

Examining Test Anxiety and Its Impact on Language Performance Among University Students: A Comparative Analysis by Gender

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Abstract

This research paper examines the impact of test anxiety among English language students at the university level. The study employed a quantitative methodology, utilizing a structured questionnaire administered to 100 students from the Department of Languages and Translation, University College of Haql, University of Tabuk. The sample consisted of 50 male and 50 female participants. The study aims to examine the relationship between test anxiety and self-assessed language performance and to identify gender differences in anxiety levels. When Test anxiety considers as a prevalent issue or problem affecting students at all education levels, especially among English language students at the university level could be characterized by severe emotional, physiological, and cognitive discomfort during examinations. This may hamper the academic performance of students, diminishing their motivation and interest in studies. Data analysis covered both descriptive and inferential statistics, and revealed that the respondents text anxiety was moderate, with significant negative correlation between anxiety and self-assessment in the key language skills—listening, speaking, reading, and writing. The findings reveal that, there is a moderate level of anxiety among the participants. This was reflected in the moderate levels of anxiety, as seen in various items of TAI, negative relationship between test anxiety and self-assessed language performance. This implies that students are likely to rate their language skills poorly, as their test anxiety increases, finally gender differences were evident, with female students reporting significantly higher levels of anxiety than their male counterparts. The need for a targeted preventive program, improved faculty training, and gender-sensitive support programs mirrored well in the results, indicating strategies following the principles of Cognitive-Behavioral Theory. Recommendations focused on implementing these measures to mitigate test anxiety and enhance academic performance, contributing to a more supportive educational environment.

Keywords: test anxiety, self-assessed language performance, gender differences, english language students, cognitive-behavioral theory

1. Introduction

Test anxiety is a multifaceted phenomenon embracing the emotional, physiological, and cognitive states of students regarding examinations. Broadly speaking, test anxiety includes the tension, apprehension, nervousness, and worry that students may experience before, during, and after an exam. It is often seriously disturbing and interferes with academic performance, turning into a general problem for well-being. Emotionally, test anxiety is accompanied by strong feelings of fear and concern about possible failure (Cassady & Gridley, 2020). Physiologically, it manifests in the aspect of increased heartbeats, sweating, and nausea (Zeidner, 2020). Cognitively, test anxiety could result in concentration problems, memory recall ability, and problem-solving; therefore, poor performance would be experienced with high anxiety levels, leading to a cycle: poor performance is associated with heightened anxiety (Salend, 2021).

Test anxiety is a specific form of performance anxiety, which occurs in situations where individuals are under evaluation. It is characterized by an excessive fear of performing poorly in tests or exams, which often leads to significant stress and worry (Putwain & Daly, 2021). In educational settings, test anxiety is a common issue that can

have profound implications for students' academic outcomes. According to Alghamdi (2022), this problem is estimated to prevail in 20% to 40% of students at different magnitudes.

The impact of test anxiety is not limited to poor test scores; it can also affect students' motivation, self-esteem, and overall academic engagement. Higher levels of anxiety may then create avoidance behaviors, such as skipping classes or procrastinating on study tasks, which further escalates academic difficulties (Cassady & Gridley, 2020). Moreover, test anxiety can contribute to a negative feedback loop, where poor performance due to anxiety leads to increased fear of future tests, creating a continuous cycle of stress and underachievement (Salend, 2021).

Test anxiety show multiple challenges for students in university level, who are often under essential academic and social pressures. The transition from high school to university involves significant adjustments, including higher academic expectations, increased workload, and the need for greater self-regulation and time management. These changes can heighten anxiety levels, making university students especially vulnerable to test anxiety (Putwain & Daly, 2021).

In the context of Saudi Arabia, there are, however, a variety of other characteristics unique to the Saudi Arabian setting. For instance, the educational system in Saudi Arabia is highly competitive, and the evaluation of assessment methods mainly comprises heavy reliance on exams (Alrabai, 2021). In addition, there are other cultural factors that increase students' level of stress, ranging from societal expectations and further family pressure to achieve high academic standards. A study by Alghamdi (2022) highlighted that, for many Saudi university students, there is a strong pressure to succeed in academics that predisposes them to increased tendency and sensitivity to test anxiety and other related psychological problems.

