness and FLA, and a significant positive correlation between mindfulness and achievement motivation.

The objective of another study (Fibriasari & Tambunan, 2022) was to assess how strategy-based instructions and mindfulness influenced FLA and foreign language engagement among students learning French in Indonesia. Using a longitudinal approach over a period of nine months, the findings indicated that strategy-based instructions and mindfulness are positively correlated with both FLA and FL enjoyment. It was also observed that intercultural competence decreased FLA, and enhanced enjoyment among the sample.

Shen (2022) aimed to investigate how resilience and mindfulness could help alleviate anxiety among 501 Chinese EFL learners. The findings revealed that students had moderate levels of FLA. It was also found that mindfulness and resilience have positive effects as coping mechanisms for anxiety in language classrooms.

Thomas's (2022) study sought to investigate the effectiveness of employing a mindfulness meditation strategy to reduce L2 writing anxiety in a group of 15 students at California State University, U.S. The researcher used 5 minutes of guided meditation

mindfulness audio during two sessions. According to the results, the integration of mindful meditation before writing activities yielded significant benefits for participants. In their feedback, they mentioned that it helped them relax and achieve mental clarity, and this facilitated creativity and a greater flow of ideas.

In another study, Gao (2023) investigated the correlation among mindfulness, anxiety, burnout, and self-perceived L2 proficiency within a group of 492 Chinese EFL learners. It was found that students exhibited a moderate level of mindfulness and foreign language anxiety. The results also indicated that higher levels of mindfulness were linked to increased perceived foreign language competence and reduced anxiety. It was concluded that learners who were more mindful perceived themselves as more proficient and were less likely to suffer from anxiety.

Another study (Gordani & Sadeghzadeh, 2023) aimed to explore the connection between mindfulness, psychological capital, and FLA within a group of 504 Iranian university students. The findings revealed that mindfulness had a direct and notable impact on FLA. Moreover, self-efficacy and resilience, as two elements of psychological capital, were found to mediate the relationship between mindfulness and FLA.

2.4.2.2 Studies conducted in Turkey. The following studies, which focus on the relationship between foreign language anxiety and mindfulness, are conducted with EFL students within the context of Turkey.

Önem (2015) aimed to investigate the potential effectiveness of meditation in reducing anxiety and enhancing vocabulary acquisition in an EFL context. 61 college students were divided into control and experimental groups to study a set of English words for two weeks. The experimental group studied meditation techniques and lavender scent for four weeks. The results of the post-test revealed a statistically significant disparity in anxiety levels and vocabulary acquisition between the two groups, indicating that meditation had a notable impact.

In Öz's (2017) study, a 6-week mindfulness meditation-based clinical intervention program (MMCI) was examined in terms of its impact on university students' speaking anxiety, willingness to communicate, mindfulness, and speaking

performance. The findings revealed that the MMCI program had a positive effect on reducing anxiety and increasing willingness to communicate. Students in the experimental group achieved higher scores on midterm exams as well.

Koçali (2020) conducted a study examining the correlation between mindfulness and FLA with 157 university students. The research revealed that participants had a moderate level of FLA and mindfulness. Females had higher anxiety levels; however, mindfulness levels did not change according to gender. No significant relationship was found between FLA and proficiency level. Additionally, correlational analysis showed that mindfulness and FLA were negatively correlated at a significant level. Finally, participants stated that they experienced anxiety, particularly during language tests and speaking tasks conducted in the classroom.

Another study (Tasan, Mede & Sadeghi, 2021) examined how pranayamic breathing (PB) as a mindfulness practice could alleviate FLA and test anxiety (TA) among Turkish university students. The results showed that the application of the PB mindfulness technique significantly reduced FLA and TA, and notably enhanced participants' listening and reading comprehension skills. Both students and their instructors perceived the practice as beneficial and practical in easing anxious feelings, improving the classroom atmosphere, and regulating daily habits.

The main objective of Ersanli and Ünal (2022) was to examine how mindfulness training impacts speaking anxiety, willingness to communicate in L2, as well as mindfulness-awareness among 41 university students. The mixed-methods results indicated that mindfulness training positively influenced participants' willingness to speak, reduced their anxiety, and increased their mindfulness in the experimental group. Participants mentioned that they were more confident, motivated, and concentrated and that they were able to regulate their emotions effectively after the intervention.

2.4.3 Studies related to mindfulness and academic procrastination.

Regarding the correlation between mindfulness and academic procrastination among university students, there were some studies conducted overseas; however, only one study in Turkey focusing on this relationship was found. It is important to note that,

these studies were conducted across different disciplines and departments, and not specifically in an EFL context.

2.4.3.1 Studies conducted abroad. Flett, Haghbin, and Pychyl (2016) explored the connections between procrastination, ruminative brooding, mindfulness, and self-compassion among 214 college students in Canada. Academic procrastination was assessed in terms of the frequency of procrastination-related automatic thoughts. Correlational analyses revealed that procrastination was linked to ruminative brooding, decreased mindfulness, and reduced self-compassion.

In another study (Cheung & Ng, 2019), 339 Chinese students took part across four time points, each six months apart. Results from a cross-lagged panel model indicated a negative relationship between mindfulness and procrastination over the course of the study. It was concluded that nurturing mindfulness could diminish procrastination, and conversely, reducing procrastination tendencies may also encourage mindful behaviors.

The objective of Motie et al. (2019) was to examine the cognitive-emotional model of academic procrastination, focusing on the influence of mindfulness and the mediating effect of self-efficacy, exam anxiety, self-esteem, and perfectionism in an experimental research with 36 Iranian college students. The findings validated the research model which suggested that increasing self-esteem and self-efficacy and reducing test anxiety and perfectionism would result in decreased academic procrastination levels. It also revealed a significant negative relationship between academic procrastination and mindfulness.

The study of Eltayeb (2021) was conducted with 206 Saudi Arabian students to explore the levels of mindfulness and their relation to procrastination. Findings showed that students exhibited a high level of both mindfulness and academic procrastination. A statistically significant and negative correlation was also observed between mindfulness and procrastination. Moreover, notable variations in mindfulness were identified across different study levels.

Another study (Serrano, Williams, Ezzeddine & Sapon, 2022) investigated the impact of social media usage on academic procrastination and performance among 233

participants studying in the U.S., and the extent to which students' mindfulness acts as a mediator. According to the results, there was a statistically significant correlation between procrastination and mindfulness. Furthermore, it was found that students with higher grades had higher levels of mindfulness and lower levels of procrastination.

Li, Su, Zhao, J. Wang, and G. Wang (2023) examined the connections among academic procrastination, mindfulness, and future time perspective in 343 nursing students in China. Those who reported higher levels of procrastination also tended to have lower mindfulness and future time orientation. Mindfulness was found to mediate the relationship between future time perspective and procrastination.

The study of Rad et al. (2023) explored the effectiveness of mindfulness training in reducing procrastination among 36 Iranian students with an intervention consisting of eight 90-minute weekly sessions for the training group. The results indicated significant effects, with the mindfulness training group demonstrating higher scores on self-regulation and mindfulness scales. Additionally, this group exhibited reduced procrastination behaviors and lower scores on negative emotions and perceived negative consequences. The study concluded that mindfulness training could be an effective approach to enhance self-regulation and decrease procrastination in students.

2.4.3.2 Studies conducted in Turkey. At the time this research was conducted, there was only one study found to be focusing on academic procrastination and mindfulness within a Turkish context.

Özgür (2024) aimed to investigate the relationship between academic procrastination and cognitive-emotional mindfulness levels of 622 university students. The results revealed that while gender had no effect on procrastination, females were observed to have higher mindfulness levels than males did. There was also a moderate and negative correlation between procrastination and mindfulness.

2.4.4 Studies related to academic procrastination, FLA, and mindfulness.

To the best of the researcher's knowledge, no studies so far have focused on academic procrastination, anxiety, and mindfulness together in an EFL context. However, there are studies focusing on the interrelation of these concepts in other fields, with different types of anxiety, although they are still rather limited in number for the time being.

2.4.4.1 Studies conducted abroad. In their study, Sirois and Tosti (2012) explored the role of mindfulness in understanding why procrastinators experience high anxiety levels and poor health. According to the results of a survey, conducted with 339 students, procrastination was linked to lower levels of mindfulness, higher general anxiety, and poorer perceived health. Moreover, it was found that mindfulness partially mediated the effects of procrastination on anxiety.

Another study (Einabad, F. J. Roshan, R. Roshan & Ghasemzadeh, 2019) sought to explain whether mindfulness and acceptance played a role in predicting academic procrastination beyond and over trait anxiety. The findings revealed a significant correlation between anxiety and procrastination. However, acceptance and mindfulness did not add to the prediction of procrastination beyond the influence of anxiety. It was concluded that a lack of mindfulness might contribute to anxiety, which in turn could result in task avoidance.

Gautam, Polizzi, and Mattson (2019) examined the interconnections among procrastination, state-trait anxiety, and five facets of mindfulness (non-reactivity, non-judgment, observing, describing, and acting with awareness). The findings suggested that anxiety mediated the relationship between procrastination and all mindfulness facets except observing. Specifically, acting with awareness showed the strongest association with decreased procrastination. It was concluded that mindfulness might reduce procrastination by alleviating anxiety.

Saadipour, Soltanizadeh & Ghavam (2020) aimed to examine the impact of mindfulness training on academic procrastination in students with high and low levels of test anxiety. The experimental group underwent eight sessions of mindfulness intervention. Results indicated that mindfulness training was effective on those with high anxiety while showing no significant effect on those with low anxiety.

Additionally, there was a notable discrepancy in the effectiveness of mindfulness training on academic procrastination between students with high and low anxiety.

A more recent study (Salehi, Yousefi & Moradi, 2022) compared Well's metacognition training and Kabat-Zinn's mindfulness training in terms of their effect on academic procrastination with students experiencing math anxiety. The results revealed that both types of training were effective in reducing the academic procrastination of anxious students. However, Kabat-Zinn's mindfulness therapy was more effective in reducing procrastination and its related factors.

2.4.4.2 Studies conducted in Turkey. Although the majority of these research studies were conducted overseas, there were also two studies on academic procrastination, FLA, and mindfulness that were conducted in Turkey.

Şenlik (2020) conducted a study in Turkey examining the correlation between academic procrastination, depression, anxiety, stress, mindfulness, and various sociodemographic factors. It was found that male students had a higher inclination toward academic procrastination. There was also a statistically significant negative correlation between students' GPAs and their levels of procrastination. Furthermore, it was observed that as academic procrastination levels increased, so did anxiety levels. The results also revealed a significant negative correlation between mindfulness and procrastination. Depression, mindfulness, and overall GPA collectively explained 23% of the variance in academic procrastination.

Tarman and Sari's (2021) study explored the connection between social anxiety and procrastination while considering the mediating influence of mindfulness. A sample of 242 Turkish university students completed surveys and delivered a public speech to elicit social anxiety. The findings indicated a positive correlation between social anxiety and procrastination, with mindfulness serving as a partial mediator. It was concluded that in situations that induce anxiety, such as public speaking, students with higher levels of mindfulness may exhibit reduced tendencies toward procrastination.

Chapter 3

Methodology

The purpose of the present study is to investigate the relationship between academic procrastination, foreign language anxiety, and mindfulness levels of Turkish EFL learners who study in the preparatory program at a foundation university in Istanbul, Turkey. Therefore, in order to gain more insight into the relationship between these variables, the following research questions were formulated:

- 1) What are the levels of academic procrastination, foreign language anxiety, and mindfulness among Turkish EFL students?
- 2) Do academic procrastination, foreign language anxiety, and mindfulness scores differ according to gender and language proficiency?
- 3) Is there a significant relationship between academic procrastination, foreign language anxiety, and mindfulness levels of learners?
- 4) What are learners' opinions about academic procrastination and foreign language anxiety in terms of
 - a) common tasks and situations of their experience, and
 - b) reasons for their occurrence?

This chapter gives details of the methodology by presenting the research design, the setting and participants, the data collection tools, and procedures as well as the data analysis procedures. Finally, the chapter finishes with a discussion of the utilized instruments' validity and reliability along with the limitations of the study.

3.1 Research Paradigm and Design

A research paradigm is defined as “a set of beliefs, values, and assumptions that a community of researchers has in common regarding the nature and conduct of research” (Johnson & Onwuegbuzie, 2004, p. 24). In other words, it is the selection of principles that determine the purpose, interest, and expectations for the application of the research. Johnson and Onwuegbuzie (2004) contended there were three primary

research paradigms: qualitative research, quantitative research, and mixed methods research (p. 14).

Quantitative research, which has been predominant in education research until the late 20th century, is grounded in positivism (Ary, Jacobs, & Sorensen, 2010, p. 23). Positivism asserts that true knowledge can be obtained through scientific methods, such as hypothesis testing and the collection of objective data, to produce systematic and generalizable findings. This type of research draws statistically significant conclusions about a population by analyzing a representative sample (p. 23). In quantitative research, data is collected in a form that can be quantified, enabling its use in statistical analysis (Creswell, 2012, p. 535). It uses a deductive approach to search for regularities in the population and describe the degree or relationships by using numeric data (Creswell, 2012, p. 128).

Qualitative research, gaining popularity since the mid-1970s, has constructivist underpinnings (Johnson & Onwuegbuzie, 2004, p. 14). It aids the researcher in forming an understanding of individuals' behaviors, opinions, and perceptions of the world around them (Ary, Jacobs, & Sorensen, 2010, pp. 23-29). Since reality is considered to be based on subjective perceptions, events, and experiences hold different meanings for people (p. 23). Thus, researchers adopting a qualitative approach aim to investigate and display the participants' subjective reality. While quantitative data provide valuable information to understand trends in a large population, qualitative data offer different perspectives on the research subject (Creswell, 2012, p. 535). Qualitative research conversely adopts an inductive approach in which the researcher generates meaning from the data obtained within the context (p. 128). In other words, qualitative studies make meaning from the data rather than proving a hypothesis.

Both the qualitative and quantitative approaches have some biases and weaknesses and thus, combining the two paradigms into one research design is one way to minimize the drawbacks of these approaches (Ary et al., 2010, p. 559). This type of research is called mixed methods research, which has gained acceptance as a third methodological movement in the last few decades. Mixed methods can be defined as "research in which the investigator collects and analyzes data, integrates the findings,

and draws inferences using both qualitative and quantitative approaches in a single study or program of inquiry” (Tashakkori & Creswell, 2007, p. 4). In other words, mixed methods research enables researchers to make use of various approaches or methods so that they can seek answers to their research questions instead of limiting themselves to a single approach. The mixed methods approach favors a pragmatic approach which focuses on “what works” to answer the research questions (Ary et al., 2010, p. 559). It can address complex problems that researchers face and help gain a deeper perspective into the problem which cannot be achieved through purely quantitative or qualitative approaches alone (Creswell, 2012, p. 22).

Johnson and Onwuegbuzie (2004) note that by adopting mixed methods research in a study, a researcher may take advantage of both qualitative and quantitative paradigms’ strengths. As a qualitative study might have some aspects that cannot be measured statistically, or a quantitative study may fail to capture perceptions, opinions, and beliefs by numbers and statistics, the mixed methods approach may provide both. Besides, quantified, statistical data can be enriched with personal experiences or narratives collected through qualitative methods (pp. 19-21). Moreover, a wider range of research questions and larger data may be investigated, giving a better explanation of the results, painting a wider picture of a phenomenon, and thus, providing greater validity (Johnson & Onwuegbuzie, 2004; Creswell, 2012). Furthermore, the possibility of generalizing the research findings to other similar research contexts increases, which ensures the reliability of data (Johnson & Onwuegbuzie, 2004, p. 21). Ivankova and Greer (2015) also mentioned the advantages of using mixed methods research design in the field of applied linguistics as providing a multidimensional view of the language learning processes by delving into social, cultural, and political factors that may hold an influence on them (p. 63). Due to the aforementioned reasons, a mixed type method was adopted as a research design in this study in order to investigate the levels of academic procrastination, FLA, and mindfulness among Turkish EFL learners, how these differ according to students’ gender and proficiency, and the interrelationship between these variables.

