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Beyond Language Ability: The Omnipresent Test Anxiety in Tertiary EFL Preparatory Schools

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Abstract

High-stakes testing environments frequently trigger test anxiety, a well-acknowledged phenomenon significantly influencing foreign language acquisition. While this has been studied globally in recent years, there is limited research investigating how test anxiety interacts with specific learner variables in Turkish preparatory schools. This study explores the nature of test anxiety, including its triggers and consequences, among Turkish EFL learners in higher education. To achieve this, a concurrent mixed-methods design was adopted, and 391 EFL learners at a preparatory school of a university in Turkey completed the Test Anxiety Scale (Sarason, 1984) along with four open-ended questions, investigating the sources, effects, and coping strategies. Descriptive statistics were used for the quantitative data, while thematic analysis was employed for the qualitative data. Quantitative results indicate that Turkish EFL learners exhibit moderate levels of anxiety, with female students experiencing higher anxiety compared to male students. Four major themes were discovered, revealing that fear of failure, family pressure, and concerns about future academic careers were among the major causes of test anxiety. This research underscores the importance of developing new methods to deal with test anxiety by suggesting a paradigm shift towards a system which supports more alternative assessment methods, such as portfolios and projects.

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Keywords: Assessment literacy; EFL learners; High-stakes testing; Preparatory school; Text anxiety

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Introduction

In today's educational environment, exams and performance tests are the primary indicators which determine a student's academic success or failure (Majidifar & Oroji, 2015). Encouraging academic success is the main objective of educational institutions; however, institutional and affective factors frequently undermine the validity of these evaluations. Anxiety, which can seriously hinder effective thinking and prevent students from reaching their full potential, often constitutes the biggest obstacle for students to demonstrate their true language competency rather than a lack of linguistic knowledge, to achieve good grades (Gregersen et al., 2014). According to prior studies, between 15 and 22% of students report having significant levels of anxiety during their time in school (Thomas et al., 2017). As a result, prior research suggests that anxiety has become a key factor in language instruction (Tran, 2012) since its degree and intensity can lower learning quality and negatively impact students' test scores (Cassady, 2010; Joy, 2013).

This relationship between assessment and anxiety is particularly evident in exam-oriented countries like Turkey (Gursoy & Arman, 2016). Turkish students start their higher education after a period of arduous and exhausting preparation for the high-stakes university entrance exam. They continue experiencing further challenging assessment procedures in preparatory schools before they can commence their education in their departments. Therefore, test anxiety is not only a temporary emotional state which the students go through in this context but also a life-changing sentiment they need to develop mechanisms to deal with. This is important because this type of anxiety might have major consequences for students' academic careers, as it can disrupt their future career plans after graduation (MacIntyre & Gardner, 1989). Consequently, it is not surprising to see that many students are under a lot of stress, as they try to complete their compulsory year-long intensive English training successfully so that they can commence their studies at their departments.

There has been a plethora of research studies, both empirical and theoretical, on test anxiety; however, more research is warranted to better understand how it interacts with different learner variables, such as gender, age, and language proficiency. Generally, there is a tendency to believe that students who are at a higher level of language proficiency do not experience as much test anxiety as those who are at lower proficiency levels; however, this relationship might be more complicated and delicate in an exam-oriented country like Turkey. In this specific context, mandatory testing and assessment regulations shape language teaching

and learning at all levels of education. Therefore, the importance given to assessment in this high-pressure testing environment makes it more compelling to conduct more research into this phenomenon. Therefore, this study seeks to examine the nature of test anxiety among Turkish EFL learners at the higher education context by investigating its relationship with different learner factors, such as age, gender, and language proficiency level.

Literature Review

Test Anxiety (TA)

The cognitive and affective domains are the two fundamental areas of research for human learning. The first domain, the cognitive, concerns the psycholinguistic processes; the second domain, the affective, is related to emotions, feelings, and perceptions which shape a learner's efforts (Aydin et al., 2020; Chen & Chang, 2004). Among these affective factors, anxiety is a crucial component, which is defined as a psychological or emotional state. Key factors, such as worry, nervousness, and unease, typically in response to uncertain outcomes, characterise this emotional state of being (Risking & Rector, 2018; Spielberger, 1972).

Previous research studies have traditionally categorised anxiety into distinct types so that its impact on language learning could be better understood. For instance, Spielberger (1985) distinguished between two types of anxiety: trait anxiety refers to a stable personality characteristic, whereas state anxiety is based on a temporary condition which is dependent on specific circumstances. In the educational context, there is another categorisation of anxiety: facilitative and debilitating anxiety (Alpert & Haber, 1960). Facilitative anxiety can motivate learners positively so that they can prepare for the upcoming assessment more carefully. Conversely, debilitating anxiety significantly hinders student performance and success. (Ahmed, 2024; Akinmulegun & Kunt, 2017). The Affective Filter Hypothesis, which contends that excessive anxiety and stress might raise the affective filter and obstruct language acquisition in the process, is also consistent with this difference (Krashen, 1982). Since this filter is connected to emotions and feelings, encompassing motivation, attitudes, and anxiety (Du, 2009), there is an abundance of data in the literature which supports that a low emotion filter can easily facilitate language acquisition (Wang, 2020). Consequently, it is of utmost importance that learners overcome their anxiety to be successful (Wu, 2010), and reducing this affective filter makes sure that learners are prepared for the language learning process as long as the adverse effects of anxiety are nullified (Horwitz, 2001; Ni, 2012) because foreign

language anxiety can negatively impact students' emotions and performances (Kurtoğlu & Sabuncuoğlu, 2021).