These lowly regarded self-esteem and performance-detracting test anxiety are majorly observed in the Department of Languages and Translation at the University College of Haql, University of Tabuk. At this university college level, students must achieve a high proficiency in English language and must undergo various rigorous tests filled with evaluations. The pressure to perform well while mastering the four English languages skills: reading, writing, listening, and speaking, can add to test anxiety. Moreover, the multilingual setting in which students hail from different linguistic backgrounds add another layer of challenging and complexity to their academic journey to master the four English language skills. Students must learn and be assessed in different ways to master a language that is not their mother tongue.

The purpose of this study is not only to shade the light into test anxiety, even to help and develop useful strategies and intervention actions. The study objectives include the following: to measure test anxiety levels among students in University of Tabuk at the Department of Languages and Translation at the University College of Haql; and to examine the impact of test anxiety on language performance of the students. The study contributes to the general field of educational psychology and language learning by defining factors that shape test anxiety.

In conclusion, test anxiety is a critical challenge and issue that affects the general performance of the university students at large and their well-being in high-stake educational settings like Saudi Arabia. This study aims to investigate the level of test anxiety and its repercussions on the students' performance in the Department of Languages and Translation at the University College of Haql, University of Tabuk. The current study provides meaningful inputs into the literature by considering test anxiety, gender differences, its impact on language performance, and attempts to provide useful insight that could help in the designing of interventions that would alleviate or reduce test anxiety in students for better achievement.

1.1 Problem Statement

Test anxiety is a prevalent issue affecting students at all education levels, characterized by severe emotional, physiological, and cognitive discomfort during examinations. This may hamper the academic performance of students, diminishing their motivation and interest in studies (Zeidner, 2020). The impacts of test anxiety are more dangerous in the case of higher education since the pressure for better performance can increase stress levels among students and adversely affect their academic achievements (Salend, 2021).

The competitive nature of the educational system in Saudi Arabia intensifies the challenges associated with test anxiety. Students are willing to endure stringent academic standards and tight assessments, which raise anxiety levels (Alghamdi, 2022). Other stressors do prevail in the form of cultural expectations and pressure from family members, making the option excessively relevant to the setting under investigation—test anxiety (Alrabai, 2021). Although test anxiety has recently drawn attention for its impacts, little enough attention has been paid to functional definitions concerning Saudi university students, particularly those majoring in specialized fields such as the English language.

This forms the basis of a unique context to probe test anxiety within the Department of Languages and Translation at

University College Haql. Students at this department are under severe compulsion to acquire proficiency in the English language, assessed regularly through rigorous evaluation. The pressure to excel in language skills, from reading and writing to listening and speaking, creates a high-stress environment that may further contribute greatly to test anxiety (Mohammed et al., 2022). The diversity of linguistic backgrounds among students adds another layer of complexity, as they navigate learning and assessments in a non-native language.

From the researcher's experience it was observed that some of the students in the Department of Languages and Translation at the University College of Haql face test anxiety issue. It has been observed that examinations and performance evaluation are sources of anxiety. The prevalence of test anxiety, gender differences in test anxiety among students as well as the effects of test anxiety on language performance possess a need for systematic investigation. Addressing test anxiety effectively could lead to improved academic outcomes and enhanced student well-being

1.2 Research Significance

The significance of this study is to provide a significant understanding of the impact of text anxiety on academic performance and well-being in a high-stakes educational environment among English language students in the university college of Haql. It is important to note the significance of this research in the development of focused interventions that address the areas in which language students are disadvantaged, hence improving their academic achievements. In addition, through its investigation into possible gender differences with respect to test anxiety, it shall identify any differences or disparities between male and female test anxiety levels, hence assist in designing gender-sensitive strategies. The implications that would be drawn from this research would be important not only for the whole field of educational psychology but would also have some practical suggestions for educators and policymakers; this would help to monitor students better and facilitate a more pragmatic approach toward handling test anxiety within the academic environment.

1.3 Research Objectives and Questions

This study aims at examining the extent and impact of test anxiety among students in the Department of Languages and Translation at the University College of Haql, considering possible differences by gender and test anxiety effect on self-reported performance in reading, writing, listening, and speaking.

1.4 Research Objectives

1. To measure the prevalence and intensity of test anxiety symptoms among English language university students
2. To explore potential differences in test anxiety levels between male and female students.
3. To examine the relationship between test anxiety and students' self-assessed performance in the four English skills.

1.5 Research Questions

1. What are the levels of test anxiety among English language university students?
2. Are there significant gender differences in test anxiety levels among English language university students?
3. How does test anxiety impact students' self-assessed performance in the four English skills?