There are six mixed methods research design approaches that have started to become more popular: the convergent parallel design, the explanatory sequential design, the exploratory sequential design, the embedded design, the transformative

design, and the multiphase design (Creswell, 2012, p. 540). These approaches differ in the sequence, priority, and process by which the data collection and analysis are executed.

Specifically, this research employed the explanatory sequential design among these mixed methods approaches. The explanatory sequential mixed methods contain two parts: the quantitative and the qualitative (Creswell, 2012, p. 542). The first phase of collecting quantitative data is followed by a qualitative data collection phase. The logic behind this method is that the quantitative data results enable the researcher to see the general picture of the phenomenon, and the qualitative data assist in expanding and interpreting the initial findings through qualitative data (p. 542). In other words, by delving deeper into participants' perspectives, the qualitative data and analysis clarify and explain the statistical findings. As Ivankova and Greer (2015) stated, explanatory sequential design is popular in educational research as it is easy to design, simple to implement, and can be conducted by a sole investigator (p. 71).

In this study's first quantitative phase, data was obtained through the Aitken Procrastination Inventory (API), Foreign Language Classroom Anxiety Scale (FLCAS), and Mindful Attention and Awareness Scale (MAAS). Specifically, research questions one, two, and three were analyzed with a quantitative approach.

Then, this first phase was complemented by the second, qualitative phase. The qualitative data was collected through semi-structured focus group interviews with information-rich participants in order to gain deeper insights into the learners' procrastination habits and FLA experiences. Specifically, research question four was investigated by utilizing qualitative methods with purposive sampling generated through quantitative analysis.

Afterward, data from both phases were analyzed separately within their configuration to improve the quality of research by constructing a well-established conception of the terms and their relationships with each other (Creswell, 2012, p. 552). To contribute to the understanding of these relationships, qualitative data was used to elaborate and explain the quantitative results in-depth by discovering the participant's point of view. Figure 3 demonstrates the research design used in this study.

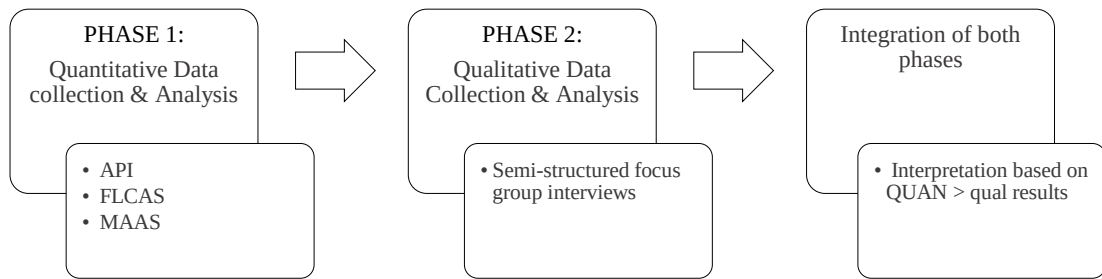


Figure 6. Visual representation of the explanatory sequential mixed methods research design of the study

To sum up, this study employed the mixed methods research paradigm, which allows researchers to give a more complete picture and establish a better understanding of the central phenomena. An explanatory sequential mixed methods design was used to gather and interpret the quantitative data from the three-scale questionnaire and qualitative data from the semi-structured focus group interviews.

3.2 Setting and Participants

The present study was conducted in the English preparatory school of a foundation (non-profit, private) university in Istanbul, Turkey. English is not an official language in Turkey. Therefore, at this foundation university, where the teaching medium is English, there is an English preparatory program that aims at providing students with the necessary language skills before starting to attend their departments. In the current study, the target population was the Turkish students who were studying English at the preparatory program of the aforesaid university.

At the beginning of each academic year, students who are accepted into English-medium departments are required to take an English proficiency exam, which is administered by the preparatory school. The passing grade, which differs according to the department, ranges between 60 and 80. Those who succeed in getting a passing grade are sent to their departments. However, those who fail to reach the criterion score in the exam are required to study at the English preparatory school for at least one semester. They are placed in a class at the appropriate level based on their scores in the English placement exam given during the registration period. The proficiency of the students is assessed according to the Common European Framework of Reference (CEFR), and ranges between A1 and B2. At the end of each semester, preparatory

school students are required to take the English proficiency exam again to determine their eligibility. Those who cannot achieve a passing grade for their level or the proficiency exam must continue their studies in the English preparatory program.

The preparatory school program of the university aims to increase students' competency in all four language skills as well as the necessary academic skills, such as note-taking and giving presentations. It incorporates a modular system involving 5 eight-week modules in an academic year. Students follow a hybrid schedule, attending 14 hours of face-to-face lessons three times a week, and 8 hours of online lessons on the other two weekdays. Speaking and writing skills, which are emphasized in the curriculum, are promoted through a separate course called Academic Skills for 8 hours a week. All the teachers in each level follow the same syllabus with the same weekly program by using the same materials that are prepared by the faculty members.

Concerning the assessment system of the school, there are different academic tasks that students are responsible for completing in order to pass on to the next level and eventually be eligible to retake the proficiency exam. The end-of-module exam, which includes the examination of four language skills in addition to grammar and vocabulary, has the biggest share with 40-45 percent. The students also collect points through speaking and writing assignments, online daily tasks, and in-class participation. Although the content of tasks differs according to the level, all students receive a final grade from the sum of the assessment tools shown in Table 1. The school offers 4 levels (A1, A2, B1, B2) and a Proficiency Exam Preparation Course (PREP-C). Students must successfully complete each level before advancing to the next one.

Table 1

Assessment Tools Used in the English Preparatory School

A LEVELS		B LEVELS	
Online daily tasks	5%	Online daily tasks	5%
In-class participation	5%	In-class participation	5%
Process Writing	5%	Process Writing	5%
Collaborative Tasks (x2)	10%	Timed Writing	10%
Weekly Tests (x4)	15%	Weekly Tests (x3)	10%
Speaking Task	15%	Collaborative Tasks (x2)	10%
End-of-Module Exam	45%	Speaking Task	15%
		End-of-Module Exam	40%

The sample of this study was recruited during the last two weeks of the first module in the 2023-2024 academic year, at a point when students had some experience with all types of tasks mentioned above. The reason for choosing this particular setting for sampling was that these students underwent a faster-paced, more intense language learning program, which might potentially cause higher levels of FLA as well as increase the tendency to procrastinate. The demographic characteristics of the study sample according to gender and proficiency levels are shown in Table 2 in detail.

Table 2

Demographic Information Table

Demographic Information		M	Min	Max
Age		19.7	17	48
Demographic Information		N		%
Gender	Male	369		45.7
	Female	438		54.3
Level	A1	151		18.7
	A2	268		33.2
	B1	215		26.6
	B2	173		21.4
	Total	807		100

As shown in Table 2, the sample was comprised of 807 students of four proficiency levels, being A1 – elementary ($n = 151$), A2 – pre-intermediate ($n = 268$), B1 – intermediate ($n = 215$), and B2 – upper intermediate ($n = 173$). The proficiency levels of students were determined through the placement and proficiency exams given at the start of the academic year. Overall, the participants' ages ranged from 17 to 48 ($M = 19.7$). There were 369 males (45.7%) and 438 females (54.3%). All of the participants were from Turkey and were native Turkish speakers. Although the school has a student body of diverse ethnic backgrounds and nationalities, the sample was chosen from the Turkish population to minimize the possible effects of socio-cultural factors on the variables, especially FLA.

3.3 Procedures

This section gives a detailed description of the data collection instruments, the data collection procedures, and finally, the data analysis procedures of the study.

3.3.1 Data collection instruments. In the present study, multiple data collection tools were used. To gather quantitative data, the researcher used three validated scales: the Aitken Procrastination Inventory, the Foreign Language Classroom Anxiety Scale, and the Mindful Attention and Awareness Scale. A personal information form was also used to collect data on demographic variables such as age, gender, level, and class number. On the other hand, the qualitative data was obtained through semi-structured focus group interviews. This part provides detailed information on each data collection instrument that was used to answer each research question as presented in Table 3 as well as the methods used in their analyses.

Table 3

An Overview of Research Questions and Procedures

Research Questions	Data Collection Instruments	Data Analyses
What are the levels of academic procrastination, FLA, and mindfulness among Turkish EFL students?	Aitken Procrastination Inventory (API) Foreign Language Classroom Anxiety Scale (FLCAS) Mindful Attention and Awareness Scale (MAAS)	Descriptive Statistics
Do academic procrastination, FLA, and mindfulness scores differ according to gender and proficiency level?	Personal Information Form API FLCAS MAAS	Descriptive & Inferential Statistics
Is there a significant relationship between academic procrastination, FLA, and mindfulness levels of learners?	API FLCAS MAAS	Inferential Statistics
What are learners' opinions about academic procrastination and FLA in terms of a) common tasks and situations of their experience, b) reasons for their occurrence?	Semi-Structured Focus Group Interviews	Thematic Analysis

3.3.1.1 Aitken Procrastination Inventory (API). Developed by Aitken (1982), this scale aims to reveal tendencies toward academic procrastination. It consists of a single dimension and a total of 19 items. Individuals are asked to rate and mark themselves on a Likert scale of 1 to 5 for each item (1 = ‘*completely false*’, 5 = ‘*completely true*’). The internal consistency coefficient of the original version of the scale was .82.

This study used the Turkish version of API adapted by Balkis (2006) (Appendix C). For the reliability assessment of the Turkish version, the scale was translated from English to Turkish and then back, from Turkish to English. These translations were compared, and a consensus was reached with a common form. In the structural validity examination conducted as part of Balkis's (2006) adaptation study, the scale demonstrated a structure that was consolidated into a single dimension with 16 items. Additionally, the reliability analysis revealed that Cronbach's Alpha for the scale was 0.84.

In the current study, one item stated as “*I’m careful to return library books on time*” was excluded. After several discussions with different field experts and colleagues, it was found to be irrelevant and outdated in the context of this specific preparatory school since its students are not required to use library books, nor do they often choose to because of the convenient digital technologies in their reach. Thus, to avoid the possible misinterpretations of the item outside the school context, the item was removed and the final form of the scale used in this study was comprised of 15 items. Items numbered 3, 8, 9, 11, 12, 13, 14, and 15 are reverse-scored since they contain negative statements. To evaluate the scale scores, the points from each item are summed to obtain a general procrastination tendency score. The possible score range of the scale is between 15 and 75, with higher scores indicating a higher general tendency to procrastinate. As a result of the reliability analysis, Cronbach's Alpha for the scale in the current study was determined to be 0.87.

3.3.1.2 Foreign Language Classroom Anxiety (FLCAS). FLCAS is a self-report, developed by Horwitz et al. (1986), that aims to determine respondents' degree of anxiety while learning a foreign language. It is a 5-point Likert scale which contains 33 items. Participants are required to select an option among strongly agree (5), agree (4), neutral (3), disagree (2) and strongly disagree (1). The points from each item are added together to get a general FLA score. Nine items (items no. 2, 5, 8, 11, 14, 18, 22, 28, and 32) are reverse scored, and the possible score range is between 33 and 165, with higher scores indicating a higher general tendency to procrastinate. As the internal consistency coefficient of FCLAS was originally measured by Cronbach's alpha coefficient of .93 and test-retest reliability was .83, it is a widely acknowledged and frequently used FLA questionnaire.

In order to avoid any potential confusion or misunderstanding due to linguistic barriers on the part of students, the Turkish version was used in this study (Appendix D). FLCAS was adapted into Turkish by Aydın, Harputlu, Güzel, and Çelik (2016) who found the internal consistency to be .91, and the test-retest coefficient .85. In this study, the Cronbach's Alpha coefficient for the scale was determined to be .92.

3.3.1.3 Mindful Attention and Awareness Scale (MAAS). Developed in 2003 by Brown and Ryan, MAAS is a self-report questionnaire containing 15 items to measure the extent to which an individual tends to be aware of their present-moment experiences, as well as their tendency to be attentive and mindful in daily life. Respondents are asked to rate each item on a 6-point Likert scale (1 = 'almost always', 6 = 'almost never'). To evaluate the scale scores, the points from each item are summed to obtain a general mindfulness score. The possible score range is between 15 and 75, and a higher score represents a higher level of mindfulness. This scale is preferred in research because it is sufficiently short and suitable for every population compared to other scales for measuring mindfulness levels. Another difference between it and other scales is that it includes statements appropriate for populations unfamiliar with mindfulness practices like meditation. In this study, this scale was chosen because the students were not expected to engage in any mindfulness practices, and the aim was to measure their existing level of mindfulness.

Being a common mindfulness scale in educational research, MAAS has demonstrated strong convergent and divergent validity. The internal consistency of the original scale (Brown & Ryan, 2003) was .82. In order to measure the level of mindfulness in the present study, the Turkish adaptation of MAAS was utilized (Appendix E). The translated version of the MAAS was developed by Özyeşil, Arslan, Kesici & Denz (2011). The Turkish scale's internal consistency coefficient was .80. In this study, the coefficient alpha was found to be .89.

3.3.1.4 Semi-structured focus group interviews. To constitute the qualitative data in the study, semi-structured focus group interviews were carried out. Interviews are the most preferred qualitative data collection instruments as they give an opportunity for interviewees to talk about their experiences, beliefs, motivations, and perceptions of the world they live in and to explain how they interpret the situations from their perspectives, which enables researchers to gather detailed information about the phenomenon under investigation (Creswell, 2012; Ary et al., 2010).

The structured interviews are performed through pre-set questions, which follow a specific order (Ary et al., 2010, p. 383). However, in the present study, semi-structured interviews were preferred since they have a more flexible implementation process compared to structured interviews. During these interviews, the interviewer was allowed to ask further questions depending on the interviewees' responses, which not only provided the researcher with a structure to the interview but also allowed participants to freely express their opinions (Kvale, 1996, as cited in Creswell, 2012, p. 46).

Focus groups are organized with people who share certain qualities to discuss a particular problem or an issue (Ary et al., 2010, p. 381). In the present study, the researcher had focus group sessions with 5 students at a time, each session targeting a specific proficiency level. Altogether four focus group interviews consisting of 20 students in total were conducted. These interviews were also carried out in Turkish to avoid any misunderstandings and to help participants express themselves better. The interaction during the focus group interviews in this study was mostly among the participants, but the researcher acted as a moderator, who regulated or guided the discussion whenever it was necessary. Focus group interviews are not held to collect

data from each group member simultaneously; instead, they are carried out to gather the data through group interaction, which might be relevant to the research topic (p. 381). In the current study, working with a focus group helped the researcher acquire more qualitative data in a shorter period of time, and it helped better clarify and evaluate individual opinions through the support of other members (Creswell, 2012, p. 218).

The semi-structured, open-ended questions in the present study's focus group interviews were developed with reference to the research purpose and literature, and aimed to elicit students' experiences with academic procrastination and FLA. There were 6 interview questions in total prepared by the researcher so that the research question was discussed within the framework of reasons and common occurrences. Before being presented to the students, the interview questions were checked and revised by three other field experts and piloted with three students who did not take part in the study. Each focus group was asked the following questions:

- 1) Among the tasks and assignments you are responsible for, which ones do you feel like not doing or tend to postpone the most?
- 2) What do you think are the reasons that lead you to procrastinate on such tasks and assignments?
- 3) When you think about the English lesson activities, assignments, and exams, which ones cause you more anxiety compared to others?
- 4) What do you think are the reasons for feeling anxious in these situations?

