

# Exploring Test Anxiety in Undergraduate Education: Causes, Effects, and Interventions in Vocabulary Learning

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Test anxiety is a common behavioral phenomenon that greatly hinders students' academic performance and general well-being. The current study discusses the type of test anxiety, causes and the effect of test anxiety on the five Tourist Guidance students at the Art Department of King Faisal University. Applying a mixed-method research design, the research tracks the impacts of test anxiety on vocabulary performance and identifies the best effective ways to alleviate its influence. Even small and inexpensive changes like altering the testing environment to be supportive and encouraging, the results have shown can reduce this test anxiety significantly while improving academic performance. This suggests that targeted interventions can play a significant role in managing test anxiety and promoting better academic performance.

## 1. Introduction

In an educational context, test anxiety is a common and significant challenge, affecting a majority of students and hindering their academic performance. Students specializing in Tourist Guidance within the Art Department at King Faisal University face this issue, often experiencing excessive worry, negative thoughts, and physical symptoms such as a rapid heartbeat, sweating, and difficulty concentrating. These symptoms impede their ability to focus, retrieve information, and perform optimally during tests. This research aims to explore the nature and effects of test anxiety on their academic performance and the strategies they employ to cope with it.

Building on recent advancements in the study of test anxiety, Al Fraidan (2024a) emphasizes the importance of understanding the psychological underpinnings of anxiety in testing

contexts. His research on cognitive and affective dimensions of test-related stress highlights the need for adaptive interventions that address the root causes of anxiety. Additionally, Al Fraidan (2023) demonstrates how AI-based testing tools can create more personalized and less stressful assessment environments, paving the way for innovative solutions to test anxiety in academic settings.

By integrating such insights, this study explores the causes of test anxiety, its impact on vocabulary performance, and strategies to manage it. Through a combination of pre- and post-vocabulary tests and an online survey, the research identifies key factors contributing to test anxiety and evaluates the effectiveness of tailored interventions.

## **2. Literature Review**

Test anxiety is defined as a neurophysiological condition that includes thoughts of dread, worry and body activation while taking a test. It is presented as a mix of physical, mental and emotional symptoms developing prior to, during or after tests or examinations.

### **The Nature of Test Anxiety**

Test anxiety is a multidimensional construct consisting of two major components: cognitive anxiety and somatic anxiety. For cognitive anxiety, thoughts are negative regarding performance, anxiety, doubts, or fear. Somatic anxiety tends to manifest with physical symptoms including an increased heart rate, perspiring, trembling, and trouble concentrating.

### **Causes of Test Anxiety**

Although the causes of test anxiety vary widely from person to person, a few contributing factors have been identified. Having had bad experiences with tests or exams makes one fear the failure and anticipate the same in future. An example for this would be a student who has failed an important exam and who develops a fear of failure and anxiety related to future tests. A meta-analysis found that test anxiety has a detrimental effect on a range of performance outcomes, including standardized tests and GPAs, and that the strongest effect sizes were in the middle grades (von der Embse et al., 2018). Perfectionism, or the desire to do anything perfectly, can create underlying anxiety and a lot of mental pressure. An overachiever student can become so stressed and anxious about error free results. Evaluation apprehension, fear of being judged or evaluated negatively, can cause anxiety. For example, if a student fears looking incompetent or unprepared, this can show up as test anxiety. The main one being self-esteem as a key risk factor for test anxiety (von der Embse et al., 2018). Lack of preparation or cramming for tests can lead to increased anxiety. Example: – A student who auses procrastination or does not study effectively may end up feeling anxious and un prepared to take the exam. Finally self-critical thoughts, also known as negative self-talk worsen anxiety. For example, a student thinking things like "I'm not smart enough," or "I'm going to fail," might find that negative self-talk causes them to feel more anxiety and perform worse.