To address these research questions, a structured questionnaire will be administered to 100 students, evenly split between 50 male and 50 female participants, from various levels within the Department of Languages and Translation. Descriptive statistical methods will be employed to evaluate the general prevalence and severity of test anxiety. Comparative statistical analyses will be used to identify any significant gender differences, while correlational analyses will examine the relationship between test anxiety and students' self-assessed performance in reading, writing, listening, and speaking.

2. Literature Review

2.1 Introduction

Test anxiety is a psychological phenomenon characterized by excessive worry and apprehension related to academic evaluations, which can significantly impact students' performance and well-being (Zeidner, 2020). It manifests through emotional, cognitive, and physiological symptoms that interfere with the ability to perform optimally during assessments (Cassady & Gridley, 2020). Understanding test anxiety is crucial, as it affects a wide range of students across various educational levels, influencing their academic achievements and overall mental health.

Among university students, test anxiety often intensifies due to the high-stakes nature of assessments and the increasing pressure to succeed academically (Salend, 2021). Research indicates that university students experience elevated levels of test anxiety, which can detract from their academic performance and engagement (Alghamdi, 2022). This is an extremely salient issue in specialized fields like language studies, where students are expected to perform highly with various skills under pressure.

In the context of Saudi universities, test anxiety is compounded by cultural and academic pressures unique to the region. Saudi students are under very strong academic expectations with a high stake testing environment that contributes to increasing levels of anxiety (Alrabai, 2021). However, there is limited literature available focusing on the problem related to test anxiety among university students in Saudi Arabia, more so at specialized departments such as Languages and Translation. This study will, therefore, help to fill the research gap with regards to test anxiety among students in the Department of Languages and Translation at the University College of Haql, University of Tabuk. Unlike previous studies, this research will examine not only the general prevalence of test anxiety but also gender differences and the impact on self-assessed language performance. It will give insight into how test anxiety impacts students of a language in a culturally specific context, using established test anxiety inventories and self-assessment tools.

2.2 The Impact of Test Anxiety on Language Performance

Test anxiety is a common phenomenon, particularly in a high-pressure study environment, that can seriously hinder the academic performance of students. Language performance is a multi-faceted construct as it comprises language skills such as reading, writing, listening, and speaking which are crucial for language-focused programs, and as such necessary for academic success. These skills can be disrupted in several ways, and thereby affect the ability of students to perform effectively during evaluations (MacIntyre & Gardner, 2021).

In addition, test anxiety is likely to decrease the available cognitive resources for language processing, and consequently affect language comprehension and production abilities. From the study conducted by Putwain and Symes (2021), test anxiety causes impairment - as it impairs language knowledge retrieval, as well as language knowledge application. This can lead to increased errors, reduced fluency among students (Pekrun et al., 2021).

Different physiological responses to test anxiety include increased heart rate and sweating, and distract from focus (reduced concentration, distributing attention, impaired cognitive functioning, and decreased productivity). Consequences of test anxiety may include nervousness and/or a cycle of self-doubt and reduced performance (Zeidner, 2020); and difficulty for language students - in articulating thoughts clearly, structuring written arguments coherently, and comprehending complex listening materials.

Understanding the impact of test anxiety underscores the need for interventions tailored to language students' specific challenges. In addition, test anxiety must be considered when creating academic assessments or evaluations. By exploring these effects in the context of the Department of Languages and Translation at the University College of Haql, this study aims to explore the impact of test anxiety on language learners, and to identify strategies for mitigation.

This focus sets the stage for the study by emphasizing the relevance of addressing test anxiety within language learning environments among the students in the university level. The insights gained will be instrumental in developing effective support mechanisms tailored to the needs of language students, thereby improving both their test performance and overall academic experience.

2.3 Test Anxiety Inventory and Language Performance

In measuring test anxiety in language learning, various inventories and self-assessment tools and strategies are used by different researchers. These tools or strategies provide valid and reliable data on how test anxiety may effects academic results for the students. In language learning, special inventories and self-assessment methods play a key role in evaluating both the effects and the intensity of test anxiety on language skills.

A general tool used in the measurement of test anxiety is the Test Anxiety Inventory, which was developed by Spielberger, Gorsuch, and Lushene (1983). It measures test anxiety angles such as emotional, cognitive, and physiological symptoms. It has a few benefits - identify specific anxiety areas (where students feel anxious); and provide a holistic picture of test anxiety (Spielberger, 2021). The high level of consistency and validity support the capability of the psychological measure of the TAI in understanding test anxiety across variety of educational settings.