3.3.2 Data collection procedures. For the purposes of this study, the explanatory sequential mixed-method research design was adopted. Thus, both quantitative and qualitative data were collected, analyzed, and interpreted during the 2023-2024 academic year. The required approvals were obtained from the university's ethical committee and the school of foreign languages. The researcher initially contacted the preparatory program's coordinators to plan and execute the data collection process. In the following sections, quantitative and qualitative data collection procedures are presented separately.

3.3.2.1 Quantitative data procedures (Phase 1). The quantitative phase of the study aimed to find out (1) the levels of academic procrastination, FLA, and mindfulness of students, (2) whether there was any difference between these levels according to gender and proficiency, and (3) whether there was a significant relationship between the three variables.

To collect quantitative data, a convenience sampling method was employed to select a sample from the available population. This technique is commonly utilized in quantitative research and can be generally defined as "drawing samples that are both easily accessible and willing to participate in a study" (Teddlie & Yu, 2007, p. 78). It is relatively uncommon for researchers to involve the entire population in their studies. Therefore, choosing participants who are easy to reach is a more practical approach. Accordingly, convenience sampling was used in this study because the researcher was working at the preparatory school where the participants were drawn from.

While gathering data for the quantitative phase, the prior-mentioned instruments (API, FLCAS, and MAAS) along with a personal information form were put together on Google Forms to create an online survey for the easy access and navigation of students. Online surveys offer researchers several benefits, including the ability to reach a large number of participants, thereby collecting substantial data easily and quickly without any cost (Ary et al., 2010, p. 385). Another benefit of web-based surveys is the decreased risks of errors in data entry because the participants are given specific options to choose from, and the economical process of its preparation and execution.

The current survey began with an informed consent form, which explained the aims and content of the study, and informed students about what was expected of them as well as their rights of withdrawal, anonymity, and confidentiality. All of the instructions and items in the survey were in Turkish in order to avoid any possible misunderstandings or ambiguity while gathering the data from the learners.

The online survey, which was first proofread and checked by three other colleagues at the university, was then piloted to determine if they were appropriate to the specific context of the study and to experience the use of the instruments during

the process. Four pilot classroom observations were conducted with 34 students from the PREP-C level, which was excluded from the actual study.

After finalizing the web-based survey according to the feedback from the piloting stage, the survey link was shared in a WhatsApp group that was used to contact the school's teachers. The instructors were kindly requested to share the link with their students during their face-to-face class hours in order to increase the participation rate. The questionnaire was administered during the first module of the 2023-2024 academic year, and over the period of a week since each level had a different face-to-face schedule. The time to complete the survey took around 15 minutes for students.

3.3.2.2 Qualitative data procedures (Phase 2). The objective of the qualitative phase was to answer the fourth research question, which aimed at having a deeper understanding of students' perceptions of and experiences with procrastination and FLA. Qualitative data were gathered through semi-structured focus group interviews with 20 students.

Purposive sampling was used to select participants who could form a representative sample of students with higher levels of procrastination and FLA, and provide detailed insight about the subject matter to elucidate the survey results. Purposive sampling is used in qualitative research to identify the information-rich participants in order to help the researcher explore the research problem better (Teddlie & Yu, 2007, p. 77). In order to achieve this, after analyzing the quantitative data, students were purposefully chosen from the classes that had the highest procrastination and FLA scores in the first phase. For the sampling of the level groups, the guidance of the instructors of these classes was requested. The instructors informed their students about the interviews and took notes of the voluntary students' names and email addresses to share with the researcher. The researcher then reached out to the volunteering students to set an interview date and time.

In this phase, four group sessions were held with 20 students in total, with each group comprised of 5 students representing a specific proficiency level. The focus group interviews were conducted in the last week of the first module during the 2023-2024 academic year, following the quantitative phase. The meetings were administered on different days, after lessons, for each group of participants.

Before starting the interview, the participants were informed about the purpose, content, and duration of the interview and asked for their consent to be audio recorded. The students were also informed that participation was on a voluntary basis and their names would remain anonymous just like the quantitative part of the study. The interviews were conducted in a friendly atmosphere as a discussion event only with the researcher's presence. The researcher took the moderator role during the interviews and facilitated the discussions by using structured and follow-up questions. The students were directed to talk about specific instances of procrastination and FLA they experienced throughout the module. All interviews were conducted online on Microsoft Teams, each lasting 15-20 minutes. Each session was audio recorded to be later transcribed and analyzed.

3.3.3 Data analysis procedures. To reach the aims of the study, data were obtained from both quantitative and qualitative phases. The quantitative data collected from the online survey were analyzed through Statistical Package for the Social Sciences (SPSS) 25, and the qualitative data gained from the focus group interviews were examined through thematic analysis. This section will present a detailed description of the data analysis procedures in the study.

3.3.3.1 Quantitative data analyses. Before starting the quantitative analysis, the collected data were initially screened and it was determined that there were no missing or duplicate data.

In order to determine the quantitative data analysis methods, the statistical analysis for normality and homogeneity of variance assumptions were applied. In this study, the normal distribution requirement was analyzed through skewness (symmetry) and kurtosis (pointiness) values. Since the normality tests are heavily affected by the sample size, for sample sizes greater than 300, it is advised to check the normality of distribution based on the histograms and the absolute values of skewness and kurtosis without considering z-values (Kim, 2013; Mayers, 2013). Either an absolute skewness or kurtosis value smaller than 2 may be used as a reference for determining substantial normality (Kim, 2013, p. 53). According to the results of these preliminary analyses, all the data were found to be normally distributed in order for further parametric tests

to be conducted. The following Table 4 presents the results of the skewness and kurtosis values.

Table 4

Statistical Analysis for Normality Assumption

Variable	Skewness		Kurtosis	
	Value	SE	Value	SE
API	.379	.086	.083	.172
FLCAS	.120	.086	-.408	.172
MAAS	-.437	.086	.089	.172

As can be seen in Table 4, the mean of API was normally distributed among the sample, with skewness of .379 and kurtosis of .083. Similarly, the absolute value of skewness (.120) and kurtosis (-.408) for FLCAS was within ± 2 , which concludes the scores to be normally distributed. Finally, results for MAAS show that data were normally distributed since skewness (-.437) and kurtosis (.089) individually were within ± 2 .

Furthermore, the homogeneity of variance requirement was checked through Levene's test in SPSS. In other words, it was examined whether the variances were the same throughout the data. The p-values for the means of the API, FLCAS, and MAAS by the proficiency level were .837, .848, and .120, respectively. As they were greater than .05, it was concluded that the homogeneity of variance assumption was met. Table 5 below presents the details of Levene's test results.

Table 5

Levene's Test of Homogeneity of Variances by Proficiency Level

Variable	Levene Statistic	df1	df2	Sig.
API	.587	3	803	.624
FLCAS	.904	3	803	.439
MAAS	.789	3	803	.500

After all variables were found to have a normal and homogeneous distribution of variances, parametric tests were processed and analyzed through SPSS 25. A significance level of $p < .05$ was used for statistical analysis.

The first research question, which was concerned with the EFL learners' levels of academic procrastination, FLA, and mindfulness, was answered by running descriptive statistics. The characteristics of the numerical data set were summarized through graphs and tables in which the mean, maximum, and minimum scores, and mean values with standard deviation were given to show the patterns.

The second research question involving any difference between procrastination, FLA, and mindfulness levels based on the participants' characteristics was examined by employing descriptive and inferential statistics. Gender and proficiency levels were included in the analysis as controlling variables. To identify gender differences, an independent samples t-test was used to compare the mean scores. Considering the demographic variable of proficiency, differences were determined by one-way analysis of variance (ANOVA). In order to conduct ANOVA, assumptions for normal distribution of the data, homogeneity of variance, and independence of samples were confirmed, as mentioned previously. If the difference was found to be significant as a result of ANOVA, one of the posthoc tests (the Tukey test), was applied to determine from which group or groups the difference originated.

Research question 3 was also answered through inferential statistics (Pearson correlation coefficient) to test whether there was any relationship between academic procrastination, FLA, and mindfulness levels of Turkish EFL students at university. The Pearson correlation coefficient test was conducted as the normal distribution of the data for all three scales was verified priorly.

3.3.3.2 Qualitative data analyses. There are many different techniques to analyze qualitative data, and some examples of well-established techniques are content analysis, thematic analysis, narrative analysis, discourse analysis, and grounded theory. In this study, thematic analysis was applied to analyze the qualitative data gained from semi-structured focus group interviews. Thematic analysis involves utilizing structured qualitative data to identify patterns and provide researcher-generated themes (Braun & Clarke, 2006, p. 87). It converts raw data to concepts and

meaningful units and clusters them by determining similarities and differences in the raw data (Ary et al., 2010, p. 449). Thematic analysis is also a versatile method that is applicable to a variety of qualitative data types and research topics (Braun & Clarke, 2006, p. 101).

This method was chosen for the current research to complement the in-depth analysis of academic procrastination and FLA within the chosen sample. It would also contribute to a general framework of the research question by grouping information to make it more understandable and visible. Besides, thematic analysis provides sequential stages, so it is a less time-consuming process contrary to other qualitative methods such as behavioral observations.

In this study, thematic analysis was grounded on the inductive method and six steps outlined by Braun and Clarke (2006). First, the qualitative data was transcribed by the researcher, and the transcripts were explored to get familiar with the data and make an overall sense of conceptualizations. The chunks that were descriptive in nature and were relevant to the interview questions were color-coded under each question for an in-depth analysis.

Later, codification was executed by using the program Atlas.ti to detect the recurring points and to segment data into units. According to Creswell (2012), it is pivotal to code the data in order to have a general sense of the patterns and ideas and to organize them in a meaningful way (p. 243). After the initial identification and constitution of codes, the generated codes were clustered under candidate themes by comparing and contrasting frequent and relevant keywords.

To verify the accuracy of the analysis, the selected data was analyzed by a second coder, who was a colleague in the field of ELT. The process of determining the interrater reliability was based on a percentage agreement, which is a common way to determine interrater reliability (O'Connor & Joffe, 2020, p. 8). Thus, in this step, the research questions and the selected chunks were provided for the second coder, who also received written and oral briefings on the central theoretical concepts explored in the study (academic procrastination, FLA, and mindfulness). The selected data were coded independently by the coders without any interaction. After the individual coding process, the researchers jointly discussed the codes until reaching a common consensus

on the final themes. The percentage of agreement was 92%, making the qualitative data analysis reliable and within the standard of 80% agreement (Miles & Huberman, 1994, as cited in O'Connor & Joffe, 2020, p. 9).

After the debriefing sessions with the thesis supervisor, the final version of the themes was shaped and defined in light of the fourth research question. Finally, the number of replies with identical codes was counted to get the frequencies and percentages. During the qualitative analysis, the student-participants' identities were substituted with numbers to maintain their confidentiality and protect their privacy.

3.3.4 Ethical considerations. Ethical considerations were adhered to in several ways in this study. First, ethical approval was obtained from the ethical committee of the university where the researcher continues her master's program (Appendix A). Then, the ethical approvals were taken from the preparatory school where the researcher carried out this study.

The second measure applied for the ethical considerations was the consent forms taken from two groups of participants (students who joined the online survey, and students who joined the focus group interviews). These consent forms were prepared digitally, and before collecting the data, the participants were requested to read and accept the form to continue participating in this study (Appendix B). Through these consent forms, all participants were informed that participation in this study was voluntary, and they were made aware of their right to withdraw at any time. Also, the researcher shared her contact information details with the participants in case they might want to ask further questions about the study at any time.

The third measure was protecting the research-related documents from other parties. The data collected from the participants and the approvals taken from the universities were all in digital forms and kept in a digital folder with a password for confidentiality issues. Only the researcher of this study had access to these data and documents.

The final measure was taken to maintain the anonymity of the participants. The names and contact details of the first group of participants (students who joined the online survey) were not collected. Regarding the second group of participants (learners

who joined focus group interviews), their names were not taken for qualitative data analysis purposes. Additionally, anonymity was granted to each participant by assigning them a random number, and this information was shared with the participants.

3.3.5 Reliability and validity. In order to establish trust in a given study, reliability, and validity are of crucial importance. Validity refers to the extent to which a test measures what it is designed to measure (Ary et. al, 2010, p. 225). It provides ‘truthfulness’ for a study, which should be projecting the real social world.

The validity of the current study was established through multiple measures. Firstly, the instruments chosen for the study were frequently used by many scholars worldwide and in Turkey, ensuring the content (addressing whether a test or instrument represents and samples the total content area) and construct validity (concerning the appropriate inferences of psychological constructs in the study) (Ary et al., 2010, pp. 226-272). The instruments were also checked by the researcher and three other experienced colleagues in order to prevent any multiple interpretations, typos, or any other errors that might have interfered with research procedures. Additionally, before the questionnaire was shared with the sample group, it was piloted on a separate group of students who were excluded from the actual sample. Moreover, the validity of the interviews was enhanced with the use of a semi-structured interview format in which there were open-ended questions within a predetermined thematic framework and probing follow-up questions. In this way, this study offered a more valid exploration of the concepts. The interview questions were developed based on the literature and the scales, which ensured that they were relevant and purposeful in exploring the research objectives.

On the other hand, reliability can be described as the degree of consistency of a test’s measurement of a construct (Ary et. al, 2010, p. 236). In other words, a reliable research tool should consistently produce the same results when it is repeatedly used in the same context (Creswell, 2012, p. 159). In this study, the following steps were taken in order to establish reliability. To determine the internal consistency of the scales used in the quantitative phase, Cronbach’s alpha was calculated using SPSS version 25. Hinton, McMurray, and Brownlow (2004) explained that any reliability

coefficient between .50 and .70 shows moderate reliability, between .70 and .90 shows high reliability while any value over .90 shows excellent reliability (p. 359). In the current study, the Cronbach coefficient of the API, FLCAS, and MAAS was found to be .87, .92, and .89 respectively (Table 6). Considering these values, it was concluded that the scales can be administered as a reliable research instrument to evaluate the participants' academic procrastination, FLA, and mindfulness levels in the current setting.

Table 6

Reliability Analysis of the Scales

Scale	Cronbach's Alpha	N of Items
API	.875	15
FLCAS	.927	33
MAAS	.896	15

For the focus group interviews, reliability was ensured with the involvement of an external evaluator in the analysis of interview transcriptions, which provided the examination of the data from two different perspectives and minimized individual biases. In this way, the experts analyzed the transcripts separately and discussed them until they reached a consensus on the themes. The intercoder agreement was 92% which was higher than the recommended consistency (80% on 95% of the codes) by Miles and Huberman (1994, as cited in O'Connor & Joffe, 2020, p. 9). In order to improve the trustworthiness of the study, debriefing was also employed, and the analysis processes were audited by the thesis adviser. Reviewing and interpreting the data with a highly experienced research adviser provided a more objective assessment of the study.

3.4 Limitations

Although it can be claimed that the study has reached its objectives through extensive and detailed data collection and analysis procedures, it is still important to stress its applicable limits.

The first limitation of the present study is that there are only three specific variables included in the study. There could be more factors affecting the EFL learners' academic procrastination, FLA, or mindfulness levels; thus, including other variables in the research could have yielded different results.

Furthermore, the impact of various demographic features, such as the length of formal English education, the ethnic background, or the department, were not examined in this study, and the current demographics might not be enough to represent a broader population of EFL learners. Since the data was obtained through convenience sampling from a single foundation university in the unique context of the Turkish educational system, the characteristics of the surveyed learners may not be applicable to other settings. Therefore, as the data cannot easily be generalized to different contexts, the external validity of the data may limit the current study.

Another limitation could be the accuracy of the results being affected due to the self-reporting nature of the survey. There may have been some misinterpretations of the items and their ranking scales while completing the scales. Therefore, the results can be influenced by social desirability bias or respondents' lack of awareness. Additionally, the survey was shared with the participants online. Thus, it was not possible to ensure whether all the items had been answered by the participants themselves, which might have had an impact on the precision of the findings.