Within language education, Horwitz et al. (1986) conceptualised foreign language anxiety as comprising communication apprehension, fear of negative evaluation, and test anxiety. Unlike the first two, which are associated with social interaction, test anxiety is directly linked to evaluative situations and learners' concerns about possible failure. Zeidner (1998) defines test anxiety as "the set of phenomenological, physiological, and behavioural responses that accompany concern about possible negative consequences or failure in an evaluative situation" (p. 25). From this perspective, test anxiety emerges when learners perceive test demands as exceeding their abilities, which may lead to avoidance, cognitive interference, and reduced performance (Cassady & Johnson, 2002; Putwain & Best, 2011; Zeidner, 2007). Given the central role of testing in EFL preparatory programmes, examining how learners experience and interpret test anxiety is essential for understanding assessment-related barriers to language learning.

Related Studies

A substantial body of research has examined the relationship between test anxiety (TA) and learners' academic or language-test performance. Overall, these studies suggest that TA is often associated with lower achievement, weaker test performance, and reduced confidence in evaluative situations. In the Turkish EFL context, Aydin et al. (2006), using the Test Anxiety Scale (Sarason, 1984) and open-ended questions, found statistically significant relationships between anxiety and learner variables, such as age, grade level, and achievement. Similarly, Salehi and Marefat (2014) reported a statistically significant negative correlation between test anxiety and language achievement, indicating that higher levels of TA were associated with lower test performance. This pattern is also supported by broader research showing that learners with higher anxiety tend to perform less successfully in language tests and academic evaluations (Segool et al., 2013; Tsai & Li, 2012; Zheng & Cheng, 2018). Taken together, these studies indicate that TA is not merely an emotional reaction to testing but a factor which can interfere with learners' ability to demonstrate their actual language competence.

Despite this general pattern, the relationship between TA and achievement is not entirely consistent across contexts. For example, Cakici (2016), who examined foreign language anxiety, test anxiety, and language achievement among Turkish EFL preparatory school students, found no significant relationship between TA and language achievement.

Similarly, Brady et al. (2018) reported findings that complicate the assumption that TA always directly predicts lower academic performance. These inconsistent results suggest that TA should not be treated as a uniform construct operating in the same way across all educational contexts. Rather, its effects may depend on the contextual factors, the stakes attached to assessment, institutional testing practices, and learner-related variables. Among these variables gender has received particular attention. Several studies have shown that female learners tend to report higher levels of TA than male learners (Birjandi & Alemi, 2010; Cakici, 2016; In'nami, 2006), although findings are not fully unanimous. In comparison, the roles of age and proficiency levels appear to be less conclusive, especially in EFL preparatory-school contexts where learners are placed in different proficiency groups but are still subject to the same high-stakes assessment system.

Therefore, the existing literature points to three important gaps. First, while many studies have examined the relationship between TA and academic performance, fewer studies have focused specifically on how TA is experienced in tertiary EFL preparatory schools, where assessment is frequent, compulsory, and closely connected to students' academic progression. Second, although gender, age, and proficiency level have been explored in previous studies, their relationship with TA remains insufficiently clear in highly exam-oriented contexts, such as Turkey. Third, quantitative findings alone may not fully explain why learners experience TA, how it affects them, or what kinds of coping strategies they develop. Responding to these gaps, the present study investigates Turkish EFL preparatory school learners' TA levels, examines whether these levels differ according to selected learner variables, and explores learners' own accounts of the sources, effects, and management of test anxiety. Accordingly, the study seeks to answer the following research questions:

1. What are the overall test anxiety levels of Turkish EFL learners in a tertiary preparatory-school context?
2. Do learners' test anxiety levels differ according to gender and proficiency level, and are they associated with age?
3. What sources, effects, and coping strategies do Turkish EFL learners report in relation to test anxiety?

Methodology

Research Design

This study was guided by a pragmatic mixed-methods orientation, as the research questions required both measurable patterns of test anxiety and contextualised accounts of learners' experiences (Cohen et al., 2017). A purely quantitative approach would have been insufficient to explain how learners interpreted the sources and consequences of their anxiety, while a purely qualitative approach would not have allowed the researcher to examine overall anxiety levels or their relationship with selected learner variables. Therefore, a concurrent mixed-methods design was adopted (Creswell, 2015; Creswell & Plano Clark, 2011).

In this design, quantitative and qualitative data were collected during the same data-collection phase. The quantitative strand, based on the Test Anxiety Scale (Sarason, 1984), aimed to identify learners' overall test anxiety levels and examine whether these levels differed according to gender, age, and proficiency level. The qualitative strand, based on four open-ended questions added to the questionnaire, aimed to explore learners' own perceptions of the sources, effects, and coping strategies related to test anxiety. The two strands were first analysed separately and then integrated at the interpretation stage. Specifically, the qualitative findings were used to explain and elaborate the quantitative results by showing why learners experienced test anxiety, how it affected them, and how they attempted to manage it within the high-stakes assessment context of the preparatory school. This integration allowed for a more comprehensive understanding of test anxiety than either dataset could provide alone.