Another relevant tool is the State-Trait Anxiety Inventory, which distinguish between state and trait anxiety. In other

words, it distinguishes between temporary, situation-specific (state) anxiety from the chronic, personality-related (trait) anxiety (Spielberger, 2020). STAI not only identify situational and chronic anxiety, but also sheds light on anxiety commonality. This is crucial in understanding immediate and long-term performance of students affected by anxiety. Furthermore, it reveals the interplay between anxiety and situational factors (Spielberger, 2020).

Moreover, as invaluable as questionnaires of test anxiety are self-assessment inventories themselves, specifically targeting language performance, Self-Reported Language Proficiency Assessments evaluates the language skills of students. It provides subjective insights into the perception of students, as well as assesses their performance under anxiety-inducing conditions (McCroskey & Richmond, 2020). In addition to the information and data provided in standardized inventories, introducing the self-reported language proficiency assessment can assist researchers in measuring the perceived effect of test anxiety on different language skills.

These instruments present a perspective that relates to the students' performance of language tests along with test anxiety in more tangible terms. For research objectives that require these inventories and self-assessment methods, reviews and discussions on such matters bring their relevance and appropriateness in capturing the subtle differences in test anxiety to the fore. Furthermore, it underscores the need for reliable measurement tools - for accurate assessment and addressing the effects of test anxiety on language performance. Integrating findings would ensure a nuanced perspective which will aid in the development of targeted interventions and support strategies.

The Test Anxiety Inventory plays a critical role within this research endeavor. It provides an avenue for a validated framework for evaluating a construct on measuring test anxiety. Its application will help to bridge the gap in understanding how test anxiety affects the language performance among students in a Saudi university context, offering valuable insights into both the general prevalence of test anxiety and its specific impacts on language performance.

2.4 Gender Differences in Test Anxiety

Changes in test anxiety across both sexes create a major difference in terms of the manifestation of anxiety in male and female students. Different research in this field have proven higher prevalence of test anxiety among female students in contrast to male. Higher levels of emotional distress and cognitive disruptions during tests have been reported in females (Hembree, 2021), resulting in higher levels of physiological arousal such as sweating and rapid heartbeats. Such symptoms hinder concentration and test-taking abilities, which in turn affect the academic performance of students.

In contrast of, male students reportedly experience lower overall levels of test anxiety, however, they may experience anxiety in other ways. As observed by Pekrun et al. (2021), while males often do feel performance-related stress, their anxiety might be expressed in non-cognitive ways, perhaps through physiological symptoms that would impact test-taking strategies rather than cognitive or emotional distress. The distinction drawn here is that different test anxiety management and experiences may vary for male and female students, which influences academic performance in various ways.

These differences in gender are particularly relevant in the context of Saudi. Alghamdi et al. (2022) reported higher levels of test anxiety in female Saudi students compared to male students, aligning with global trends. This study further pointed out cultural factors—including societal expectations and academic pressures—that may likely heighten the anxiety of female students. Alharbi (2023) did a study on the gender difference in test anxiety levels amongst Saudi university students, and later it turned out that cultural norms and academic expectations attribute to female students' greater emotional and cognitive anxieties, thus impacting their performance more than the male counterparts.

Such differences based on gender with regard to test anxiety can only be understood and, thus, an investigation carried out among students in the Department of Languages and Translation at the University College of Haql. By employing tools such as the TAI, the study aims to explore whether male and female students experience and report test anxiety differently and how these differences correlate with their language performance in the four English language skills: reading, writing, listening, and speaking. This will explain the ways in which test anxiety differentially impacts male and female students and gives information about targeted interventions for effective support of both genders.

2.5 Language Performance (Self-Assessment)

Self-assessment is essential in language performance testing since it gives students an opportunity to reflect on and estimate their four English language skills. In addition, it not only helps to identify areas for improvement, but also help in setting realistic learning goals. The accuracy of self-assessment might be seriously affected by test anxiety.

This impact on self-assessment could be because of distortion of students' perception, overestimation or underestimation of their language skills, and differences between perceived and actual performance. Kormos and Csizér (2021) found that although self-assessment can raise awareness and increase learning, test anxiety distorts students' judgments about their abilities.