Finally, this study focuses on a specific period when the study took place and does not track changes in learners' levels and perceptions of procrastination, FLA, and mindfulness over time, which can be regarded as a constraint. Longitudinal research may have provided more reliable and robust results for a better understanding of the aforesaid constructs.

Chapter 4

Findings

This chapter outlines the findings related to the research questions of the current study. Each section in this chapter will deliver a thorough set of findings that refers to the corresponding research question that is being investigated. Initially, the levels of academic procrastination, foreign language anxiety, and mindfulness among Turkish EFL learners will be provided. Following this, the significant differences in these levels according to two demographic variables (i.e., gender and proficiency level) are analyzed. Next, the correlational relationships between academic procrastination, foreign language anxiety, and mindfulness are presented. Finally, the chapter concludes with the recounted experiences of EFL learners on academic procrastination and foreign language anxiety with common situations and their reasons.

4.1 RQ1: What Are the Levels of Academic Procrastination, FLA, and Mindfulness among Turkish EFL Students?

In order to answer the first research question, which focuses on the Turkish EFL learners' academic procrastination, FLA, and mindfulness levels, descriptive statistics were conducted on SPSS. Data that is collected from the Aitken Academic Procrastination Inventory (API), the Foreign Language Classroom Anxiety Scale (FLCAS), and the Mindful Attention and Awareness Scale (MAAS) were used to identify mean, maximum, and minimum scores, while mean and standard deviation values were also determined. First, the total score for each scale was calculated after reverse coding the items specified in the previous chapter. The Likert scale measurements' qualitative interpretation was based on the mean value categorization, as proposed by Pimentel (2019, p. 188). The evaluation criteria (Table 7) and the descriptive statistics of learners' overall mean scores on all three scales (Table 8) are given below.

Table 7

The Adapted Evaluation Criteria for Quantitative Scales (Pimentel, 2018)

Scales	Intervals	Interpretation
Academic Procrastination (API)	1.00 – 1.79	very low procrastination
	1.80 – 2.59	low procrastination
	2.60 – 3.39	moderate procrastination
	3.40 – 4.19	high procrastination
	4.20 – 5.00	very high procrastination
Foreign Language Anxiety (FLCAS)	1.00 – 1.79	very low anxiety
	1.80 – 2.59	low anxiety
	2.60 – 3.39	moderate anxiety
	3.40 – 4.19	high anxiety
	4.20 – 5.00	very high anxiety
Mindfulness (MAAS)	1.00 – 1.82	very mindless
	1.83 – 2.65	mindless
	2.66 – 3.48	slightly mindless
	3.49 – 4.31	slightly mindful
	4.32 – 5.14	mindful
	5.15 – 6.00	very mindful

Table 8

Descriptive Statistics on API, FLCAS, and MAAS

	N	k	Min	Max	M	SD	M/k	
API	807	15	15	71	35.23	10.75	2.34	low procrastination
FLCAS	807	33	33	157	90.25	25.85	2.73	moderate anxiety
MAAS	807	15	15	88	56.58	14.96	3.77	slightly mindful

k: number of items in a scale

M/k: mean value in Likert scaling

The descriptive statistics on Turkish EFL learners' academic procrastination levels reveal that the lowest procrastination score was 15 and the highest score was 71. This indicates that while some students followed through with their academic duties, others were engaged in extreme procrastination. Furthermore, the average or mean score of procrastination was calculated as 35.23. The standard deviation was measured at 10.75. According to the evaluation chart (Table 7), the sample population of Turkish

EFL learners' mean value of academic procrastination was 2.34, which categorizes them as 'low procrastinators.'

The results of FLCAS show that the overall anxiety level of the Turkish EFL students was 'moderate' with a mean value of 2.73. The mean score of the learners' FLA results was 90.25 and the standard deviation was 25.85. However, a maximum score of 157 indicates that some students felt extremely anxious while learning English, and a minimum score of 33 shows that some of them were relaxed during language classes.

Regarding mindfulness, the overall mean value of Turkish EFL learners was calculated as 3.77, which indicated that they were in a 'slightly mindful' state. Although the mean score was 56.58 ($SD = 14.96$), the lowest score obtained was 15, and the highest was 88, which can be interpreted as some students being very mindful of their daily experiences while others lacking awareness of these.

Overall, it was observed that the sample of Turkish learners studying EFL at university had a low level of academic procrastination behavior, experienced moderate anxiety, and performed their everyday tasks in a slightly mindful manner.

4.2 RQ2: Do Academic Procrastination, FLA, and Mindfulness Scores Differ According to Gender and Language Proficiency?

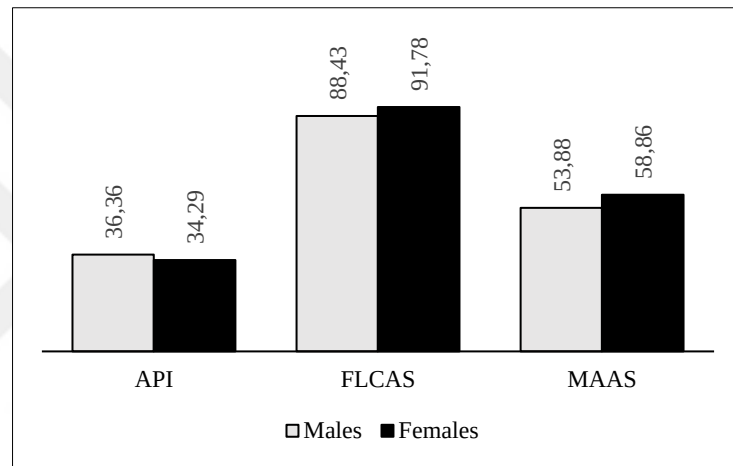
To answer the second research question, which investigates whether there is a significant difference in the EFL learners' academic procrastination, FLA, and mindfulness scores in terms of gender and proficiency, both descriptive and inferential statistics were used to analyze the data. After determining that the data was normally distributed across the gender and proficiency groups, calculations were carried out through parametric tests. The comparative findings were displayed for both the gender and proficiency level groups separately in the following sections.

4.2.1 Results according to gender. To discover whether there was a significant difference in the Turkish EFL learners' academic procrastination, FLA, and mindfulness scores according to gender, an independent samples t-test was conducted to analyze the data gathered from the survey. The detailed findings are demonstrated in Table 9 and Figure 7 below.

Table 9

Independent Samples T-test Results Based on Gender

	Gender	N	M	SD	t	df	p	d
API	Male	369	36.36	10.80	2.736	805	.837*	.019
	Female	438	34.29	10.62				
FLCAS	Male	369	88.43	25.98	-1.835	805	.848*	.012
	Female	438	91.78	25.67				
MAAS	Male	369	53.88	15.61	-4.767	805	.120*	.335
	Female	438	58.86	14.01				

* $p > .05$ *Figure 7. Mean scores based on gender*

As shown in Table 9 and Figure 7, the mean scores of female students in terms of academic procrastination ($M = 34.29$, $SD = 10.62$) were lower than those of male students ($M = 36.36$, $SD = 10.8$). On the other hand, female students' FLCAS scores ($M = 91.78$, $SD = 25.67$) were higher than male students' scores ($M = 88.43$, $SD = 25.98$). Similarly, female students obtained higher scores in MAAS ($M = 58.86$, $SD = 14.01$) compared to their male counterparts ($M = 53.88$, $SD = 15.61$).

However, the independent samples t-test results (Table 9) showed that the difference in the mean scores of academic procrastination ($t_{(805)} = 2.736$, $p = .837 > .05$), foreign language anxiety ($t_{(805)} = -1.835$, $p = .848 > .05$), and mindfulness ($t_{(805)} = -4.767$, $p = .120 > .05$) according to gender were not statistically significant. In other words, the gender of Turkish EFL learners did not affect their levels of academic

procrastination, foreign language anxiety, or mindfulness. Thus, it can be stated that both female and male participants in this study had similar experiences or habits regarding these constructs, and this is affecting them in a similar way.

4.2.2 Results according to proficiency level. The participants were initially categorized into four groups based on their proficiency, which was determined over a proficiency exam administered by the university at the beginning of the academic year. In order to determine the difference in variables among students at four proficiency levels (A1, A2, B1, and B2), mean scores and standard deviations of the scales were computed. After the normal distribution and homogeneity of variances were accepted, a one-way ANOVA was performed on SPSS 25 to evaluate the relationship between the level of language proficiency and the levels of academic procrastination, foreign language anxiety, and mindfulness. The descriptive and inferential statistical results of ANOVA are presented in Table 10 and Figure 8 below.

Table 10

One-way ANOVA Results Based on Proficiency Level

	Prof. Level	N	M	SD	F	p
API	A1	151	33.72	10.43	2.176	.089
	A2	268	34.90	10.59		
	B1	215	35.59	10.50		
	B2	173	36.65	11.44		
FLCAS	A1	151	87.86	23.66	3.006	.030*
	A2	268	88.49	25.48		
	B1	215	89.75	26.36		
	B2	173	95.29	26.88		
MAAS	A1	151	59.75	13.84	3.272	.021*
	A2	268	55.92	15.25		
	B1	215	56.61	14.63		
	B2	173	54.81	15.56		

*p<.05

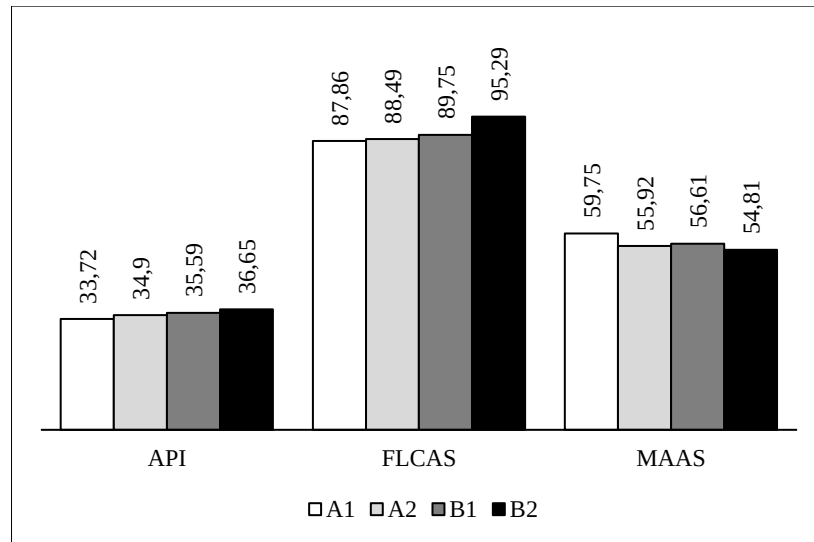


Figure 8. Mean scores based on proficiency level

According to the descriptive statistics given in Table 10 and Figure 8, the A1 group had the lowest levels of academic procrastination ($M = 33.72$, $SD = 10.43$) among the four proficiency groups while the B2 group displayed the highest levels of procrastination ($M = 36.65$, $SD = 11.44$). Moreover, it was observed that as the proficiency level increases, so do academic procrastination scores. However, the ANOVA results (Table 10) also show that there was no statistically significant difference between the learners' academic procrastination and their language proficiency at the .05 level, $F_{(3, 803)} = 2.176$, $p = .089$. Thus, it can be inferred that proficiency level does not significantly affect the academic procrastination scores of learners ($p > .05$).

On the other hand, there was found to be a statistically significant difference between FLA and language proficiency at the .05 level, $F_{(3, 803)} = 3.006$, $p = .030$. While the B2 group had the highest FLA mean score ($M = 95.29$, $SD = 26.88$), the A1 group had the lowest ($M = 87.86$, $SD = 23.66$). It can also be observed in Table 10 and Figure 8 that the scores of FLA increase as the level of proficiency increases. Therefore, it can be interpreted that the students' FLA scores differed significantly according to their language proficiency with more proficient students experiencing higher levels of FLA.

Similarly, a statistically significant difference between mindfulness and language proficiency, $F_{(3, 803)} = 3.272$, $p = .021$, was identified. This implies that the students' mindfulness scores differed significantly according to their proficiency level.

Contrary to what was observed for API and FLCAS, the A1 group had the highest scores in MAAS ($M = 59.75$, $SD = 13.84$) and the B2 group obtained the lowest ($M = 54.81$, $SD = 15.56$). It can also be observed in Table 10 and figure 8 that the scores of MAAS decrease as the level of proficiency increases with the exception of the B1 group which had a mean score ($M = 56.61$) higher than the B2 group.

In order to further analyze which of the groups means the significant difference arises, the result of a post hoc Tukey HSD test was analyzed (Table 11).

Table 11

Post Hoc Tukey HSD Test for Multiple Comparisons

Dependent Variable	(I) Prof. Lvl.	(J) Prof. Lvl.	Mean Diff. (I-J)	SE	Sig.
API	A1	A2	-1.180	1.092	.701
		B1	-1.871	1.139	.355
		B2	-2.932	1.195	.068
	A2	B1	-.691	.982	.896
		B2	-1.752	1.046	.338
	B1	B2	-1.061	1.096	.767
FLCAS	A1	A2	-.632	2.735	.996
		B1	-1.893	2.621	.888
		B2	-7.428*	2.869	.048**
	A2	B1	1.261	2.358	.951
		B2	-6.796*	2.631	.049**
	B1	B2	-5.535	2.512	.123
MAAS	A1	A2	3.833	1.517	.057
		B1	3.146	1.583	.193
		B2	4.946*	1.660	.016**
	A2	B1	-.688	1.365	.958
		B2	1.112	1.454	.870
	B1	B2	1.800	1.522	.638

* The mean difference is significant at the 0.05 level.

** $p < .05$

The post hoc Tukey HSD test indicated that the mean FLA of the B2 group was significantly higher than that of the A1 group ($p = .048$) and the A2 group ($p = .049$). However, there were no significant differences between the mean FLA scores of the

A1 and A2 ($p = .996$), A1 and B1 ($p = .888$), A2 and B1 ($p = .951$), or between the B1 and B2 groups ($p = .123$).

The Tukey post hoc test also showed that the A1 level students exhibited statistically significantly higher mindfulness compared to B2 level students ($p = .016$). There was no statistically significant difference between A1 and A2 groups ($p = .057$), A1 and B1 groups ($p = .193$), A2 and B1 groups ($p = .958$), A2 and B2 groups ($p = .870$), or B1 and B2 groups ($p = .638$).

To summarize this section, the findings of the independent samples t-test revealed that gender does not have a significant effect on the levels of academic procrastination, FLA, or mindfulness. Moreover, the descriptive findings showed that both academic procrastination and FLA scores increased as the proficiency level increased. Finally, the results of the one-way ANOVA test showed that while language proficiency does not affect academic procrastination scores, the levels of FLA and mindfulness differed significantly according to the students' proficiency, especially between A1 and B2 levels.

4.3 RQ3: Is There a Significant Relationship Between Academic Procrastination, FLA, and Mindfulness?

To investigate the third research question which aims to find whether there is any relationship among academic procrastination, foreign language anxiety, and mindfulness, the Pearson's correlation test was applied. The interpretation of the correlation coefficient was based on the evaluation chart proposed by Schober, Boer, and Schwarte (2018). Table 12 presents the cut-off points for each range.

Table 12

Interpretation Table for Correlation Coefficient (Schober et al., 2018)

R-value	Interpretation
0.00 – 0.10	Negligible correlation
0.10 – 0.39	Weak correlation
0.40 – 0.69	Moderate correlation
0.70 – 0.89	Strong correlation
0.90 – 1.00	Very strong correlation

To identify the direction (positive or negative) and the effect size (weak, moderate, or strong) of the relationships among academic procrastination, foreign language anxiety, and mindfulness, correlational analysis was performed by using a Pearson correlation coefficient (r). The findings of the analyses are presented below.