### **Consequences of Test Anxiety**

Test anxiety can hurt a student academically and in his or her personal life. Students who are afraid of failing have high anxiety associated with the fear — the stress can then impede their ability to concentrate and retrieve information, as well as make rational decision-making,

during exams. Physical, psychological, and cognitive manifestations of test anxiety may lead to inadequate examination performance (Hamzah et al., 2018). Negative self-talk, like “I’m not good enough” or “I’m going to fail,” can compound their anxiety and erode their confidence. It may hamper cognitive performance, causing problems in information retrieval, attention, and decision making (Maloney et al., 2014; Al Fraidan & Fakhli, 2024; Al Fraidan, 2024a; 2024b; 2024c; 2024d)). A student who is constantly afraid of failing a math exam might not be able to solve the problems even if he or she knows the subject well. This may create a negative spiral of anxiety, poor performance, and weaker motivation. The impact of academic anxiety isn't just limited to examinations, it affects students' home and school life as well and can be worsened by parental expectations, peer pressure, and difficult subjects (Sharma & Choudhury, 2020). Continued exposure to elevated levels of academic anxiety over a long period can result in psychosis of fear, school withdrawal, and subject phobias (Sharma & Choudhury, 2020). Guided by parental encouragement, teacher acknowledgment, emotional intelligence, and time management skills can serve students to cope with academic anxiety leading to improved academic achievement (Sharma & Choudhury, 2020, Al Fraidan & AlSalman, 2023).

Throughout the years, many students experience test anxiety.

The phenomenon of test anxiety is a substantial concern for the academic achievements and well-being of students at different grades and across countries (Soares & Woods, 2020). Strategies for managing test anxiety can be thought of as being broken down into environmental adjustments and student behavior<sup>^</sup> (Quinn & Peters, 2017). Here are some effective strategies one might use to reduce test anxiety. Cognitive-behavior therapy techniques (e.g. cognitive restructuring, relaxation techniques, or positive self-talk) can help individuals confront harmful attitudes and establish minor cognitive habits that may help decrease the physical symptoms of anxiety. Such as shifting "I'm going to fail this test" to "I've studied hard. Test anxiety is a widespread issue impacting academic performance, however, there are several successful interventions that have been identified. The students can use cognitive-behavioral techniques by also using relaxation methods and use of positive self-talk could be included to manage anxiety and to improve confidence (Chakraborty, 2023). According to a systematic review, Cognitive Behavioral Therapy (CBT), mindfulness, and emotional self-regulation were found to have a significant impact in decreasing anxiety levels among adolescents (Dhawan, 2024). Techniques like deep breathing and meditation can help calm the body and mind. It can help build confidence and diminish self-recrimination. Developing effective study habits, such as time management, active learning and consistent practice can help to increase confidence and alleviate anxiety. A student could, for example, create a study schedule, actively engage with the material by taking notes, summarizing them, and practicing the past exams regularly. In some cases, professional help, like counseling or medication, might be necessary. Some test anxiety interventions have shown success, though none collaborated with schools to provide practical, non-stigmatizing interventions (Soares & Woods, 2020). And the need for intervention is that structured (Soares & Woods, 2020; Quinn & Peters, 2017). For specifically nursing students, aromatherapy, music therapy, and several cognitive or behavioral interventions have documented experimental support for their effectiveness (Brodersen, 2017). And we have also (unfortunately non-experimental) evidence in favor of collaborative testing and crib sheets (Brodersen, 2017). Using these strategies

supported by empirical research, teachers and practitioners can support students in enhancing their academic progress and mental health.

### **3. Methodology**

The current study is to find out the effect test anxiety on five Jeddah King Faisal University tourists guidance students from art department. A mixed-methods research design was utilized to accomplish this goal, implementing both quantitative and qualitative methods.

#### **Participants**

Five undergraduate students from the Tourist Guidance specialization in the Art Department at King Faisal University participated in this study. All the students participating were either 21 or 22-years-old. They are female students with different educational backgrounds. Participants were chosen using purposive sampling based on their ability and willingness to offer insights that would contribute to understanding the research question. Their involvement is also because of how much test anxiety affects these students and how many of them develop test anxiety. Within this context, this study aims at proving the effect of test anxiety on these undergraduate students taking the Tourist Guidance specialization of the Art Department at King Faisal University on the one hand, and the strategies on the other hand they use in an attempt to alleviate the effect of test anxiety affecting them while they are taking the test.