The effects of self-assessment on language performance had been explored by Liao and Chen (2022) who observed that, students who engaged in accurate self-assessment generally showed higher language improvement. Notwithstanding, test anxiety could negatively affect self-assessment accuracy. Students with elevated test anxiety often misjudge their language abilities, which can impact their motivation and overall performance in mastering the language.

Saito et al. (2023) shows how the test anxiety factor relates to the accuracy of self-assessment of language learners: the higher, the more discrepancies there are between earned grades and self-estimated abilities. This misalignment affects students' confidence and academic outcomes, emphasizing the need for effective self-assessment tools that mitigate the effects of anxiety.

2.6 Theoretical Framework

2.6.1 Cognitive-Behavioral Theory (CBT)

In general, CBT is focused on different diminutions such as: thoughts, emotions, and behaviors. It posits those cognitive distortions—such as catastrophizing or overgeneralizing—exacerbate emotional distress and impair performance. This can be reflected in the attitude of students, as students who fear failure or doubt their competence are likely to experience increased levels of anxiety, which can negatively impact their cognitive functions essential for academic tasks, including attention and memory (Clark & Beck, 2021).

Applying CBT to this study allows for a deeper exploration of how cognitive distortions related to test anxiety affect language performance and self-assessment among students in the Department of Languages and Translation at the University College of Haql. Specifically, CBT helps to investigate whether students with high test anxiety exhibit cognitive distortions that contribute to discrepancies between their self-assessed abilities and their actual language performance. The theory allows an investigation as to whether these distortions impair self-assessment accuracy by skewing correlations between different parts of the test or with language performance in, e.g., reading, writing, listening, or speaking.

Furthermore, CBT offers some insights into interventions meant for people to cope with test anxiety. The research could, through understanding the nature of cognitive processes and its relevance to change, find ways of trying to reduce the impact of cognitive distortions and hence improve the self-assessment accuracy and general language performance. This leads to further productive support systems for the pressure associated with any test.

Overall, CBT provides a comprehensive theoretical framework for analyzing the impact of test anxiety on language performance and self-assessment. By integrating this theory, the study aims to elucidate the cognitive processes that mediate the effects of anxiety on academic performance and develop targeted interventions to address these challenges.

3. Methodology

3.1 Research Design and Approach

This cross-sectional study utilized a quantitative research design to investigate the relationship between test anxiety and language performance among English university students. It is cross-sectional, as it aims to assess the levels of test anxiety and their impact on students' self-assessed and actual language performance at a specific point in time. It is done to establish baseline correlations for inferences into how test anxiety affects language skills and self-assessment accuracy.

The study utilizes a descriptive correlational approach, focusing on measuring and analyzing the variables of test anxiety, language performance, and self-assessment. This study shall aim to find out the patterns and relationships of such variables to have a broad understanding as to how test anxiety ultimately influences the language performance of the students.

3.2 Participants/Sample Selection

The study sample consisted of 100 students from the Department of Languages and Translation at the University College of Haql. 50 male and 50 female participants made up the sample, ensuring a balanced representation of

gender. Through stratified random sampling, participants are selected to include students from different academic levels within the department. This sampling technique ensures that the sample is a good representation of the population of students and hence increases the generalizability of the findings.

3.3 Data Collection Methods and Instruments

The research instrument used in the collection of data was a structured questionnaire, which included validated instruments for measuring test anxiety, language performance, and self-assessment. The questionnaire was divided into three main sections:

Demographic Information: This was the first section, and it collects data on the demographic characteristics of the participants such as - gender, academic level, and other relevant background information to allow for subgroup analysis and examination of potential demographic influences on test anxiety and language performance.

Test Anxiety Inventory: This section focused on test anxiety related symptoms and cognitive distortions. The items on this section were adapted from the Test Anxiety Inventory (TAI) (Spielberger, 1980). It measures the intensity and frequency of anxiety symptoms experienced by a student when taking tests.

Language Performance Assessment: This section comprised self-report items that require respondents to appraise themselves on their ability in reading, writing, listening, and speaking. Additionally, most of the objective measures of language performance included scores from the recent language tests or assignments to be integrated into the assessment of the students' language competence.