Table 13

Results for Pearson's Correlation Coefficient

	API	FLCAS	MAAS
API		.664**	-.378**
FLCAS			-.411**
MAAS			

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

As shown in Table 13, the highest correlation was between academic procrastination and foreign language anxiety, and the relationship between these variables was found to be positive, moderate, and significant ($r = .664, p < .05$). Thus, it can be inferred that when students' FLA levels increased, their tendencies to procrastinate increased as well, and vice versa. In regards to the correlation between foreign language anxiety and mindfulness, it was found that there was a negative, moderate, and significant relationship ($r = -.411, p < .05$). This implies that when the student possesses a higher level of mindfulness, they tend to experience less anxiety in a language classroom. As for the correlation between academic procrastination and mindfulness, a negative, weak, and significant relationship was observed ($r = -.378, p < .05$). In other words, the higher the learners' mindfulness level was, the less they procrastinated in academic contexts.

To summarize the section, all three variables, academic procrastination, foreign language anxiety, and mindfulness were correlated at a significant level. The correlation between academic procrastination and FLA was positive whereas these two variables were negatively correlated with mindfulness. This indicates that as the mindfulness score decreased, anxiety and procrastination scores increased, and when the anxiety scores increased, so did the procrastination scores.

4.4 RQ4: What Are Learners' Opinions About Academic Procrastination and FLA?

To complement the quantitative results of the study and to answer the fourth research question, the qualitative data was further gathered and analyzed to get a deeper understanding of the learners' views concerning their procrastination habits and experiences with FLA. The qualitative data, obtained from the semi-structured focus group interviews, was analyzed by implementing a thematic content analysis. Initial codes were generated based on the interview transcripts and were later grouped into categories, which consequently led to the formulation of broader themes. Some of the findings were exemplified by quotations from the participants. In order to ensure anonymity, the students were given a random number, as in S1, S2, S3, and so on.

This section presents the findings of the qualitative research data. First, the participants' opinions regarding the tasks and situations that induce procrastination and anxiety the most will be provided. Following this, the factors that influence academic procrastination and FLA will be given separately.

4.4.1 Common tasks and situations that induce procrastination and FLA.

When participants ($n=20$) were asked about the tasks where they were mostly in the habit of procrastinating and the situations where they felt the most anxious, a total of four cases arose for both. These are given in Table 14 below with the counts and percentages of case mentions. Cases that were mentioned less than two were excluded.

Table 14

Tasks that Induce Procrastinate and Anxiety

Case	Procrastinates	Feels anxious
Speaking tasks	10 (50%)	14 (70%)
In-class participation	-	9 (45%)
Writing tasks	6 (30%)	5 (25%)
Daily tasks	6 (30%)	-
Exams	5 (25%)	2 (15%)

Looking at Table 14, it can be seen that the most commonly mentioned tasks that induced procrastination and FLA were related to speaking skills. As speaking

skills are a crucial component of the curriculum, students in this institution are expected to perform several speaking tasks, including three collaborative tasks that are conducted at each level, a presentation task assigned to B1 level students, and a group discussion task assigned at B2 level. Half of the students ($n=10$) said that they delayed preparing for presentation and discussion tasks, leaving the work for the last week or even the last day.

We had a speaking exam last Monday but I hadn't done anything on it for weeks. So, I tried to complete everything on Sunday (S11, female, B1).

Not surprisingly, the majority of students ($N=14$) also expressed that speaking in a foreign language made them anxious. They also added that as a sub-skill of speaking, pronunciation was a major concern for them. Moreover, almost half of the participating students ($n=9$) commented that answering questions during class and speaking in front of others caused anxiety for them.

Standing up at the board makes you anxious. It's not just about not knowing the words, but pronunciation is really difficult (S5, female, A1).

When the teacher asks us something in class, we hesitate to speak in English and end up answering in Turkish (S8, female, A2).

Following speaking-related tasks, the second most mentioned case was regarding writing tasks and assessment. Students in this university are also expected to hone their writing skills through several assignments and tests. Process writing task is a part of the syllabus at each level whereas B-level students are also expected to take a timed writing exam. While 6 students (30%) mentioned postponing writing tasks, they also said that these included in-class writing activities, writing homework as well as Process and Timed writing.

I procrastinate process writing the most. When we are assigned to do the second or third drafts at home, I can never sit at a table and get on it (S7, female, A2).

Furthermore, some students ($n=5$) responded that writing tasks were the ones where they felt most anxious, and they further specified that anxiety heightens when they are required to write in L2 within a limited period of time.

Writing [exams] make me especially anxious. The anxiety causes me to overthink and spend too much time trying to figure out what to write, which ultimately wastes my time and increases my stress. (S17, female, B2).

Regarding testing procedures, as stated previously, exams hold a heavyweight in the assessment criteria and are regularly applied throughout modules in this specific language program. While 5 students (25%) mentioned that they delayed studying for weekly tests as well as the End-of-Module exam, 2 students (15%) also commented that being tested on foreign language skills was a major cause of anxiety for them, even to the point that they refrain from taking the exam.

We have an exam next week. I told myself that I would play around as much as I wanted this week. But as of Friday afternoon, I will start studying for it (S9, female, A2).

Weekly tests generally stress me out. It doesn't matter how many times I take them, I still get anxious in tests (S19, female, B2).

I didn't take the speaking part of the proficiency exam because I was feeling so anxious (S20, female, B2).

Finally, 6 participants (30%) stated that they mostly procrastinated doing daily tasks. At this university, daily tasks are assigned each day on Itslearning, an online platform that students can access through laptops, tablets, or phones. Once activated, every daily task has a deadline for the end of the following day set at 23:59. After the deadline, students can no longer access the task but can view their scores. These tasks may also have different foci, such as testing reading or listening skills, and vocabulary or grammar knowledge. While some students in the interview referred to the daily tasks as a whole, one of them specifically mentioned listening daily tasks.

When they activate a daily task, I always decide to do it the next day. If the deadline is the next day, I never do it before that or until the last moment, especially if it's a listening daily task (S6, female, A2).

4.4.2 Factors influencing academic procrastination. Another interview question that the learners answered was about the factors that influenced their procrastination behavior. Resulting from the participants' various responses, 9 codes have emerged, which were grouped into 3 themes: psychological factors, behavioral factors, and external factors. The codes and themes are given in Table 15 and explained in detail below.

Table 15

Factors Influencing Academic Procrastination Sorted by Theme

Themes	Sample Codes
Psychological factors	Sense of incompetence
	Lack of motivation
	Anxiety
Behavioral factors	Ineffective planning
	Study habits
	Better performance
External factors	Task characteristics
	Social and environmental distractions
	Lack of supervision or assistance

4.4.2.1. Psychological factors. The first theme, psychological factors, was related to differences in self-perceptions and personal experiences. Three codes were generated within this theme: sense of incompetence, anxiety, and lack of motivation.

One of the most apparent reasons for procrastinating that the interviews revealed was the sense of incompetence that learners felt in specific areas of their education, which led them to avoidance behavior. They expressed that they often believed to lack the skill or knowledge to do academic tasks for several reasons. Some students mentioned that they felt inadequate because they were inexperienced while some others said this was related to the fear of failure as well as a lack of confidence.

I think because we have never written essays before and are just learning now, we don't have much confidence in this area. The need to procrastinate might also arise from the fear of failure (S19, male, B2).

Because I see myself as weak in writing. I didn't want to sit down to write because I thought I would fail. I find the reason within myself. Because when I don't study new words, I automatically don't know them, and because I don't know them, I can't do it. (S16, male, B2).

When I see someone doing all the tasks successfully, I automatically feel down. Deep down, I feel sad for myself, thinking that I can't do it (S9, female, A2).

Moreover, some students expressed that when they feel anxious, they tend to procrastinate. They added that they either sought to postpone the negative emotions by engaging with the task later on or to avoid the anxiety altogether by not engaging with the task at all.

Even the thought of it is stressful. There's a difference between feeling anxious for weeks and for a few days. So, we actually procrastinate on this thought as well. (S11, female, B1).

For me, not wanting to experience that anxiety is the biggest reason. I didn't want to engage in speaking because it made me very stressed. Maybe it's because it pushes you out of your comfort zone (S20, female, B2).

Finally, it was mentioned by some participants that they procrastinated because they did not have the motivation to study or complete their tasks. Although they partially took the blame for not being motivated to learn and fulfill their academic duties, they also stated that they were unable to find a solution.

Actually, this is entirely a problem on my part. But I still haven't figured out why I can't study. I mean, there's no inner desire to study. This leads to procrastination because I feel that the closer I study to the exam, the better it is (S16, male, B2).

4.4.2.2. Behavioral factors. Another theme of factors that received frequent commentary was about students' behaviors that resulted in procrastination. There were three codes generated in this category: ineffective planning, study habits, and better performance.

Firstly, ineffective planning was a commonly expressed reason for procrastination under this theme. Some participants admitted that they often forget to complete tasks due to a lack of organization while some others said that even when they make plans, they fail to keep up with them. Students also acknowledged the ineffectiveness of their planning, expressing that they added more things to the list than they could accomplish and that this was due to poor time management skills.

I try to write down what I need to do, but they accumulate, and I can't get them done. It's actually because I always write down more than I can accomplish. For example, I tell myself I'll spend one hour on this task, and two hours on that, but it never works out. The one hour I planned turns into three or four hours. See, there's a flaw in my planning, and I need to fix it. (S6, female, A2).

I usually set an alarm for 11:50 PM and try to finish the daily task within nine minutes. But this isn't very effective because I tend to forget the words, and there's a bit more fatigue since it's late at night (S10, female, A2).

I think of starting with the easier or shorter tasks and then moving on to more difficult ones. But I could never get around to it (S17, female, B2).

Additionally, long-term study habits that lacked discipline were another cause for procrastination. Some participants highlighted that they have long been engaged in procrastination behavior to the extent that it has become a habit for them. Although they have been uncomfortable with it, they have admittedly not been able to overcome it. They also expressed that they were not able to self-regulate in order to keep up with the deadlines, and they also added this was linked to being aware of one's responsibilities.

For example, they give us an assignment one or two months in advance. But I always leave it until the very end, and at that point, I feel terrible about it. I just want to get it over with, to be done with it. As a result, I end up producing

something that's always below what I'm capable of. This has been going on for years (S10, female, A2).

I'm not a very hard-working person. I've been procrastinating for years. It's not something new. I guess I've gotten used to procrastinating. It's just a bad habit (S4, male, A1).

This is all about having discipline. Someone who is aware of their responsibility will take action to improve (S10, female, A2).

Contrary to this, a few students remarked that procrastination was an intentional act or a strategic decision that they employed for a better performance outcome on a task. While they were aware of the downsides of procrastination, they suggested several benefits of doing a task towards the last moment as stated below:

When you do things at the last minute, you focus all your performance on it. It's really stressful, too but you end up doing your best (S6, female, A2).

Better ideas come to mind, and we become more motivated (S9, female, A2).

I am used to doing things on the last day, planning to memorize everything then. Actually, memorization isn't the best approach, but I find that if I memorize things at the last minute, I remember them more easily (S12, female, B1).

4.4.2.3. External factors. The last theme that arose in this section was the outside influences and the environment surrounding the students. Another three codes were constituted for this theme: task characteristics, lack of supervision or assistance, and social and environmental distractions.

According to the interview results, how students perceive a task had a high influence on their decision to procrastinate as expressions such as 'difficult,' and 'boring,' were uttered many times. Many students mentioned that they procrastinated on a task due to the challenges they faced during its execution. Among these tasks, speaking was deemed the most difficult one due to the complexity of grammar, choice of vocabulary, accurate pronunciation, and the differences between L1 and L2. Furthermore, some students reported that when they find a task especially tedious, they

tend to delay completing it or even give up on it. The common tasks that the participants found boring were reading and writing.

Since our native language is Turkish, we have to think in Turkish when we speak. But then, we struggle with choosing words because we're thinking in Turkish. To improve, we need to speak English more and repeat those words frequently. This is a challenging process. (S14, male, B1).

Especially reading tasks are really boring. Finding specific information from long paragraphs can be really annoying (S8, female, A2).

I get really tired of writing something over and over. We already write everything in the book during class, and then we have to transfer it to paper as well (S1, female, A1).

On the one hand, it was mentioned by some students that they tended to overexaggerate a task's demand or difficulty, and that such overestimation kept them from starting it. On the other hand, one student commented that the very reason he procrastinated was because the tasks were easy enough for him to pass from the preparatory school, so he did not feel the need to study.

There's always some procrastination until I begin working on a task. Because I tend to blow things out of proportion in my mind. But then, when I start, I realize that it's not as big of a problem or as difficult as I made it out to be. Still, the process leading up to that starting point is challenging because the more I think about it, the more I exaggerate it in my mind (S17, female, B2).

If I believe I can achieve something and it's an easy goal for me, I always put it off. Since the passing score I need is 60, and I usually get 70-75 on mock exams, I keep procrastinating because I already feel confident that I'll succeed (S16, male, B2).

Another reflected reason for procrastination was the lack of teacher support and assistance, which was exclusively mentioned by students of lower proficiency (A1, A2). They stated that the presence of an instructor would not only serve as a source of knowledge but also as a monitoring entity encouraging their task engagement.

At home, you can't use your environment, and you don't really learn. I think it would be better if daily tasks were done in class under the teacher's supervision (S1, female, A1).

In the classroom, you can comfortably ask questions, whether it's a friend or a teacher. At home, there's no one around, and you're trying to do everything on your own (S4, male, A1).

Finally, participants talked about various influences in their social lives that distracted them and inhibited their studies, which led them to procrastinate. Among these, the use of smartphones and external sounds were mentioned. A few students talked about how their classmates influenced their decision to procrastinate, too. It was mentioned that procrastination was what they observed in class, and they simply followed the trend.

I can't study at home or the school. Because there is usually a lot of noise (S9, female, A2).

I just forget sometimes ... I'm usually on my phone, to be honest (S4, male, A1).

Everyone said that they were going to prepare their presentations on the last day. And since we were memorizing, I decided to leave it for later so that I could better remember (S12, female, B1).

Overall, the students' procrastination habits were affected by psychological, behavioral, and external factors. Within these, ineffective planning, a sense of incompetence, and task perceptions were the most frequently commented ones that led students to procrastinate academically.

4.4.3 Factors influencing foreign language anxiety. Another question that the participants responded to was regarding the causes of experiencing foreign language anxiety, which stimulated a lot of feedback. Table 16 below presents the results of the qualitative analyses with nine emerged codes that are grouped into three themes; fear of negative evaluation, erroneous beliefs and attitudes, and classroom procedures. Each theme with its codes is explained in detail below.

Table 16

Factors Influencing Foreign Language Anxiety Sorted by Theme

Themes	Sample Codes
Fear of negative evaluation	Making errors
	Peer criticism
Erroneous beliefs and attitudes	Sense of inadequacy
	Procrastination
	Perfectionism
Classroom procedures	Difficulty of the task
	Difference between L1 and L2
	Unfamiliarity
	Having to speak in front of others

4.4.3.1 Fear of negative evaluation. The majority of the comments regarding the causes of FLA revolved around the students' fear of being evaluated negatively by either their teachers, peers, or even themselves. Under this theme were two codes: making errors, and peer criticism.

The most common reason for anxiety as uttered by students was the expectation of making errors. Many participants stated that making an error in using a language would be something frowned upon and criticized, ultimately hurting their self-image. The areas that students feared of misproducing the target language were grammar, choice of vocabulary, spelling, and answering questions in the classroom. They also expressed feeling shame when making errors in language classes.

There's a fear of making mistakes. For example, when the right word doesn't come to mind at that moment, the thought of how to organize my sentence makes me a bit anxious (S11, female, B1).

I think students are a bit more reserved when it comes to constructing sentences or participating in class. They worry about making mistakes. Making mistakes is often seen as something negative, even within oneself (S4, male, A1).