Research Context and Participants

The study was conducted at a school of foreign languages of a state university in Turkey, where EFL learners complete a compulsory preparatory English programme before beginning their departmental studies. The setting was relevant to the purpose of the study because students are assessed through both continuous assessment components, such as quizzes, in-class tasks, and homework checks, and higher-stakes examinations, including midterm, final, and end-of-year proficiency exams. The proficiency exam is particularly important because it determines whether students can successfully complete the preparatory programme and proceed to their departments.

Convenience sampling was used because the researcher had access to intact classes in the target institution (Mackey & Gass, 2022). At the time of data collection, the population

consisted of 910 EFL students from different departments. A total of 391 students participated in the study. The sample included 231 female students and 160 male students, and the participants were between 17 and 21 years old ($M = 19.06$). They were enrolled in four proficiency levels: A/high-intermediate ($n = 83$), B/intermediate ($n = 91$), C/pre-intermediate ($n = 109$), and D/elementary ($n = 108$). Table 1 presents the demographic information of the participants.

Table 1. *Information regarding the participants of the study*

Demographic information	Category	<i>n</i>	Percentage
Gender	Female	231	59.1%
	Male	160	40.9%
Age	17	26	6.6%
	18	96	24.6%
	19	137	35.0%
	20	89	22.8%
	21	43	11.0%
Department	Economics	161	41.2%
	Communication	128	32.7%
	Letters	38	9.7%
	Education	28	7.2%
	Other	36	9.2%
Proficiency level	A (High intermediate)	83	21.2%
	B (Intermediate)	91	23.3%
	C (Pre-intermediate)	109	27.9%
	D (Elementary)	108	27.6%

As shown in Table 1, the sample included learners from different departments and proficiency levels. Department information is reported to provide a fuller description of the participant profile; however, it was not treated as an analytical variable because the research questions focused on gender, age, and proficiency level.

Data Collection Tools

The data were collected through a questionnaire consisting of three sections. The first section included demographic questions about participants' gender, age, department/faculty, and proficiency level. The second section included the Turkish version of the Test Anxiety Scale (TAS), originally developed by Sarason (1984) and adapted into Turkish by Aydin et al. (2006). The Turkish version was preferred to ensure that participants could respond to the items without language-related difficulty. The scale consisted of 22 items rated on a five-point Likert

scale, ranging from 1 (“never”) to 5 (“always”). In the present study, the internal consistency of the scale was high, with Cronbach’s alpha calculated as .926 for the current sample.

The third section included four open-ended questions designed to elicit learners’ views about test anxiety. These questions focused on (1) whether they experienced test anxiety, (2) what they perceived as the main causes of their anxiety, (3) how test anxiety affected them, and (4) what strategies or institutional measures could help them cope with it. The open-ended questions were developed in line with the research questions and the relevant literature on test anxiety. To enhance content relevance and clarity, the questions were reviewed by one ELT professor and two colleagues working in the preparatory school context. Based on their feedback, minor wording revisions were made to the open-ended questions to make them clearer and more accessible to the participants. No changes were made to the items of the Turkish Test Anxiety Scale. Participants were allowed to answer the open-ended questions in Turkish so that they could express their experiences and emotions without being limited by their English proficiency.

Data Collection Procedure

Before the data collection, ethical approval was obtained from the University Social Sciences and Humanities Ethics Committee (Approval No. [812259], [26.11.2024]). Following the ethical approval, a research permit was also obtained from the preparatory school in which the study was going to be conducted. The researcher contacted colleagues and asked for permission to administer the questionnaire in these classes. Because individually reaching out to participants was not feasible, students in these intact classes comprised the sample. Before the scale was administered, students were briefly informed about the procedure and told that their participation was voluntary and would have no effect on their grades. The researcher administered the scale in each class and thanked the teachers of the classes individually. It took 15-20 minutes to finish answering the questionnaire.

Data Analysis

The data analysis procedure took two stages because of the mixed-methods design of the study. Quantitative and qualitative data analysis aimed to examine the nature of test anxiety of Turkish EFL learners in higher education and its relationship with gender, age, and proficiency levels. Initially, descriptive statistics were calculated to determine the participants’ overall test anxiety levels and item-level response patterns. To examine the relationship

between test anxiety and learner variables, point-biserial correlation was used for gender because it was coded as a dichotomous variable, while Pearson's correlation coefficient was used for age because it was treated as a numerical variable. A one-way ANOVA was conducted to compare test anxiety scores across the four proficiency levels, as proficiency level consisted of more than two independent groups. Statistical significance was set at $p < .05$ for these tests. Before conducting the inferential analyses, the distribution of the test anxiety scores was examined through skewness and kurtosis values. The values fell within the acceptable range of -1.5 to +1.5, suggesting that the data were approximately normally distributed (Demir, 2022). Therefore, parametric tests were considered appropriate for the quantitative analyses.

To complement and support the data gathered from the scale, data from the open-ended questions in the scale were analysed in relation to the research questions of the study. Thematic analysis was implemented to analyse the answers which the participants wrote at the end of the scale (Braun & Clarke, 2006). This analysis followed the six-step framework (Figure 1). The process started with familiarising with the data through repeated reading of the answers, followed by generating initial codes. In this step, noteworthy features and notes were identified across the dataset. These codes were then put into similar groups, aimed to search for themes. Next, the initial codes and themes were reviewed together, and they were checked against each other, followed by the defining and naming of the themes. Finally, the analysis was written, and key excerpts from the participants were included in the final report.