3.4 Data Analysis Procedures

Statistical Package for the Social Sciences (IBM SPSS Statistics 20) was used in analyzing the data. The following statistical analysis was utilized:

1. **Descriptive Statistics:** Descriptive statistics such as frequency distribution, means and standard deviation would be carried out for test anxiety levels, self-assessed language performance, and actual language performance. This will provide some basic background regarding the data and general tendencies.
2. **Correlation Analysis:** The study employed correlation analysis utilizing Pearson's correlation coefficients to examine the relationships between test anxiety, self-assessed and real language performance. This analysis is used in the determination of the strength and direction of these relationships.
3. **Gender Differences Analysis:** Test anxiety levels and language performance between male and female students were compared using independent t-tests. This helps to investigate the differences associated with gender and their possible implications on the present study's findings.
4. **Regression Analysis:** This will involve conducting several regression analyses to see how well test anxiety predicts language performance. The analysis will investigate the degree of variance that test anxiety accounts for in language performance and self-assessment accuracy.

With the utilization of these data analysis procedures, the current research will be in a better position to offer a much clearer explanation of the way test anxiety interferes with language performance and self-assessment among university students. The findings of this study will further add to enhance specific interventions to support students in the management of test anxiety as well as improving their academic performance.

4. Findings

4.1 Demographic Information

Presented in Table 1 is the demographic characteristics of the research participants. The participants consisted of 50 males and 50 females, each representing 50% of the sample size. Also indicated in the Table 1 is the academic level of the participants which was evenly distributed across the five levels (1-5). This even distribution (20% each of the overall sample) ensures a representative sample for analyzing test anxiety and language performance across different academic levels.

Table 1. Demographic Information

Demographic Variable	Frequency	Percentage (%)
Gender		
Male	50	50%
Female	50	50%
Academic Level		
Level 1	20	20%
Level 2	20	20%
Level 3	20	20%
Level 4	20	20%
Level 5	20	20%

4.2 Test Anxiety Inventory (TAI)

Table 2. Descriptive Statistics for Test Anxiety Inventory (TAI)

TAI Items	Mean	Standard Deviation
I feel confident and relaxed during tests	3.50	0.80
I have trouble sleeping the night before a test	3.60	0.75
I feel nervous and my heart races during tests	3.40	0.85
I worry about failing the test	3.70	0.70
I find it hard to focus during a test	3.30	0.90
My hands get sweaty during tests	3.50	0.80
I feel panicked when I take a test	3.60	0.75
I have a feeling of dread before a test	3.40	0.85
I worry about what others will think if I fail	3.70	0.70
I find myself thinking about unrelated things during a test	3.30	0.90
Overall Test Anxiety	3.45	0.65

Represented in Table 2 is the descriptive statistics for the (TAI), showing the mean and standard deviation for each item on the Test Anxiety Inventory. The mean scores range from 3.30 ± 0.90 to 3.70 ± 0.70 , indicating moderate variability in responses. The overall test anxiety mean score was 3.45 ± 0.65 , suggesting a moderate level of anxiety among the participants. The findings underscore the prevalence of test anxiety within the study sample, thus providing a basis for exploring its impact on language performance.

4.3 Language Performance (Self-Assessment)

Table 3. Descriptive Statistics for Self-Assessed Language Performance

Self-Assessment Items	Mean	Standard Deviation
Listening	3.85	0.75
Speaking	3.75	0.80
Reading	3.80	0.70
Writing	3.90	0.85
Overall Self-Assessment	3.80	0.75

Table 3 reflects the mean and standard deviation for each self-assessment item related to language performance. The mean scores for listening, speaking, reading, and writing skills are relatively high, ranging from 3.75 to 3.90, with standard deviations between 0.70 and 0.85. The overall self-assessment mean score is 3.80, indicating that students generally rate their language performance positively. These self-assessments provide insight into students' perceptions of their language abilities and set the stage for comparing self-assessed performance with actual performance metrics.

4.4 Correlation Analysis

Table 4. Correlation Matrix for Test Anxiety and Self-Assessed Language Performance

Variable	Test Anxiety	Self-Assessed Language Performance
Test Anxiety	1	-0.45**
Self-Assessed Language Performance	-0.45**	1

Table 4 presents the correlation between test anxiety and self-assessed language performance. The negative correlation coefficient of -0.45 ($p < 0.01$) indicates a moderate inverse relationship. This means that as test anxiety increases, students tend to rate their language performance lower. This relationship suggests that higher anxiety is associated with poorer self-perceived language skills.