In the first week, I answered the teacher's questions incorrectly twice and decided not to respond again because I was so embarrassed. People generally

feel self-conscious when they make mistakes, regardless of who is around (S7, A2).

Negative evaluation was also discussed in terms of peer criticism and mockery. Students expressed that they feared participating in class and performing in front of their peers because they worried too much about what others may think of them or how they would treat them if they were to fail. Due to the multicultural nature of the current study's context, students also mentioned unfamiliar cultures could be triggering this situation.

I think we're intimidated by what others might think. For example, if I mispronounce a word or give an incorrect answer, I worry about what my classmates will think. Thoughts like 'Oh, that's funny,' or 'Look, they mispronounced it' can be distressing (S15, B2).

The class has people from very different backgrounds—different nationalities, cultures, and upbringings. This diversity can add to the stress. We're trying to speak English in front of people from unfamiliar cultures, which can be intimidating (S5, A1)

4.4.3.2 Erroneous beliefs and attitudes. The second theme was regarding the irrational beliefs and attitudes that the learners have adopted while learning a foreign language. Under this theme, three codes were discussed: sense of inadequacy, procrastination, and perfectionism.

Firstly, students' self-perceived low competence was a popular opinion for them to feel anxious while learning a language. Participants stated that their current knowledge of the target language was insufficient for them to perform at a desirable level. These negative thoughts were more prevalent in production skills and often occurred when students compared themselves to others that they deemed more proficient.

The biggest reason is inadequacy. We don't know the tenses or the vocabulary. This lack of proficiency can cause anxiety because we don't know what to use or when to use it. I mean, how can you speak English knowing only two tenses? (S2, male, A1).

When the people in the class speak very well, I feel like I'm the only one struggling, and I think it's just me. This also affects me negatively (S6, female, A2).

Moreover, similar to how anxiety was discussed among the causes of procrastination, procrastination habits were also mentioned as a factor triggering anxiety. Some learners stated that when they procrastinate on a task, they tend to feel increasingly anxious as the deadline approaches. A couple of them also added that although making study plans made them feel more relaxed at first, failing to follow these plans increased their anxiety in the end. One comment also referred to the two-way relationship between procrastination and anxiety.

I feel more comfortable when I have a plan, but I usually don't stick to it. When I can't follow through, I get even more stressed because I set goals but don't achieve them, and that makes me feel worse and more empty (S8, A2).

When I can't accomplish what I've planned, that's when I get really frustrated and anxious. If it's not something academic, I don't get stressed. But if it's related to school, like completing an assignment, and I can't get it done, I get stressed because it piles up for the next day (S9, A2).

For example, when I postpone something for ten days and don't study at all, I end up feeling much more stressed in the last few days and procrastinate even more. I try to calm myself by thinking 'if I pass, I pass, if I don't, I don't.' Then this sense of relaxation would make me procrastinate more (S18, female, B2).

Finally, being a perfectionist was mentioned by some students who responded that they feel the urge to speak with perfect fluency and accuracy, and failing to achieve this made them quite anxious. Once they performed below their expectations, the anxiety prevented them from trying again unless it would be a perfect performance.

I want to speak fluently. When I try to structure the grammar in my head in Turkish, my speaking isn't fluent. So, when I can't do it perfectly, I feel like I shouldn't be speaking at all (S9, A2).

When I'm speaking and I can't remember even the words that I know well, I get quite anxious (S6, female, A2).

4.4.3.3 Classroom procedures. The last theme that emerged from the interview results was regarding the procedures carried out in the language classroom. From this category emerged four codes: task difficulty, the difference between L1 and L2, unfamiliarity, and having to speak in front of others.

To begin with, a good number of participants highlighted that the difficulty of speaking tasks was anxiety-provoking for them because there were several aspects of speaking that they needed to deal with, such as spontaneity of oral production, time constraints, and lack of opportunities to correct mistakes, which made its performance more challenging compared to other skills, and, as a result, felt them feeling anxious about speaking.

In speaking, it's more difficult because I'm trying to focus on grammar, pronunciation, and the meaning of words all at once, which makes me more anxious about speaking (S9, female, A2).

With writing, for example, you have over an hour. You can draft, write, erase, and revise. But speaking happens very spontaneously. You're given one or five minutes, and it's all in the moment. If I say something wrong or mispronounce a word, I don't have the chance to correct it immediately. I think this alone increases the stress (S13, male, B1).

Another coding under this theme was the difference between the learners' native language and the target language. Some learners highlighted how their mother tongue (Turkish) differed from English in terms of syntax and phonology. They added that they kept mispronouncing the words or forming sentences inaccurately because they tried to utilize their Turkish repertoire, which made them feel anxious while trying to produce the target language.

I make a lot of spelling mistakes when writing, which makes me hesitant about writing tasks. It becomes a stressful process because unlike Turkish, English words aren't spelled as they are pronounced (S17, female, B2).

Because we tend to think in Turkish while speaking. But in English, we need to structure sentences differently, often starting from the end. This can cause anxiety when we first approach the topic (S2, male, A1).

Moreover, being unfamiliar with a task's procedure or the target language itself caused anxiety for learners as well. Some participants expressed having anxiety during tests that they are taking for the first time and tasks that they are not well informed about. Some others also thought that having less experience with the processes of learning a language during prior education was the reason for their unfamiliarity with English.

I didn't attend the EOM speaking part [in the September proficiency exam] because I was too anxious. But having speaking exercises every week really helped me. The stress comes from not being used to it, but after a while, it becomes a normal situation for you. As you know more about it, the stress decreases, and after some time, it feels normal. (S20, female, B2).

Because we didn't have a strong foundation in high school and English wasn't emphasized much, we never developed a habit of it. I think that's why it makes us feel anxious because we're suddenly trying to learn it all at once (S1, female, A1).

Lastly, as part of their modular evaluation, students are required to perform the presentation task and the collaborative tasks in front of their teacher and classmates. The other speaking assessment procedures are again conducted with one or two teachers present. Also related to social anxiety, having an audience while performing in L2 triggered anxiety for a few students, as supported by the statement below:

In general, speaking in front of people is difficult, even in Turkish. And since we do the speaking in front of the whole class, I get nervous about being in the spotlight (S12, female, B1).

In summary of this section, according to findings gathered from the semi-structured focus group interviews, speaking tasks, and writing assignments were the most commented ones that influenced students' procrastination behavior and FLA. As for factors causing procrastination, personal, behavioral, and external factors were identified as emerging themes, with a sense of incompetence, ineffective planning, and task characteristics being the most mentioned. In regards to causes of FLA, fear of negative evaluation, erroneous beliefs and attitudes, and classroom procedures were

the broader themes. Students mostly felt anxious due to making mistakes, being inadequate, and the difficulty of the tasks. All the findings, gained from both quantitative and qualitative data analyses, are discussed in the following chapter.



Chapter 5

Discussion and Conclusions

The aim of this study was to assess how academic procrastination, foreign language anxiety, and mindfulness are related in a Turkish EFL context. To determine the levels of academic procrastination, FLA, and mindfulness of the participants, three Likert scale questionnaires were utilized. These included the Turkish adaptation of the Aitken Procrastination Inventory by Balkıs (2006), the Turkish adaptation of the Foreign Language Classroom Anxiety Scale by Aydın et al. (2016), and the Turkish adaptation of the Mindful Attention and Awareness Scale by Özyeşil et al. (2011). Semi-structured focus group interviews were further conducted to gain a deeper understanding of the researched phenomena. This section focuses on discussing the key findings and conclusions derived from the data analysis. The results will be examined in four distinct sections, aligned with the study's research questions. Initially, the discussion will offer a summary of the results and then explore their connection to previous research studies. Finally, it will be concluded with some pedagogical implications and suggestions for future research.

5.1 RQ1: What Are the Levels of Academic Procrastination, FLA, and Mindfulness Among Turkish EFL Students?

The first research question of the study investigated the academic procrastination, foreign language anxiety, and mindfulness levels of Turkish EFL students. An evaluation chart, adapted from the categorization by Pimentel (2019), was used to determine the levels according to the mean values.

Firstly, regarding the academic procrastination level of students, the results of the descriptive statistics showed that the overall mean score of the sample on API was 35.23 with a 10.75 standard deviation. The average mean value was calculated to be 2.34, which signaled a low level of procrastination. Since there is a lack of literature regarding the academic procrastination level of Turkish university students in an EFL context, it was difficult to compare the findings with a similar sample. Therefore, the findings were generally compared with other studies done in other fields and with various samples of university students in Turkey.

The present findings were found to be consistent with the previous studies (Li et al., 2023; Balkis, 2006; Solomon & Rothblum, 1984; Mocan, 2022; Uzun-Özer, 2005), where the participants reported low levels of procrastination. Specifically, the results showed little difference from the studies done in Turkey by Balkis (2006) and Mocan (2022), in which the mean scores were found 36.24 ($SD = 10.53$) and 37.45 ($SD = 10.79$) respectively. However, there were other studies where the academic procrastination scores of university students were identified at a moderate level (Yurtseven & Akpur, 2018; Zasiakina & Zhuravlova, 2019; Şenlik, 2020; Eltayeb, 2021; Zhang & Zhang, 2022). For instance, Yurtseven and Akpur's study with 522 Turkish EFL students demonstrated an API mean score of 42.19, and in their study with 55 Chinese EFL learners, Zhang and Zhang (2022) also found a moderate level of academic procrastination.

This suggests that university students generally manage their academic responsibilities with minimal delay. While a low level of academic procrastination might be considered acceptable, existing literature indicates that students possess a strong inclination to postpone their academic tasks (Steel, 2007; McCown & Roberts, 1994; Uzun-Özer & Saçkes, 2011). This study's finding about academic procrastination being still close to a moderate level highlights the need for solutions to address this issue. University students are expected to take responsibility and complete their academic duties on time, making it essential to find ways to reduce procrastination. The insights gained from this research into the causes of academic procrastination could offer valuable guidance on how to prevent it effectively.

Regarding foreign language anxiety, the overall mean score was found to be 90.25 ($SD = 25.85$) with a calculated mean value of 2.73, which indicated a moderate level of anxiety. Since the study was conducted on a large sample size ($N = 807$), a general statement can be made that Turkish EFL students at this university have a moderate level of foreign language anxiety.

When the mean scores of the present study are compared to others carried out with university students in EFL contexts, the results were in accordance with several studies from Turkey (Koçali, 2020; Yurtseven & Akpur, 2018; Batumlu & Erden, 2007; Altunel, 2018) and worldwide (Horwitz et al., 1986; Aida, 1994; Liu, 2006; Llinas &

Garau, 2009; Fallah 2017; Gordani & Sadeghzadeh, 2023), all of which indicate a moderate level of FLA among language learners. It was seen that many of these studies had similar FLCAS means scores, such that in Batumlu and Erden's with 150 Turkish EFL students (2007; $M = 89.84$), Yurtseven and Akpur's with 522 EFL students (2018; $M = 92.03$), Gordani and Sadeghzadeh's with 504 Iranian EFL students (2023; $M = 90.52$), and in Horwitz et al.'s with 108 ESL students (1986; $M = 94.5$) located in the U.S. This might well be an indicator that university students in Turkey, as well as across different countries, who are learning English may have moderate levels of foreign language anxiety.

The moderate, but not high, level of anxiety observed in this study may stem from several factors. Firstly, all participants were from the same university and were enrolled in the same preparatory program. Additionally, the relatively small class sizes, comprised of 12-22 students, may have fostered a stronger sense of community among the students. The smaller number of students likely allowed lecturers to give more individualized attention, and encourage students to share their concerns or seek further guidance. However, despite these advantages, the level of FLA was not found to be low, either. The moderate anxiety levels could be attributed to the institutional practices and demands of the language program. Preparatory students were anticipated to have a moderate level of FLA since it was their first year at university, and they were subjected to an intense language learning program, with a heavy list of vocabulary and grammar topics covered each week, probably for the first time in their lives. Also, both teachers and students are expected to use only English in class, requiring students to comprehend the teacher's instructions and respond in L2 as needed. These could cause anxiety among students who may not be comfortable with or accustomed to such teaching methods and practices. The reasons for FLA are further explored in the discussion of the fourth research question.

Lastly, according to the quantitative findings of MAAS, the learners were found to be slightly mindful. The overall mean score was 56.58 ($SD = 14.96$) with a calculated mean value of 3.77. This finding was in line with several other studies conducted previously. For instance, Fallah's (2017) study investigated mindfulness, coping self-efficacy, and anxiety among 295 Iranian EFL students and found that the participants had a slightly mindful state with a mean score of 59.81. Similarly, Gao

(2023) detected a slightly mindful state in a study with 687 Chinese EFL university students. In Turkey, Ersanli and Ünal (2022), and Tarman and Sari (2021) also found similar results regarding university students' mindfulness levels with mean MAAS scores of 60.59, and 59.44, respectively.

This finding can be attributed to the fact that mindfulness is a relatively new term and may not be widely known by the learners. While participants may be familiar with expressions like "awareness of feelings" and "being in the moment," they might not fully understand how these concepts apply in everyday life. Additionally, there is a lack of implementation connecting mindfulness with foreign language education in the literature. As a result, both teachers and students may not be utilizing mindfulness exercises in foreign language classrooms. Courses specifically designed to practice mindfulness through various techniques are only recently emerging, and in Turkey, such courses are rare, expensive, and targeted at a specific audience. Consequently, students in this context may have limited awareness of or experience with these courses. These factors likely contributed to the lower levels of mindfulness observed in this particular group of EFL learners.

5.2 RQ2: Do Academic Procrastination, FLA, and Mindfulness Scores Differ According to Gender and Language Proficiency?

The second aim of the present study was to investigate the levels of academic procrastination, foreign language anxiety, and mindfulness according to two demographic variables: gender and proficiency. In order to find out whether there is a significant difference between these variables, one sample t-test and ANOVA was used. Below is the discussion of the findings provided separately for each demographic variable.

5.2.1 Discussion according to gender. Firstly, the academic procrastination levels of Turkish EFL students were examined in terms of gender. According to the descriptive results, males had slightly higher levels of procrastination ($M = 36.36$) than their female counterparts ($M = 34.29$). However, the results of the one-sample t-test showed that this difference was not statistically significant. In other words, gender did not have a significant effect on the participants' API scores.

There are various studies in the literature which have dealt with the relationship between gender and academic procrastination. The result of the current study is consistent with the majority of these (Beswick et al., 1988; Milgram et al., 1994; Kachgal et al., 2001; Şenlik, 2020; Zasiiekina & Zhuravlova, 2023; Rothblum et al., 1986; Ferrari, 1991). For instance, the study done by Beswick et al. (1988) with 245 university students in South Australia yielded no gender difference. Similarly, Ferrari's (1991) study did not find significant gender differences among male and female procrastinators. Rothblum et al. also concluded that the frequency of procrastination was not related to gender but the effects of procrastination differed among males and females. In Turkey, Şenlik (2020) found no gender difference in academic procrastination scores of 338 university students as well.

In contrast, there are studies stating males are more likely to procrastinate on academic tasks (Batumlu & Erden, 2007; Uzun-Özer, 2005; Milgram et al., 1994; Balkıs, 2006; Senecal et al., 1995). Milgram et al. (1994) found that the female Israeli students procrastinated less than the male students. Likewise, the results of Senecal et al.'s (1995) study with 498 French-Canadian students indicated that males procrastinated more than females. In addition to these studies, there are also some studies, although fewer, which concluded that females displayed significantly higher academic procrastination in comparison to males (Rothblum et al., 1986; Solomon & Rothblum, 1984).

As evident from the aforesaid studies, gender is a complex factor in academic procrastination research, with multiple underlying reasons. While some studies have found significant relationships between procrastination and gender, others have reported no links. One possible explanation for these conflicting and inconsistent results could be the influence of other variables differing in these studies. For instance, differences in participants' cultural and educational backgrounds may serve as intervening factors, leading to varying outcomes. When considering all research findings collectively, it can be seen that explaining gender-based differences in academic procrastination requires a comprehensive approach that takes various cultural, social, and individual factors into account.