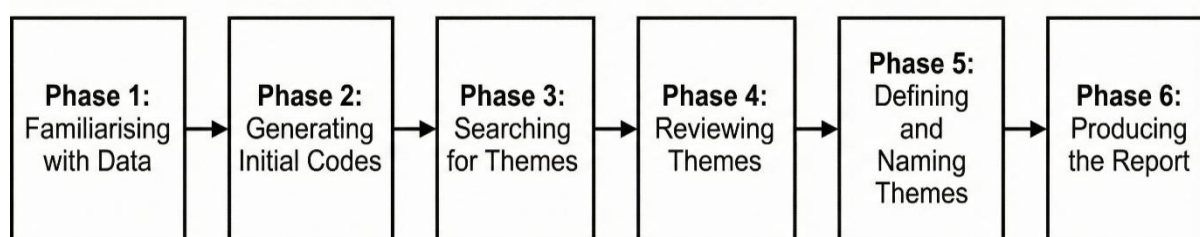


Figure 1. *Thematic Analysis (Braun & Clarke, 2006)*

To enhance the trustworthiness of the qualitative analysis (O'Connor & Joffe, 2020), approximately 25% of the open-ended responses were independently coded by another researcher in the field. Inter-coder agreement was calculated by dividing the number of coding decisions on which both coders agreed by the total number of coding decisions in the selected dataset. This comparison indicated more than 90% agreement. Disagreements were then discussed until consensus was reached, and the coding scheme was finalised accordingly.

Results

Quantitative Results

To address the first research question of this study, descriptive statistics were calculated the test anxiety levels of Turkish EFL learners in higher education. Each item in the Test Anxiety Scale was examined individually, and their mean scores, standard deviations, and standard error of the mean were analysed separately. Table 2 presents the item-level descriptive statistics for all 22 items of the Test Anxiety Scale, ranked from the highest to the lowest mean score.

Table 2. *Item-level descriptive statistics for the Test Anxiety Score*

Item	M	SD	SE mean
15. Tests bother me much.	3.62	1.226	.062
9. After the test, I feel I would do better.	3.49	1.132	.057
21. I worry when I am not prepared well.	3.37	1.391	.070
1. I worry while I am taking a test.	3.14	1.170	.059
4. During the test, I am thinking unrelated things about the class.	2.93	1.251	.063
5. I feel worried when I learned that I would take a test.	2.88	1.268	.065
11. During the test, I forget what I know.	2.82	1.196	.060
3. When I know that I will take a task, I do not feel confident and relaxed.	2.78	1.262	.064
16. I feel pressured by time limits during test.	2.77	1.297	.066
22. I feel crammed before an exam.	2.75	1.334	.067
14. During the test, I cannot be sure if I will succeed.	2.75	1.294	.065
20. I worry even when I am prepared well.	2.72	1.404	.071
2. While taking a test, I am thinking that other students are better than I am.	2.66	1.210	.061
6. During the test, I think I will fail.	2.62	1.148	.058
18. I would learn more if I should not have tests.	2.61	1.422	.072
10. During the test, my emotions affect my performance negatively.	2.60	1.240	.063
12. I feel worried when I study for a test.	2.57	1.283	.065
19. Tests affect my performance negatively.	2.46	1.276	.065
13. The more I work, the more confused I get.	2.28	1.254	.063
7. After the test, I feel worried.	2.12	1.222	.062
17. When I have bad grades, I study less.	2.10	1.222	.062
8. I cannot feel confident even if I have good grades.	1.87	1.245	.063
Average	2.72	.79	

Descriptive analysis indicated that Turkish EFL learners in higher education experienced moderate levels of test anxiety, with an overall scale mean score of 2.72 (SD = .79). As shown in Table 2, the highest-scoring items were Item 15 “*Tests bother me much*” (M = 3.62, SD = 1.23), Item 9, “*After the test, I feel I would do better*” (M = 3.49, SD = 1.13), and

Item 21, “I worry when I am not prepared well” ($M = 3.37$, $SD = 1.39$). These item-level results suggest that learners’ anxiety was particularly associated with general discomfort during testing, post-test regret, and preparation-related worry. Conversely, the lowest-scoring items were Item 8, “*I cannot feel confident even if I have good grades*” ($M = 1.87$, $SD = 1.25$), Item 17, “*When I have bad grades, I study less*” ($M = 2.10$, $SD = 1.22$), and Item 7, “*After the test, I feel worried*” ($M = 2.12$, $SD = 1.22$). These lower-scoring items suggest that although participants reported moderate test anxiety overall, they did not uniformly associate test experiences with reduced confidence or decreased study motivation.

Regarding the demographic variables and to answer the second research question of the study, a series of point-biserial analyses between test anxiety and learner variables were conducted: point-biserial correlation for gender and Pearson’s correlation for age. First, the analysis revealed a moderate negative relationship between gender (female=0, male=1) and anxiety levels ($r = -.344$; $p < .01$). This finding indicates that female learners reported higher self-reported test anxiety scores than their male counterparts. Second, on the other hand, age was not significantly correlated with anxiety scores ($r = .006$; $p > .05$). This non-significant result may be partly attributable to the narrow age range of the sample (17-21 years).

A one-way ANOVA test was conducted to examine the relationship between Turkish EFL students’ test anxiety scores and their language proficiency levels in higher education. Table 3 details the one-way ANOVA test results.