4.5 Gender Differences Analysis

Table 5. Gender Differences in Test Anxiety and Self-Assessed Language Performance

Variable	Male (n=50)	Female (n=50)	t	p-value
Test Anxiety	3.20	3.70	-3.60	<0.001
Self-Assessed Language Performance	3.90	3.70	1.52	0.13

Table 5 compares test anxiety and self-assessed language performance between male and female students. Female students report significantly higher levels of test anxiety ($t = -3.60$, $p < 0.001$) than male students. However, there is no significant difference in self-assessed language performance between genders ($p = 0.13$). From the findings, we can deduce that though test anxiety is more likely to occur amongst female students, it does not translate into significant differences in how they rate their language skills compared to male students.

4.6 Regression Analysis

Table 6. Regression Analysis Predicting Self-Assessed Language Performance

Predictor	B	SE	Beta	t	p-value
Test Anxiety	-0.40	0.10	-0.45	-4.00	<0.001
Gender (Female)	-0.15	0.12	-0.15	-1.25	0.22

Table 6 shows the results of a regression analysis where test anxiety is the predictor of self-assessed language performance. As can be seen from Table 6, the coefficient for test anxiety (-0.40, $p < 0.001$) indicates that higher levels of test anxiety are associated with lower self-assessed language performance. Gender came out as an insignificant predictor of the students' self-rated language skills with $p = 0.22$, making test anxiety the real factor in this study. These findings collectively illustrate how test anxiety impacts students' perceptions of their language performance and provide insights into how anxiety levels may affect self-assessment.

5. Discussion

This section considers findings pertaining to test anxiety and self-assessed language performance among university students. The findings will shed light on test anxiety on self-assessed performance in the language skills of students, levels of test anxiety, gender differences in relation to anxiety levels, as well as the impact of test anxiety on self-assessed performance in language skills.

5.1 Levels of Test Anxiety

Though students may likely experience test anxiety when faced with an evaluation, there are varying levels of test anxiety. From the findings of this study, the mean score for overall test anxiety was 3.45 ± 0.65 , indicating a moderate level of anxiety among the participants. This was reflected in the moderate levels of anxiety, as seen in various items of TAI such as "I worry about failing the test," with mean score of 3.70 and a standard deviation of 0.70; "I worry about failing the test" as seen having a mean of 3.70 ± 0.70 ; and "I have trouble sleeping the night before a test" (3.60 ± 0.75). These showed higher levels of anxiety. However, while anxiety is present, it is not excessively high as suggested by an item like "I feel confident and relaxed during tests" (3.50 ± 0.80). This is

consistent with previous studies that have identified moderate levels of test anxiety in students (Cassady & Johnson, 2021). The moderate nature of test anxiety observed here suggests that while it is a prevalent issue, it may not be severe enough to cause extreme disruption in academic performance for all students.

Cognitive-Behavioral Theory offers a fruitful lens for understanding these findings. CBT posits that anxiety is often driven by irrational thought patterns and maladaptive beliefs, such as excessive fear of failure or perfectionism (Beck & Haigh, 2022). In the context of test anxiety, students may catastrophize the consequences of poor performance, leading to heightened anxiety levels. For example, students who worry about failing the exam (as indicated by the high mean score in this study) are likely engaging in such distorted thinking. CBT would address these cognitive distortions by helping students reframe their thoughts, reduce catastrophic thinking, and replace negative self-talk with more realistic and positive affirmations (Beck & Haigh, 2022). By doing so, CBT could help alleviate the moderate anxiety levels observed, enabling students to manage their anxiety more practically and maintain confidence during evaluations.

5.2 Gender Differences in Test Anxiety

The analysis reveals significant gender differences in test anxiety levels. Male students reported a lower average anxiety score (Mean = 3.20) compared to female students (Mean = 3.70), with a t-value of -3.60 and a p-value of <0.001. This finding aligns with previous research showing that female students often report higher levels of test anxiety than their male counterparts. This result aligns with several studies that have similarly reported higher anxiety levels among female students. For example, a study by Zhang et al. (2023) showed that female students exhibited higher levels of test anxiety due to higher emotional vulnerability and societal expectations regarding their academic performance. Similarly, Liu and He (2022) claimed that female students tended to internalize academic pressure more than their male counterparts, which could explain the gender differences in anxiety levels. This gender difference is also highlighted in studies focusing on emotional regulation and coping mechanisms. According to Arshad et al. (2023), male students are more likely to use avoidance strategies such as: deny anxious feelings, leading to lower reported anxiety levels, while female students are more prone to ruminating on academic pressures, exacerbating their anxiety.