In regards to gender differences in FLA scores, the descriptive analysis showed that females had higher levels of FLA ($M = 91.78$) compared to male students ($M = 88.43$). Even though the comparison of the mean scores showed a slight difference in the anxiety levels of females and males; the t-test results showed no significant effect of gender in determining foreign language anxiety.

Some of the previous research carried out in Turkey (Altunel, 2018; Batumlu & Erden, 2007; Özgür, 2024; Erdoğan, 2016) and other countries (Elkhafaifi, 2005; Tianjian, 2010; Aida, 1994; Dewaele, 2007; Nahavandi & Mukundan, 2013) have also found no significant relationship between gender and FLA. For instance, Batumlu and Erden (2007) who worked with preparatory school students at Yıldız Teknik University also concluded that females had higher FLA levels; however, similar to this study, they found no significance between foreign language anxiety and gender. Likewise, Altunel (2018) found similar results in her study, stating that there was no meaningful relationship between foreign language anxiety and gender, even though females obtained higher scores. Investigating the speaking anxiety of Chinese EFL learners Tianjian (2010) found that females were more anxious than male students but the difference was not significant. On the other hand, Aida's (1994) study on Japanese learning and language anxiety concluded that males experienced higher levels of FLA; however, no statistical association between anxiety and gender was observed.

In addition to these studies, there are others that have found a significant difference in FLA levels according to gender. While some studies identified that females obtained significantly higher scores in FLCAS (Pappamihel, 2002; Park & French, 2013; Arnaiz & Guillén, 2012; Koçali, 2020; Geng, 2021), a few others observed statistically higher scores in males (Kitano, 2001; Fariadian et al., 2014).

As evident from the various findings mentioned above, evaluating and drawing conclusions about the relationship between gender and FLA is quite challenging. Park and French (2013) suggested that these contradictory findings could be influenced by socio-cultural factors (p. 463). Since the current study was conducted at a large university in a major city, with most students coming from different regions of Turkey, the participants are likely to have diverse cultural backgrounds and upbringings, which may have affected the study's results.

Finally, following the analysis of MAAS scores, no significant difference was detected in terms of gender. However, females were also found to have slightly higher levels of mindfulness ($M = 58.86$) than males ($M = 53.88$). Several studies have been conducted to explore the relationship between gender and trait mindfulness. Some of these studies align with the findings of the current research, indicating that there is no significant relationship between the two variables (Brown & Ryan, 2003; Charoensukmongkol, 2019; Geng, 2021; Koçali, 2020).

Conversely, the results of this study contradict those that have found a significant association between gender and mindfulness. Some studies suggest that female learners experience higher levels of mindfulness compared to males (Serrano et al., 2022; Rojani et al., 2017; Özgür, 2024; Salahat & Al-Zaghoul, 2018, as cited in Eltayeb, 2021), while others indicate that male learners demonstrate higher levels of mindfulness than females (Waszcuk et al., 2015; Gautam et al., 2019).

As the research review indicates, the difference in mindfulness levels concerning gender is inconclusive. Some studies show significant relationships between mindfulness and gender, while others report no such findings.

5.2.2 Discussion according to proficiency. Another variable examined in relation to API, FLCAS, and MAAS scores was the proficiency level of students. Since the sample was comprised of four different levels of proficiency (A1, A2, B1, and B2), an ANOVA test was utilized.

First of all, as a result of the data analysis on academic procrastination and gender, a steady increase in the mean scores was observed from the lowest proficiency level (A1) students reporting the lowest procrastination mean score ($M = 33.72$) to the ones at the highest proficiency level (B2) who had the highest procrastination score ($M = 36.65$). However, the differences were not significant between any of the levels. In other words, whether students were in elementary or intermediate level was not a significant factor affecting their procrastination behavior.

To the best of the researcher's knowledge, no study in literature investigated the difference in procrastination levels based on foreign language proficiency. Most of the previous research compared learners' academic achievement in terms of GPA

scores to their procrastination levels without considering their predetermined English proficiency levels (Balkis, 2006; Şenlik, 2020; Mocan, 2022). Therefore, this study aims to fill this gap in the literature and provide valuable data for future research.

Another major finding of the current research study is that a significant relationship exists between FLA and student's English proficiency. It was revealed that B2 level students had significantly more language anxiety ($M = 95.29$) than A1 ($M = 87.86$), A2 ($M = 88.49$), and B1 level ($M = 89.75$) students at 0.05 level. This finding supports the idea that advanced students, who are more competent in L2, experience higher levels of language anxiety compared to those of less proficiency.

This result confirms Kitano (2001), Llina and Garau (2009), Batumlu and Erden (2007), and Elkhafaifi's (2005) studies, which also found that advanced-level learners had statistically higher levels of FLA compared to beginner levels. In his study, Kitano (2001) revealed that advanced language learners had higher levels of anxiety than elementary and intermediate-level students. Similarly, Llina and Garau (2009) detected that advanced students obtained higher scores on FLCAS than beginner and intermediate learners. The result of the current study is also in line with the study conducted by Batumlu and Erden (2007) in Turkey, which concluded that C-level students experienced higher language anxiety compared to A- and B-level students.

On the other hand, there are other studies suggesting different results, such as Tianjian (2010), Arnaiz and Guillén (2012), and Altunel's (2018) studies, which proposed that as the proficiency level of language goes up, the level of foreign language anxiety decreases. For instance, Arnaiz and Guillén (2018), in their study with 216 Spanish EFL learners, stated that lower proficiency level groups were noticeably more anxious than higher proficiency ones. The researchers suggested that this was due to the fear of the novelties and having less control over them. In addition to these studies, there are also others that have found no significant difference in FLA levels based on language proficiency even though upper levels had higher FLCAS mean scores (Onwuegbuzie et al., 1999; Liu, 2006; Nahavandi & Mukundan, 2013; Dung & Hung, 2020).

Regarding the current study's context, one possible explanation for the significant difference in FLA scores between B-level and A-level students could be the increased difficulty of the language instruction they receive. While A1 and A2 levels focus on studying basic daily communicative skills and may include occasional Turkish explanations, B-level instruction aims to develop more authentic and academic language skills in an exclusively English environment. This heightened difficulty in advanced classes may cause some students to experience more anxiety than they did at lower levels (Kitano, 2001, p. 558). Additionally, the more challenging exams and the approaching proficiency exam at these levels may contribute to a higher level of test anxiety compared to other levels. Another key factor could be the extent of the learners' knowledge. Upper-level students, having acquired more language knowledge, are more likely to notice their own mistakes in production (p. 558). When they become aware of these errors, especially with simpler expressions, they may feel embarrassed, leading to increased anxiety. Lastly, some advanced-level teachers might not be as generous in giving praise or positive reinforcement as teachers at lower levels because they have a heavier program with higher expectations, which may have caused higher levels of anxiety in B-level groups (p. 558). Since these findings may not be applicable to all foundation and state universities, it would be more appropriate to consider them in the context of the specific university involved in the study.

Finally, when proficiency level and mindfulness scores were investigated, the results indicated that, interestingly, A1 level students had the highest mindfulness mean score ($M = 59.75$), followed by B1 ($M = 56.61$), and A2 levels ($M = 55.92$) while B2 level students obtained the lowest mean score ($M = 54.81$). The ANOVA test showed that this difference was also significant ($p = 0.21$).

When the relevant literature was examined, it was seen that the studies focusing on mindfulness levels according to language proficiency were non-existent. Similar to what was discussed regarding academic procrastination, the present study will provide valuable findings for the field of SLA considering the proficiency and mindfulness levels of language learners.

The fact that higher-level groups obtained lower mindfulness scores in the current study could be explained by the level-specific challenges and academic

burnout. Since B-level students are closer to taking the proficiency exam, they have a heavier workload and feel more pressured and stressed, which may have also affected their state of mindfulness during the data collection period. Another reason for this difference could be that MAAS intends to discover the level of mindfulness in general. Therefore, the items describe everyday experiences rather than those particular to language learning. This situation also highlights the need for a mindfulness scale specifically designed for educational contexts.

5.3 RQ3: Is There a Significant Relationship Between Academic Procrastination, FLA, and Mindfulness?

The third research question examined the relationship between academic procrastination, foreign language anxiety, and mindfulness. To analyze the results, the Pearson correlation coefficient was conducted.

Considering the results of the study, there is a moderate level, positive correlation between academic procrastination and foreign language anxiety ($r=.664$). Thus, it can be inferred that when students' FLA levels increased, their tendencies to procrastinate increased or vice versa. This finding aligns with several previous research studies conducted by Zhang and Zhang (2002), Yurtseven and Akpur (2018), Erdoğan (2016), and Akpur (2017). It also supports several theories suggesting procrastinators often suffer from anxiety (Burka & Yuen, 1983; Ellis & Knaus, 1977) and those indicating that anxiety can foster procrastination tendencies (Ferrari et al., 1995; Sirois & Pychyl, 2013; Tice & Bratslavsky, 2000).

However, it is important to add that, although academic procrastination and FLA are studied frequently in the literature, the majority of these studies examine them individually or with different variables. Since studies regarding the relationship between academic procrastination and FLA are limited, it is difficult to establish a solid, scientific connection between these variables. Therefore, it can be argued that the current study's findings obtained in this regard may contribute to the existing literature. This finding also highlights the importance of treating such behaviors and emotional conditions in language classrooms with more awareness of their interrelationship.

Another result obtained from the correlational findings was that there is a significant negative relationship between mindfulness and FLA at a moderate level ($r = -.411$). In the literature, there are many studies supporting the negative correlation between mindfulness and FLA (Fallah, 2017; Charoensukmongkol, 2019; Morgan & Katz, 2021; Gao, 2023; Geng, 2021; Gordani & Sadeghzadeh, 2023; Koçali, 2020). Therefore, it can be said that the negative relationship between mindfulness and foreign language learning anxiety revealed in the current study is consistent with the literature.

Additionally, in this study, mindfulness was treated as a trait. When examining studies where mindfulness is approached as a skill that can be developed, it is also observed that mindfulness techniques can be beneficial in language classrooms and have a significant effect on foreign language anxiety (Fibriasari & Tambunan, 2022; Thomas, 2022; Önem, 2015; Öz, 2017; Tasan et al., 2021). For instance, Thomas (2022) employed a 5-minute mindfulness meditation technique in a group of 15 students, which was observed to alleviate learners' stress before writing activities. Similarly, in Öz's study (2017), a 6-week mindfulness intervention helped reduce FLA and increase willingness to communicate among language learners.

A common explanation for this is that people with higher levels of mindfulness can handle stressful situations well since mindfulness enables them to recognize their emotions, inner thoughts, and experiences in the present moment in an accepting and nonjudgmental way (Brown & Ryan, 2003; Kabat-Zinn, 1994). Another plausible explanation is that higher levels of mindfulness are positively linked to enhanced emotion regulation abilities (Chambers et al., 2008, p. 305). This suggests that mindful learners are better able to control their emotional reactions to the negative experiences that they experience in language classrooms, such as test anxiety, communication apprehension, and fear of negative evaluation. These findings can also be understood by considering that mindfulness can reduce rumination (Ramel et al., 2004, p. 448). EFL learners who are less mindful might be fixated on negative thoughts, such as fear of making mistakes and failing while speaking or studying for a test, which can reduce their self-esteem and trigger anxiety. However, if learners are more mindful, they may be better able to focus on their learning and performance without spending time dwelling on potential negative outcomes, and, thus, experience less anxiety (Langer,

2000, p. 220). In other words, when fully present in the moment with awareness and acceptance, mindful EFL learners can stay more focused on their tasks and let go of distracting thoughts, thereby calming their anxious minds.

Finally, it has been found that there is a significant negative relationship between academic procrastination and mindfulness levels among students ($r = -.378$). This suggests that, as the mindfulness levels of university students increase, their academic procrastination levels decrease.

Upon reviewing the relevant literature, only a few studies (Eltayeb, 2021; Özgür, 2024) have been found to directly address the negative relationship between academic procrastination and mindfulness among university students. However, many other studies indirectly support this finding through mediation analyses with other variables and mindfulness interventions. For instance, Serrano et al. (2022) explored the influence of social media use on academic procrastination and the role of mindfulness as a mediator. The findings revealed a statistically significant relationship between procrastination and mindfulness. Moreover, Rad et al. (2023) investigated the impact of mindfulness training on reducing procrastination among 36 Iranian students, and the results showed that mindfulness training can increase self-regulation skills while decreasing negative emotions, which reduces procrastination tendencies. In Özgür's (2004) study with 400 university students, a moderate and negative correlation was found between procrastination and the cognitive-emotional model of mindfulness. Therefore, it can be said that the results of the current study in this regard are consistent with the literature.

These results may also be discussed from a SLA perspective as mindfulness may influence academic procrastination in language learners through several mechanisms. As mentioned before, participants in this study go through an intense language program in which tasks get especially demanding as the proficiency level goes up, and this can cause distress in students. Ultimately, students with poor self-regulation may procrastinate as a way to manage their negative feelings toward a task (Sirois & Pychyl, 2013, p. 115). In this case, mindfulness can assist in improving emotion regulation by cultivating present-moment awareness, a nonjudgemental stance against negative thoughts and emotions, help individuals engage in more goal-

oriented and adaptive attitudes toward academic tasks (Bishop et al., 2004, pp. 236-237).

Overall, while the connection between academic procrastination and mindfulness is intricate and multifaceted, the current and aforesaid findings suggest that mindfulness may serve as a valuable tool for managing anxiety and procrastination, and promote academic success in foreign language classrooms. However, more research is needed to better understand the mechanisms underlying these relationships and to create evidence-based interventions for students. The current study's design does not permit causal conclusions, so future research should focus on manipulating mindfulness levels to see if any changes impact the relationship between FLA and procrastination.

5.4 RQ4: What Are Learners' Opinions About Academic Procrastination and FLA?

The fourth research question aims to investigate the opinions of EFL learners on academic procrastination and foreign language anxiety. The qualitative data were collected through semi-structured focus group interviews to gain deeper insight into the common academic areas of procrastination and FLA as well as their reasons. The data were analyzed through thematic analysis. The findings are compared and contrasted with the findings of relevant studies in the literature.

Firstly, the common tasks that students procrastinated and felt anxious about were mostly regarding speaking and writing skills. Uzun-Özer (2005), Solomon and Rothblum (1984), and Onwuegbuzie (2004) found similar results in their studies, where writing assignments were one of the themes that emerged as commonly procrastinated. More importantly, students mentioned that they especially got anxious during tasks that required them to speak English in class, and this also led them to postpone their preparations for these tasks. This was also the case for a significant number of other studies (Aida, 1994; Onwuegbuzie et al., 1999; Horwitz et al., 1986; Kitano, 2001; Price, 1991; Mejias et al., 1991; Koch & Terrell, 1991). For instance, in Koch and Terrell's (1991) study, students reported feeling the most anxious in speaking activities with an audience, such as oral presentations and role-playing. The analysis of the interviews in Ohata's qualitative study (2005) yielded similar results with

students claiming speaking to be more anxiety-provoking due to it being spontaneous and time-limited compared to writing tasks. As Solomon and Rothblum (1984) suggest, the reason for these tasks to be most procrastination and anxiety-inducing is that they are likely to be viewed as the most important to students, and they might have the greatest impact on their academic life (pp. 505-506). Other tasks, such as listening and reading comprehension or in-class attendance, may have less severe consequences in case of failure, thus, making it more possible for them to cause procrastination and less to feel anxious about. These findings also strengthen the positive correlation between academic procrastination and FLA by suggesting that the same tasks that students procrastinated on were the ones that caused the most anxiety for them.