Table 3. *One-way ANOVA results for test anxiety scores*

	Sum of squares	df	Mean square	<i>F</i>	Sig.
Between-groups	3.838	3	1.279	2.065	.104
Within-groups	239.769	387	.620		
Total	243.607	390			

As can be seen in Table 3, there was no statistically significant difference in test anxiety scores across proficiency levels ($F(3,387) = 2.065$, $p > .05$). This finding suggests that participants’ proficiency level did not have a significant effect on their overall test anxiety scores. In other words, learners across the four proficiency groups reported similar levels of test anxiety in this high-stakes preparatory-school context. This result indicates that higher language proficiency may not necessarily protect learners from test anxiety when assessment pressure is shared across all proficiency levels.

Qualitative Results

Participants answered four open-ended questions about their test anxiety, what caused it, how it affected them, and how they could deal with it. The answers to these questions were analysed qualitatively through thematic analysis (Braun & Clarke, 2006), and each question was analysed separately in relation to the research questions of the study. The qualitative analysis revealed four categories: (1) sources of anxiety: the high-stakes context, (2) internal and external drivers, (3) physiological and cognitive impact, and (4) coping mechanisms and systemic recommendations. Table 4 summarises the major themes of the study.

Table 4. *Summary of qualitative themes and findings*

Main Theme	Sub-Themes & Codes	n of participants	Key Findings
Sources of Anxiety	High-stakes exams	121	University entrance exam and end-of-year proficiency exam were identified as primary stressors.
	Academic survival	87	Repeat (second-year) students reported a unique, chronic fear of failing again and being expelled.
Drivers of Anxiety	Internal drivers	101	Fear of inadequacy, memory distrust, and fear of unknown question types.
	External drivers	93	Pressure related to future career prospects and social expectations from family and peers.
Impact of Anxiety	Physiological	87	Symptoms included headaches, nausea, sleeplessness, and loss of appetite.
	Cognitive	76	Anxiety caused loss of focus, confusion, and "blocking" despite knowing the answers.
	Facilitative	55	A minority of students noted that manageable anxiety increased their motivation to study.
Coping & Suggestions	Individual strategies	76	Personal study routines, mindfulness, breathing exercises, and self-encouragement.
	Support systems	64	Seeking support from friends/family and professional medical help (psychiatrists/medication).
	Systemic reform	52	Requests for more mock exams, practice tests, and reduced weight for high-stakes exams.

Of the 391 participants, all participants provided written responses to at least one open-ended question and were included in the qualitative analysis. In reporting the qualitative findings, a distinction was made between assessment-related triggers and learner-related drivers of anxiety. Assessment-related triggers refer to the specific testing situations that participants identified as anxiety-provoking, such as the university entrance exam and the end-of-year proficiency exam. Learner-related drivers refer to the internal and external pressures that intensified this anxiety, such as fear of failure, perceived inadequacy, family expectations, and concerns about future academic or professional opportunities. The frequencies in Table 4 indicate the number of participants whose responses included each sub-theme; because participants could mention more than one issue, these frequencies are not mutually exclusive.

Theme 1: Sources of Anxiety: The High-Stakes Context

The first theme of the current study was related to the sources of test anxiety, as reported by the participants. They emphasised that high-stakes assessment was a major source of their test anxiety rather than the process of language learning itself. As shown in Table 4, high-stakes exams were frequently mentioned by the participants ($n = 121$), particularly the university entrance exam and the end-of-year proficiency exam. To be more specific, the university entrance exam the participants took to get into higher education appeared to have an enduring effect on them, which carried into their preparatory school education. In terms of the university entrance exam, many participants regarded the period of preparation as one of the most stressful periods in their academic lives. The pressure was so intense for some students that they had to delay their university education so that they could prepare better for the exam. In this sense, the findings suggest that earlier high-pressure examination experiences shaped how some learners approached later assessment situations in the preparatory school.

Within the preparatory school context, the participants cited the compulsory end-of-year proficiency exam as another major factor of stress. Unlike other forms of assessment in the institution, such as quizzes, homework checks, and in-class tasks, the proficiency exam determines whether students successfully complete their education at the preparatory school and advance to their departments. As a result, participants associated this local and compulsory proficiency exam not only with language performance but also with the possibility of academic delay or failure. The importance attached to this examination therefore seemed to stem not only from the test itself but also from the consequences connected to its outcome. Several participants reported that the anxiety they experienced because of this exam was comparable

to the anxiety they had experienced during the university entrance exam. This finding implies that the participants had a challenging time adjusting to the repeated pressure caused by high-stakes examinations.

The qualitative analysis also revealed academic survival as a related sub-theme ($n = 87$). These concerns were especially visible among students who associated failure with repeating the preparatory year or being unable to continue their studies. Because they had either failed the proficiency exam before or feared the possibility of failing it, they expressed worry about going through the same process again. Consequently, test anxiety appeared to extend beyond individual exam moments and became linked to broader concerns about academic continuity. Rather than describing anxiety as a temporary reaction to isolated exams, these responses suggest that learners experienced it as an accumulated response to repeated evaluative pressure in a high-stakes assessment context.