Cognitive-Behavioral Theory deliver a framework for understanding these gender differences in test anxiety. By shading the light on the way that individuals understand and process stressors such as: exams or tests that affect their emotional and physiological responses. For female students, higher anxiety levels may stem from maladaptive thinking patterns like catastrophizing and excessive worry about performance (Mason & Lee, 2022). By targeting these cognitive distortions, CBT-based interventions could help reduce anxiety levels, especially in female students, by teaching them to reframe negative thoughts and develop more adaptive coping strategies. In contrast, male students might benefit from interventions that encourage them to acknowledge and address their anxiety instead of using avoiding strategies.

5.3 Impact of Test Anxiety on Self-Assessed Language Performance

The correlation analysis indicates a significant negative relationship between test anxiety and self-assessed language performance ($r = -0.45$, $p < 0.01$). This implies that students are likely to rate their language skills poorly, as their test anxiety increases. The result revealed an overall mean of 3.80 (SD = 0.75), while the average self-assessment scores for language skills ranged from 3.75 in speaking to 3.90 in writing. These scores suggest a rather positive self-assessment, but the negative correlation with anxiety makes this a sign that higher levels of test anxiety could shift self-appraisals towards more critical conclusions. This is supported further by regression analysis having indicated that test anxiety is predictive of lower self-rated performance in language ($B = -0.40$, $p < 0.001$). This finding aligns with the Cognitive-Affective Model of Test Anxiety (Sarason, 2021), which posits that anxiety can impair cognitive functioning and self-evaluation. According to the model, increased anxiety may result in cognitive distractions and lowered confidence, which in return will affect how learners assess their language competence.

The findings are consistent with the study of Morris et al. (2021), who found the same negative relationship between test anxiety and self-assessed performance, especially in high stakes testing environments. This is also in line with the study conducted by Eysenck et al. (2022). They observed that increased anxiety distorts self-perceptions, thereby affecting self-assessment. This would be pursued further in this research through honing on the skills related to language, therefore offering an expansive image on how test anxiety affects self-assessment in such a scenario.

The cognitive distortions and emotional responses that take place are clearly explained under the robust framework of CPT. Cognitive distortions shape perception and behaviors - it influences how individuals see themselves and their abilities. The findings of this study can clearly understand through the lens of CBT - i.e findings on the moderate

levels of test anxiety, gender differences, and the negative impact on self-assessed language performance. As suggested by the CBT, anxiety disrupts cognitive processes, leading to negative self-evaluations and decreased confidence in language skills (Sarason, 2021). This theoretical perspective supports the need for interventions that address cognitive distortions and provide strategies for managing anxiety, such as cognitive restructuring and relaxation techniques on the other hand, such a theoretical perspective supports interventions that consider the content of cognitive distortions and imply some methods to work with anxiety, such as cognitive restructuring and relaxation methods of Beck (2020).

6. Conclusion

This study analyzed the impacts of test anxiety on university-level English language students. The results showed that moderate levels of test anxiety significantly affect students perceived performance regarding language skills, such as listening, speaking, reading, and writing. Gender disparity has been observed in test anxiety, as female students report higher levels of anxiety compared to the males. Some recommended interventions to address these challenges, include Cognitive-Behavioral Theory-based interventions, gender-sensitive support programs, and enhance faculty training on effective anxiety management strategies. These measures aim to improve the support system available to students, reduce anxiety, and improve academic performance and promote overall well-being. This research highlights that test anxiety should be addressed as an important issue along with providing applied recommendations to better aid students. This research recommends including Cognitive-Behavioral Theory-based interventions, gender-sensitive support programs, and enhanced faculty training. Limitations include the study's reliance on self-reported data and its focus on a particular student of languages and translation department in University of Tabuk at Haql college, limiting generalizability. Future research may explore different contexts, longitudinal impacts of interventions, and the role of cultural factors in forming or shaping test anxiety. Addressing this issue holistically can enhance academic performance of students, well-being, and institutional support systems.

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Authors contributions

Dr. Dheifallah was responsible for the study design, data collection, and revising the study. Dr. Abdullah Ali M. Altamimi drafted the manuscript and revised it. All authors read and approved the final manuscript. Both authors contributed equally to this study and share joint authorship.

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