In regards to the factors influencing academic procrastination, the results emerged three interpretable themes, which were psychological, behavioral, and external factors. In the psychological factors theme, the frequently mentioned codes were a sense of incompetence, lack of motivation, and anxiety. Students mentioned feeling inadequate because they were inexperienced in L2, lacked confidence, or feared failing. Moreover, they expressed that they procrastinated as a way to avoid or suppress negative emotions like anxiety. Some also said that they lacked the will to study or were disinterested in the given assignments. Consistent with these findings, the literature shows that academic procrastination stems mostly from internal and irrational thought processes, such as fear of failure, as well as psychological states such as anxiety (Knaus, 2002; Ferrari et al., 1995; Uzun-Özer, 2005; Senecal et al., 1995). In many studies, fear of failure was linked to the cognitions such as feeling academically inadequate (Ferrari et al., 1995; Knaus, 2000), having perfectionistic standards for one's performance (Onwuegbuzie, 2004; Solomon & Rothblum, 1984; Yurtseven & Akpur, 2018), and lacking self-confidence in achieving success (Tuckman, 1991). Onwuegbuzie (2004) also found that academic procrastination resulting from fear of failure was related to higher levels of anxiety. Therefore, the qualitative findings of the present study were in line with its quantitative findings, which revealed a positive link between academic procrastination and FLA, as well as the up-to-date literature.

In the behavioral factors theme, students talked about ineffective planning, study habits, and better performance. Some students highlighted that they often failed

to plan appropriately or manage their time while some others reflected that procrastination was a long-term habit that they couldn't break. On the other hand, a few students also mentioned using procrastination as a strategy for improved focus, creativity, and performance. These findings are in support of the literature, which suggests that students who have poor self-regulatory skills tend to exhibit procrastination (Steel, 2007; Pintrich, 2000; Ferrari et al., 2007). In Kachgal et al.'s study (2001), students reported that problems with time management, balancing academic and leisure activities, and poor study skills were the major reasons for procrastinating. Johnson and Bloom (1995) also explained this further by suggesting that exercising self-control is closely associated with how responsible and determined a person is (p. 131). Furthermore, the present research also confirms the previous ones where procrastination was claimed to have adaptive benefits (Chu & Choi, 2005, p. 247) and that not every delay results in procrastination (Balkis, 2006, p.13).

In the external factors theme, task characteristics, environmental distractions, and lack of supervision were referred to as causes of procrastination. Students emphasized that they tend to procrastinate on tasks that are too difficult, boring, or annoying for them, although a few admitted that they often overexaggerate or underestimate a task's demand. Low-proficiency students mentioned that lacking teacher support caused them to procrastinate. Lastly, participants talked about the social environment by referring to the excessive use of smartphones, being distracted by external sounds, and being influenced by peers' actions. Several studies indeed found that students put off academic tasks due to task aversion and conflictive environment (Solomon & Rothblum, 1984; Uzun-Özer, 2005; Migram et al., 1994; Kachgal et al., 2001). For instance, Solomon and Rothblum's study (1984) found the aversiveness of the task to be the second most accounted factor with students expressing that they procrastinate on the tasks which they found unpleasant (p. 508). Since overcoming boredom and frustration requires self-regulation (Kuhl, 1994, as cited in Blunt & Pychyl, 2000, p. 161), those who lack emotional control often seek distracting activities (Sirois & Pychyl, 2013, p. 121). These findings can also be discussed through the mediating role of mindfulness. Since mindful learners are better able to deal with negative emotions through awareness and acceptance (Brown &

Ryan, 2003; Langer, 2000), it is possible to interpret these comments about regulatory failures by referring to the 'slightly mindful' state of the participants in this study.

As seen in the present and other studies mentioned above, factors that influence procrastination behavior vary according to person. It is also worth mentioning that findings regarding reasons for procrastination could be affected by the sample and the procedures employed for collecting data. This also highlights the importance of the cultural effects on procrastination. Although the methods used in the present study are similar to some others mentioned, the population is different. Overall, it can be inferred that academic procrastination is not a fixed personality trait; rather, it is a volatile behavior that is influenced by the individual and their surrounding context.

Another interview question in the qualitative part of the study was the factors increasing the level of FLA. The comments were gathered under three themes: fear of negative evaluation, erroneous beliefs and attitudes, and classroom procedures. Under the fear of negative evaluation theme, making errors and peer criticism emerged as frequent codes. Students expressed that they feared making mistakes in front of their teachers and classmates because of the possibility of being criticized or mocked, which prevented them from participating in class. They added that when they make a mistake, they often feel embarrassed. Within the erroneous beliefs and attitudes theme, a sense of inadequacy, procrastination, and perfectionism were discussed. Students mentioned that they felt insufficient while performing because they compared their language abilities to that of others, especially their peers. Moreover, they said that, while aiming for perfect fluency and accuracy, they felt anxious due to falling behind their expectations. Some students also experienced anxiety when they couldn't follow their study plans and procrastinated, which caused even more anxiety. Finally, regarding classroom procedures, difficulty of tasks, differences between L1 and L2, being unfamiliar with the content, and public speaking were the generated codes. Students talked about the difficulty of speaking tasks due to their spontaneity, which does not allow enough time for error correction. They also expressed the differences between Turkish and English in terms of grammar and spelling, which added to the challenges of the task, and left them with anxiety. Furthermore, being unfamiliar with the procedure or contents of a task made students anxious but with practice, they felt more

relaxed. Lastly, some students discussed how their anxiety is deeply affected by having to speak in front of others during oral tasks and role-playing activities.

As can be seen from the abovementioned results, anxiety is partly associated with the individuals' irrational beliefs about themselves and the language learning procedures. In similar studies (Aida, 1994; Horwitz et al., 1986; Kitano, 2001; Ohata, 2005; Gregersen & Horwitz, 2002; Yurtseven & Akpur, 2018), it was also found that fear of negative evaluation, fixed beliefs about language learning, and classroom procedures had substantial effects on the level of anxiety in the foreign language learning classrooms.

In EFL classes, students frequently compare their language abilities to those of their peers, teachers, and native speakers (Young, 1991, p. 427). Good pronunciation is often a key criterion students use to assess their own language skills (Price, 1991; Yurtseven & Akpur, 2018), as some participants mentioned during the interviews in this study. When students notice discrepancies between their pronunciation and that of others, they may become hesitant to speak in class and feel anxious when required to do so. Moreover, when their teachers are native speakers (as was the case for some in this study), or when students are exposed to error-free samples of texts and audio, they might set their goals as high as native speaker proficiency. This unrealistic expectation can lead them to view their own abilities as inadequate, resulting in increased anxiety (Gregersen & Horwitz, 2002; Önem, 2015). To alleviate this, students could benefit from more exposure to speakers who are not necessarily advanced or native but still function effectively in the target language. This could help them understand that perfection is not necessary and that making mistakes is a natural part of the learning process.

Since foreign language instruction openly showcases the performance of everyone in the classroom, it is likely that most FL students will become inevitably aware of how their performance compares to that of their peers. As Mejias et al. (1991) found out, communication apprehension was more intense in formal situations, such as speaking in front of an audience, but was less pronounced in personal communication settings, like pair work or small-group interactions. In a similar study by Liu (2006), it was concluded that the fear of negative evaluation by peers and

teachers was most frequently experienced when students were singled out to speak English in class, which later caused them to remain passive to avoid feelings of anxiety. Many learners have a strong desire to make a positive social impression on others, particularly on their peers (Milgram et al., 1994; Aida, 1994). They often attempt to achieve it through speaking, which can lead to anxiety when they feel they lack proficiency in this skill (Kitano, 2001, p. 550). The fear of being watched or judged by their peers intensifies the anxious learners' concern about appearing incompetent or funny (Yurtseven & Akpur, 2018, p. 109). In the current study, the students may have produced similar thoughts, perceiving their peers in the classroom as harsh judges and critics of their mistakes.

Overall, these findings suggest that more in-depth research is necessary to understand how individuals struggle with the internal causes of anxiety in the foreign language learning process. Unfortunately, this study did not incorporate a more objective measure of evaluating students' performance, such as reflective journals from teachers or observation notes from the researcher, to compare with students' self-evaluations. Including such measures in future studies could provide valuable insights into this issue. Further pedagogical implications and recommendations are discussed in the following sections.

5.5 Pedagogical Implications

This study aimed to explore the levels of academic procrastination, FLA, and mindfulness, and their relationship among a sample of Turkish university students. The results revealed that students had low levels of procrastination and moderate levels of FLA and mindfulness. More importantly, it highlighted the notable differences in these variables according to L2 proficiency as well as their significant relationships with one another. The results of the interviews also reported the various factors influencing students' academic procrastination and FLA, while also supporting the connection between these constructs. These findings could offer valuable insights for university students, educators, practitioners, and administrators, helping them recognize the challenges students encounter and leverage their skills to address them. Below are some implications that can be derived from the results of this study.

To begin with, in line with this study's quantitative and qualitative findings, it can be stated that anxious students may struggle to keep up with their academic tasks. In this regard, teachers play a crucial role. As Horwitz et al. (1986) suggested, before attributing students' procrastination to a lack of ability or laziness, teachers should consider the possibility that anxiety might be the underlying cause of their poor performance (p. 131). By recognizing students who are dealing with anxiety, teachers, and institutions may be able to assist them in managing this challenging situation by suggesting potential strategies.

The current study also revealed that students with lower levels of mindfulness tend to experience higher levels of FLA and procrastination. This is supported by existing studies proposing that mindfulness practices, both inside and outside the classroom, are an alternative approach to mitigate the negative effects of anxiety and procrastination (Langer, 2000; Brown & Ryan, 2003; Hyland, 2009). EFL learners are often riddled with multiple concerns simultaneously, including academic, personal, and financial challenges, all of which can contribute to anxiety. In this context, mindfulness can help EFL students clear their minds of disorienting fears or worries, allowing them to concentrate better on their tasks, and ultimately creating a more comfortable learning environment.

As the qualitative results show, a significant source of FLA includes concerns about the future, with many students stating that they experience these due to the fear of being penalized or criticized for their poor performance. This anxiety about undesirable future outcomes can distract students from focusing on their current studies and tasks, as they are preoccupied with the uncertainty and potential consequences of failure. To help EFL learners manage this type of anxiety, mindfulness practices can be effective, as mindfulness emphasizes living in the present rather than dwelling on the past or possible future experiences. Thus, the key is for learners to understand the sources of these emotions and then develop effective coping strategies to manage them appropriately. These skills are not only valuable for handling the routine stresses of university life but also serve as lifelong competencies that can assist them through various challenging situations, including those in the workplace, family life, and social environments.

Since mindfulness is not an inherent trait that some people have and others lack (Bishop et al., 2004, p. 234), policymakers and administrative staff should consider creating opportunities and designing activities to incorporate mindfulness practices into schools and classrooms. This could help improve students' mindfulness levels to reduce their anxiety and procrastination. For instance, language education departments could offer extracurricular programs led by expert mindfulness instructors, where EFL learners can learn practical techniques such as meditation, yoga, and tai chi. These practices can help create a relaxed mental state, manage and address anxiety, and improve task engagement. It is also highly recommended that syllabus designers include content that promotes and encourages mindfulness through various treatments and interventions that specifically target FLA and academic procrastination.

In line with this, teachers might also implement activities designed to help students recognize their strengths and weaknesses, allowing for the development of strategies to manage FLA and maladaptive study habits. Mindfulness can be incorporated into EFL classes, even in small segments of the lesson. For example, music is often used in mindfulness practices; a light, calming tune can help students concentrate better and feel more at ease in the EFL classroom (Önem & Ergenç, 2013, as cited in Önem, 2015, p. 144). Another method to promote relaxation can be using scents in the classroom, which Önem (2015) found to positively impact FLA as well as vocabulary learning among EFL students. Tasan et al. (2021) also found that a 5-minute breathing exercise alleviated FLA levels of learners.

Research on mindfulness in regard to FLA is relatively new, with only a few studies exploring its application in EFL classes. Therefore, there is limited understanding of how to implement mindfulness effectively in these settings and what potential outcomes might arise. To address this, mindfulness can be included in teacher training programs, both through pre-service education and in-service training. Teachers should be provided with the necessary materials and guidance to integrate mindfulness techniques into their language classes. It is important to recognize that teachers do more than teach subject matter; they also support students cognitively and emotionally. Therefore, attending workshops and conferences is crucial for instructors to stay updated on the latest research and practices in the field of ELT.

In summary, these findings suggest that mindfulness practices can lead to improved mental well-being and healthy behaviors. When students learn to regulate their emotions and navigate their own language-learning journey, managing the dynamic and complex process of language acquisition becomes more manageable. With substantial evidence supporting the benefits of being mindful and the effectiveness of mindfulness training, this research concludes that mindfulness training could serve as an additional intervention to help students reduce FLA and overcome procrastination tendencies, ultimately aiding their success in learning a language.

5.6 Conclusions

The present research's objective was to investigate the levels of academic procrastination, FLA, and mindfulness, and their relationship among students in the English preparatory school of a foundation university in Turkey. To achieve this purpose, quantitative and qualitative data were collected from 807 participants during the 2023-2024 academic year. After analyses, the following conclusions were made in accordance with the research questions:

- 1) Turkish EFL learners studying at university experienced a low level of procrastination, moderate level of anxiety, and moderate level of mindfulness.
- 2) Learners' levels of academic procrastination, FLA, and mindfulness were not affected by their gender. However, these were influenced by learners' L2 proficiency. Specifically, students possessed less mindfulness and experienced significantly more anxiety as their proficiency level increased.
- 3) There was a notable positive relationship between academic procrastination and FLA, while mindfulness was negatively correlated with both procrastination and anxiety.
- 4) Students mostly procrastinated on tasks related to speaking and writing skills, which were also the ones that triggered the most anxiety. The major reasons for procrastination were ineffective planning, a sense of incompetence, and negative task perceptions. The main factors that induced anxiety in the EFL classroom were fear of making mistakes, self-perceived low competence, and task difficulty.

In conclusion, while many studies have explored academic procrastination, foreign language anxiety, and mindfulness individually or their effects across different variables, this study represents an initial effort to investigate these three constructs together within an EFL context. The findings from this study can provide valuable insights for guiding future research, which will be discussed in the final section.

5.7 Recommendations for Future Research

Based on the present study's findings and limitations, several recommendations for future research can be made.

First, regarding data collection tools, while the MAAS is a relevant and reliable instrument used in mindfulness research (Charoensukmongkol, 2019; Fallah, 2017; Öz, 2017), its application in the context of foreign language learning is limited. Developing a mindfulness scale specifically tailored to the dynamics of foreign language learning could be highly beneficial.

Additionally, this study was conducted with 807 university students at a preparatory school in a Turkish foundation university, which means the findings may not be generalizable to all foreign language learners. Future research involving larger and more diverse samples could provide insights into other aspects of foreign language anxiety. For example, comparisons could be made between state and foundation universities, universities in different cities, or across different age groups to offer new perspectives.

Future studies should also consider other demographic variables, such as the amount of time spent learning a second language or experiences visiting foreign countries. Examining how socio-cultural values influence language learning could also be insightful. Additional cognitive and psychological variables like emotional intelligence, self-regulation, cognitive flexibility, and self-efficacy may also be explored.

Experimental and longitudinal studies focusing specifically on how mindfulness techniques can reduce foreign language anxiety and academic procrastination would provide a deeper understanding of how mindfulness affects these issues among university students. Although the causes of procrastination and

anxiety are well-documented, further research is needed to explore how individuals can cope with these challenges through mindfulness in the context of foreign language learning.

In summary, future research should take a multidisciplinary and intersectional approach, employing longitudinal and experimental designs with diverse samples. Addressing these recommendations will enhance our understanding of the complex interactions between demographic factors and psychological tendencies, ultimately leading to more effective, evidence-based interventions and improved well-being across various populations.



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