Theme 2: Internal and External Drivers

Unlike the first theme, which focused on assessment-related situations, the second theme concerns the internal and external drivers that intensified learners' anxiety within those testing situations. Internal drivers were the most frequently reported sub-theme in this category ($n = 101$), followed by external drivers ($n = 93$). Specifically, it can be argued that there is a complex relationship between cognitive fears (internal) and social pressures (external) in relation to test anxiety. Participants' answers revealed that their internal drivers of test anxiety included a fear of failure and inadequacy. Many participants reported not trusting their own knowledge even after studying regularly, which suggests that their anxiety was connected not only to preparation but also to doubts about whether they could access their knowledge during the test. Similarly, further responses revealed that another major contributor to the participants' test anxiety was the fear of the unknown. The participants detailed that they had negative feelings before the exam, speculating that the test would have questions that they did not cover beforehand. On this note, one participant wrote, "Even though I study regularly, I am scared that I will forget everything when I see the exam paper."

As for external drivers, participants were concerned with the consequences of low grades or failure rather than the test event alone. This negative apprehension involved implications and consequences of what would happen if they failed the test. As a result, the participants constantly worried about not only their future academic careers at the school but also their professional careers. On another note, participants felt a lot of tension because of the

social expectations from people around them. The fear of disappointing family members or losing respect among their peers were some of the major contributors to the participants' test anxiety. For instance, one participant wrote "It's not just about passing my class. I feel a lot of pressure because this is about my future." Overall, this theme suggests that test anxiety was intensified by the interaction between learners' internal doubts about competence and external expectations related to family, peers, and future academic or professional opportunities.

Theme 3: Physiological and Cognitive Impact

Participants' answers to the open-ended questions revealed the third major theme of the study. Participants generally described test anxiety as debilitating and reported that it could manifest itself as physical symptoms. Unlike the first two themes, which focused on the sources and drivers of anxiety, this theme concerned the ways in which participants reported test anxiety affecting them physically and cognitively. Physiological effects were reported by 87 participants and included headaches, stomach aches, nausea, palm perspiration, insomnia, and loss of appetite. The participants reported that these symptoms were perceived as affecting their performance during the tests but also interfering with their daily routines. These responses suggest that test anxiety was experienced not only as an emotional state but also as a bodily reaction that could interfere with students' routines before or during examinations.

Apart from the physiological problems, participants also reported several cognitive issues that led to more stress and anxiety ($n = 76$). Because the levels of anxiety were higher than they could handle, they reported that their performance decreased. More importantly, this negative apprehension also occurred during the tests, making some participants feel blocked or unable to access information they believed they already knew. These responses suggest that participants perceived a connection between high anxiety levels and decreased performance during examinations.

However, the data also showed that anxiety was not uniformly described as harmful. The anxiety described by the participants ($n = 55$) had a facilitative effect on their performances, acting as a driving force in their studies. For them, a manageable degree of worry encouraged them to study more, as they did not regard it as a hindrance. As a result of this worry, they felt inspired and encouraged, and this positive force helped them study more attentively and carefully. On this note, one participant wrote, "Feeling anxious keeps me motivated and makes me want to study more." While anxiety can function as a debilitating force for the participants in certain cases, the responses suggest that having a manageable

degree of worry can be perceived as facilitative, driving participants to focus more on their studies. Taken together, these findings suggest that the impact of test anxiety depended partly on its intensity: while high anxiety was associated with physical discomfort and cognitive blocking, manageable anxiety was sometimes perceived as motivating.

Theme 4: Coping Mechanisms and Systemic Recommendations

Apart from the variety of causes and effects of test anxiety reported by the participants, strategies to deal with high anxiety levels emerged as the fourth major theme of the study. Unlike the previous themes, which focused on the sources, drivers, and effects of test anxiety, this theme focused on how participants attempted to manage anxiety and what changes they believed could reduce it. At the individual level, participants reported their own techniques and strategies for coping with negative feelings ($n = 76$). Participants mentioned mindfulness as one of the ways that helped them deal with stress in a healthy way. For other participants, studying on time, doing revisions, and encouraging themselves to focus were other effective ways of dealing with anxiety. Despite the low frequency, doing breathing exercises and doing yoga were among the other coping mechanisms the participants employed. On this note, one participant wrote, “If you study hard enough, there is nothing to fear.” Overall, these instances suggest that participants adopted their own strategies to deal with anxiety.

Additionally, the qualitative data further revealed that seeking social and professional support was another coping mechanism the participant preferred in dealing with their anxiety levels. The participants who referred to support systems ($n = 64$) mentioned seeking help from friends, family members, and, in some cases, professional medical assistance such as psychiatrists or medication. References to professional help and medication, although not reported by all participants, suggest that some learners experienced test anxiety as severe enough to require support beyond individual study strategies.

Finally, participants ($n = 52$) offered recommendations for the institution to help lower anxiety levels at a fundamental level. Lowering the number and weight of examinations throughout the term was one of the frequently mentioned suggestions. Furthermore, participants suggested that if the school implemented weekly mock exams and practice tests throughout the term, this would also help with their anxiety levels. These low-stakes simulations would help learners to get used to the serious testing environment, thereby helping decrease the stress of real high-stakes proficiency exams. Overall, these responses suggest that participants viewed test anxiety not only as an individual problem to be managed through

personal strategies but also as an institutional issue shaped by the structure and weight of assessment.