#### **Data Collection Tools**

**Pre-Test and Post-Test of Vocabulary** A standardized vocabulary test paper was first administered to assess the consequent vocabulary of the undergraduate students in the Tourist Guidance specialization in the Art Department at King Faisal University before intervention and again after 10 hours of intensive private English sessions. The test was multiple-choice, with questions measuring vocabulary breadth and depth. This test was given to female students as to observing or seeing test anxiety in them, and perform strategies that they do to reduce the test anxiety effect so that they could answer the test questions with confidence.

**Online Test Anxiety Survey.** We used a self-report survey to measure participants' levels of test anxiety. The survey consisted of open-ended and multiple-choice questions. The first section of the survey included free text format through which the five students enrolled in the Tourist Guidance specialization of the Art Department at the King Faisal University were able to describe and express their feelings and experiences with the effect of test anxiety on their academic performance at school, while the second section of the questionnaire included multiple-choice questions about their opinion of the subject and its effect on them to different degrees.

#### **Procedures**

**Pre-Test.** To arrange the baseline measurement of the vocabulary knowledge and anxiety levels of the five undergraduate students who enrolled in Tourist Guidance specialization of the Art Department in King Faisal University, the vocabulary pre-test was administrated. Wadad, who was the only member of her family in university, took the test in a classroom in halls of the College of Arts, female section, at King Faisal University, located in Al-Ahsa region, specifically Salmaniya. There were so many of them and this was a big hall, with a

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great distance between each one of us. I told them they had a quarter of an hour, 15 minutes, to complete the test. They were taking the test, and I was standing there in front of the class, looking at them, and sometimes walking around them to see how much test anxiety affects them.

Post-Test. After an interval time considered appropriate. I told them what they scored on the first test (the chips), then showed them how happy I was with the scores they had achieved, told them the post-test for vocabulary to happen with a different sheet of paper and with a little smiley face attached with the sentence on the top of the sheet and encouraging words with a smiley face at the end of the sheet. Also this time I said to them they shouldn't rush since they had an open time to complete the test. I also tried to warm up all the five undergraduate students who learned the Tourist Guidance of the Art Department in King Faisal University, I told them do not afraid, The test last very clear and easy, and a little help I will give to them. Also, used my students in a lesser hall in College of Arts, King Faisal University and students closer to each other this time. In front of the students, I sat, long without looking at them. At times I would leave the room for short periods to decrease their test anxiety. The purpose of this test is to evaluate their vocabulary knowledge changes and if their anxiety was decreased.

Online Test Anxiety Survey. Through the social media apps, I issued an online survey to the five undergraduate students who were studying in the Tourist Guidance specialization of the Art Department of King Faisal University. The survey includes some questions about test anxiety and the effects on students. I let the students know that they can answer freely and that it was completely confidential because I will not reveal their personal information

#### Data Analysis

This was a bit of bad news for the king faisal university | All five of them (undergraduate students majored in the birth of tourist guidance in art department) | Had a nice result on vocabulary Preetest and unfortunately had couple of mistakes. At the end of the day two students selected the wrong option because of ambiguity of the correctness of the option. The other three students did not make any mistakes (and did well for admitting that two of them for the wrong answer at the beginning corrected it).

The results of post-test were extremely high. All five undergraduate students enrolled in the Tourist Guidance branch of the Art Department at King Faisal University scored full-mark answers; one student hesitated between the correct and wrong choices for the right answer but ended up selecting the correct answer. Once the students completed their answers for the test. They submitted the exam answer sheets and appeared to be pleased with what they had done.

The initial part of the survey was an open-ended questionnaire that contained four questions. The first query addressed their views of the test prior to sitting for it, and their responses differed. Some answered that it depends on the amount of content of the material and how difficult it was, they felt anxious and afraid that they do not know the correct answer, others answered that they were optimistic and that the test would be easy. Most of the students' answers, we note, suggest that they feel more anxious than reassured. Most of them feel anxious and afraid for different reasons, and these concepts affect their performance in their answers as some of them get confused while answering and may change their right answer to the wrong answer for some reasons including excessive thinking. So to reduce their stress,

they use some strategies that help and contribute them to be secure and self-confident, as we see in table 1.

Table 1 the responses of students to the open-ended questionnaire

Open-ended questions	Student A	Student B	Student C	Student D	Student E
What is your perception about any test before taking it	It depends on the material itself, whether it is understanding or memorization. If there is a lot of enumeration, it is considered difficult.	I feel nervous	I think it's easy and simple	Big optimistic	I afraid I will not know the answer and hoping it would be easy
what is impact of these perception on your test performance	It affects me if there is a lot of material in it with anxiety, but if it is easy, it affects me in a positive way, and I am optimistic.	It improves my level	It helps me a lot	High	Let me sometimes forget the right answer
Why you change your answers dure the test before deciding the final one	Too much focus on options.	I don't know the answer	Frequent review of answers and thinking	Second thoughts	Because of overthinking and reading the question and answers many times
What strategies do you use to help reduce test anxiety?	I read the supplications, trust in God, and read the questions with concentration and in a voice where I can hear myself and understand what is written.	Breathe and drink water	Sleep well, drink soothing herbs and study a few days before the exams.	Breathing	Try not think too much, play some music before taking the test and read the questions and in loud voice

A second part was the Likert scale questionnaire results indicate that the students self-assess their test anxiety on a different level, as it is demonstrated in table 2.

Table 2 the number of their levels under these questions.

	Always	Often	Sometimes	Rarely	Never
How often do you feel nervous or anxious before a test	-	1	3	1	-
Do you experience physical symptoms like sweating, trembling, or a racing heart before or during a test	-	1	1	1	2
Do you worry excessively about failing a test, even if you've studied well	-	1	1	-	3
Do you find it difficult to concentrate or focus during a test	-	1	1	2	1
Do you blank out or forget information you know during a test	-	3	2	-	-
Do you find yourself overthinking or second-guessing your answers on a test	-	1	1	3	-
Do you choose easier classes or avoid challenging courses to reduce test anxiety	2	-	1	-	2

#### 4. Results

Quantitative analysis of the pre-test and post-test data indicated a significant increase in vocabulary performance following the implementation of the intervention. The students were affected by test anxiety; this was shown through the pre-test where students made mistakes, resulting in a reduction in their grades; the pre-test reflects test anxiety resulting in the impact of their grades. It was also observed about them that they were confused and nervous after starting the test and that they just gave away their test papers after time used up, and that where they had trouble understanding the questions, there were scribbles on their papers instead. Some of them drew a line through it. A few of them would select two answers then cross out



the answer that was correct. However, that change occurred at the level of the post-test, where the test was high for the students after reducing their anxiety towards the test and the assurance of their ability to pass. Therefore, they succeeded in the task and their score on the test was sufficient to obtain the full score. As an example of having developed several strategies, they were 'told about their achievement, and was told that their grades were good in the pre-test', 'unfilled that they had enough time to respond to the questions', and having them close to each other, changing the place in smaller, having them exit from the hall, and keeping them with one for a while made increase their feelings of confidence and familiarity. Due to the supportive and encouraging battalion that contributed lowering the degree of exam stress for the students, and therefore positively reflected on the students ability to memorize the words being studied, the five- undergraduate-pupil studying the Tourist Guidance specialized track of the Art Department at King Faisal University, obtained high degrees in the vocabulary post – written exam.

The qualitative data from the open-ended comments in the survey added depth to understanding students' perceptions, emotions and strategies about test anxiety. The findings from the survey emphasized how the students are feeling anxious when doing the test and suggested that it impacts their academic performance. By this we come to the conclusion that students are having test anxiety The students also told that there are certain strategies that they follow to lessen the test anxiety which works for them and makes them feel confident

## 5. Conclusion

Meanwhile, test anxiety was one of the most significant psychological problems facing students in the tourism guidance major at the Department of Arts, King Faisal University. The following research raise a question about what is the problem of how to tell, test anxiety for students and how research and studies have addressed this problem, plus learning to make policies to minimize the negative effects of test anxiety on students such as thinking loud. The teacher should also support their ambitions by motivating them and attempting to soothe them in addition to instilling confidence in them. This research proved that students are capable of performing and even raising their academic performance after they reached the comfort zone and relaxed

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