Discussion

The current study aimed to investigate the test anxiety levels of Turkish EFL learners in higher education, explore the underlying sources and consequences of this anxiety, and propose coping strategies. The quantitative results identified the general level of test anxiety and its relationship with learner variables, whereas the qualitative findings helped explain how learners interpreted the sources, effects, and management of this anxiety within the high-stakes preparatory-school context. Although the overall scale mean indicated a moderate level of test anxiety, female participants reported comparatively higher anxiety scores than male participants; however, age and proficiency level did not have a significant effect on test anxiety scores. This finding is consistent with the results from previous studies in the Turkish context (e.g., Aydin, 2012; Gursoy & Arman, 2016). Similarly, Brandmo et al. (2018) found out that females tended to experience higher levels of anxiety than males in the EFL context, echoing the results from other studies in the same context (e.g., Huntley et al., 2022; Peleg-Popko et al., 2003; Putwain & Daly, 2014). One possible explanation for this gender difference is that female students may be more aware of, or more willing to report, the negative consequences of anxiety, whereas male students may be more reluctant to disclose anxiety for social reasons (Else-Quest et al., 2012; Mousavi et al., 2008). Since the qualitative responses were not analysed separately by gender, they are not used here to explain the gender difference; rather, they are discussed below as contextual evidence for the learner group. Contrary to the findings of the current study, there are also several research studies which have not evidenced significant difference in terms of test anxiety levels between female and male students (e.g., Abdulbaqi & Uzun, 2024; Crişan & Copaci, 2015).

Second, the data analysis revealed that TA level of the participants does not vary with age ($r=.006$; $p>.05$). This finding is striking in that it contradicts the findings of the prior research studies. For instance, Aydin et al. (2006) and Jirjees et al. (2024) discovered that younger students tended to exhibit higher levels of anxiety. It is possible that all students of the current study experienced test anxiety on a certain level because of the severity of the tests they were required to take. The high-pressure context might have had a similar negative impact on the students regardless of their age. Prior research has demonstrated that age did not contribute to the test anxiety levels of students (e.g., Bhatta & Rai, 2020); however, the assessment

ecosystem was different in those contexts. Moreover, it is important to note that the age range of the participants in the current study was limited to 17 and 21, and the students in the population had similar learner characteristics, including previous educational background and departments. Therefore, the results may not have reflected the real situation in this respect. To conclude, it may be tentatively suggested that, within this sample, proficiency-group membership did not attenuate test anxiety, possibly because all learners faced the same high-stakes assessment conditions regardless of age.

Finally, a one-way ANOVA test was conducted to compare the means of four proficiency levels (elementary to upper-intermediate). The results indicated that proficiency level has no significant effect on the participants' TA levels ($F(3,387)=2.065, p>.05$). This is a finding which contrasts with the other results in the field. There are several research studies that evidenced that there is a meaningful relationship between participants' TA levels and their proficiency (e.g., Alias & Rashid, 2018; Kirova et al., 2012). This lack of variation challenges the assumption that higher proficiency necessarily protects learners from test anxiety. The qualitative findings help explain this result, as participants frequently associated their anxiety with the consequences of the end-of-year proficiency exam rather than with language learning alone. Therefore, the absence of significant differences across proficiency levels may be related to the fact that all learners, regardless of their proficiency group, were subject to the same high-stakes assessment structure. Consequently, anxiety in this context should not be viewed only as an individual learner trait; rather, it may also be understood as being shaped by the repeated and high-consequence assessment practices of the preparatory-school system (Zeidner, 2007).

The qualitative findings further contextualise these quantitative patterns by showing why test anxiety appeared to be present across the learner groups. Participants' responses indicated that anxiety was closely connected to high-stakes assessment experiences, particularly the university entrance exam and the end-of-year proficiency exam, as well as to internal doubts and external expectations. These qualitative findings help explain why moderate anxiety was observed at the scale level. Participants did not describe anxiety only as a reaction to individual tests; rather, they connected it to repeated high-stakes assessment experiences, especially the university entrance exam and the end-of-year proficiency exam. This suggests that the moderate overall TAS score may reflect an assessment context in which anxiety is normalised across the learner group (Jerrim, 2022) rather than limited to students with lower proficiency or weaker preparation (Embse & Hasson, 2012; McDonald, 2001).

Reflecting previous research studies (e.g., Imdad et al., 2024; Rasool et al., 2023), the second open-ended question asked about the causes of test anxiety among the participants. The responses showed that participants linked their anxiety to a variety of factors, such as test-related situations and the consequences of failing. Similarly, the third open-ended question asked the participants about the effects related to this specific form of anxiety, which yielded results including physical and health issues. Upon considering the causes and consequences of test anxiety together, the findings suggest that some students may need more systematic support in managing anxiety. As a result, to mitigate test anxiety, teachers can address this issue in the classroom, as the guidance they provide regarding the responses to TA can influence students' perceptions of worry as well as their academic performances (Brady et al., 2018). In this case, teachers are responsible for establishing a low-anxiety classroom environment and guiding students to both identify and manage anxiety (Javanbakht & Hadian, 2014; Liu & Wang, 2013; Zheng & Cheng, 2018). It is also possible to inform students about the types of anxiety (facilitative vs. debilitating), as several students reported that anxiety encouraged them to be more motivated. As a result, students can be educated not to fear anxiety but use it as a guiding force (Salend, 2011).

Finally, the last open-ended question explored the students' coping strategies for test anxiety and suggestions to effectively manage it. Students' responses include a variety of strategies, including educational, social, exam-related, and self-encouragement aspects despite their reports of experiencing test anxiety in certain situations. This might suggest that they aim to employ different strategies to deal with worry and stress to overcome their anxiety and get passing grades (Damer & Melendres, 2011). It is also important to acknowledge the students' reports regarding the intensity and weight the examinations. Therefore, merely lowering the frequency and weight of low-stakes tests and quizzes might be insufficient to help students deal with their anxiety. Instead, a procedure of modification and rebuilding might be necessary to break the cycle of high-stakes pressure. Similarly, the fear of failure caused by one-shot tests would be lessened if other forms of alternative assessment (i.e., portfolio-based assessment or continuous performance tasks) were incorporated to the assessment ecosystem (Agarwal et al., 2014; Mohamadi et al., 2014; Murphy et al., 2023). This adaptation would change the emphasis from a single, high-pressure event to a long-term accumulation of evidence, which would gradually help students deal with their test anxiety. Finally, students' fear of the unknown, which they identified as the main source of their test anxiety, may also be reduced by fostering their assessment literacy (Liu & Wang, 2023).

Taken together, the quantitative and qualitative findings suggest that test anxiety in this context was both measurable and contextually embedded. The moderate overall anxiety score indicates that test anxiety was present at a meaningful level among the participants, while the qualitative findings show that this anxiety was linked to repeated high-stakes assessment experiences, fear of failure, future-related concerns, and perceived consequences of poor performance. Therefore, the findings support the view that test anxiety in preparatory-school EFL contexts should be understood not only as an individual affective variable but also as an assessment-related experience shaped by institutional practices.

Finally, there are several important implications to be considered according to the results of the study. The findings revealed that it is not only teachers but also students who need to find ways to manage test anxiety experienced by the Turkish EFL learners in higher education. Participant learners reported that more substantial measures might be necessary to help them cope with test anxiety. For this purpose, a programme or a seminar which specifically focuses on test-taking strategies can be incorporated into EFL instruction to reduce the negative effects of test anxiety (Cakici, 2016). In order to close the gap between theory and practice, it would also be beneficial for all stakeholders involved to support teachers in engaging in ongoing professional development activities (Gursoy & Arman, 2016). Overall, the findings of the study indicate that administrations and institutions can implement a few measures that will benefit both teachers and students.

Conclusion

This concurrent mixed-methods study investigated the causes, effects, and coping strategies of test anxiety among Turkish EFL learners in higher education. Quantitative analysis reported that participant students experience moderate levels of test anxiety, whereas the thematic analysis of the four open-ended questions revealed an array of causes, effects and coping mechanism concerning test anxiety. Overall, the current study suggests that high-stakes assessment shapes the foreign language education in the higher education context in Turkey. As a result, test anxiety should not be viewed only as a negative feeling experienced by individual learners; rather, in this sample, it appeared to be closely connected to the assessment conditions of the preparatory-school context. Principally, current assessment procedures and policies may contribute to lower self-confidence and heightened anxiety among some learners. Additionally, contrary to the general assumption that high proficiency levels act as a ward against distress and anxiety, the current study found no statistically significant difference in

test anxiety scores across proficiency levels (elementary to upper-intermediate). The qualitative findings help contextualise this result by showing that many participants associated anxiety with the consequences of high-stakes assessment rather than language ability alone. Therefore, this suggests that test anxiety may be experienced across proficiency groups in this high-stakes assessment context.

Additionally, the qualitative findings help contextualise the quantitative results by showing why moderate anxiety levels may have emerged across the learner group. While the scale results indicated moderate overall anxiety and no significant proficiency-level difference, the open-ended responses showed that participants frequently linked anxiety to high-stakes exams, fear of failure, future-related concerns, and coping demands. Thematic analysis revealed four major themes concerning the sources, drivers, effects, and management of test anxiety. Many participants appeared to view the preparatory school not only as a language-learning context but also as an assessment-intensive environment where failure could affect their academic progression. Participants also tend to develop their own coping mechanisms and strategies to deal with test anxiety, which varied across participants. These strategies encompassed a range of methods, including concentrated study, mindfulness, and even depending on medical help.

On the other hand, several limitations should be mentioned despite the significant implications the study offers for the field of language testing and assessment in the future. First, the study was conducted at a single preparatory school of a state university in Turkey. The findings of this study may not be generalisable to other settings, even those with similar assessment practices and policies. Second, the study relied heavily on self-reported data (the scale and the open-ended questions), and participants might have excluded their reasons or overstated their anxiety-related experiences because of the social desirability bias. Finally, this cross-sectional design provides only a snapshot of anxiety levels; it does not capture the longitudinal effect of test anxiety or how it affects the students throughout the academic year.

Based on these limitations, several suggestions can be made for future studies. First, future studies could focus on test anxiety over a period, comparing the levels of test anxiety at the beginning of the term against the test anxiety at the end of the term, when the high-stakes exams are closer. Second, the current study revealed moderate levels of anxiety; therefore, experimental studies could be conducted to test the efficacy of specific interventions and treatments, such as mindfulness training and test-taking strategy workshops. Finally, future

research could also compare traditional testing versus alternative assessment models like portfolios and projects. Ultimately, shifting from a culture of testing toward a broader culture of assessment may be one way to ensure that language competence, rather than anxiety, plays a more central role in students' academic progression.

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