

# Test Anxiety Among Post-Basic Education Students With Learning Disabilities at Sultanate of Oman

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## Abstract

This study aimed to identify the level of test anxiety among post-basic education students with learning disabilities (LD) in the Sultanate of Oman. A descriptive design (survey) was adopted. The study sample consists of 299 students with LD who were selected randomly. The survey used in this study includes 41 negative items divided into four dimensions (psychological, social, physical, and mental). The results showed a moderate level of test anxiety for post-basic education students with LD. The results also showed that there are statistically significant differences between males and females in the level of test anxiety in general, in favor of females. In addition, there are statistically significant differences between males and females in the level of test anxiety in favor of females on four dimensions (social, physical, mental, and psychological dimensions). Given these results, the current study suggested several recommendations. It is essential to conduct counseling programs for parents to educate them on the importance of using modern methods to deal with their children and to hold teacher training workshops regarding modern methods of helping students with LD overcome test anxiety.

**Keywords:** test anxiety, student, learning disabilities, post-basic education, Oman

## 1. Introduction

Students are mainly concerned about tests, which create tension and anxiety. Tests are not meant to exhaust or punish students; rather, they are simply an evaluation of students' yearly academic achievement. However the test period is fraught with negative feelings that affect students' mental health, resulting in anxiety that increases as the test nears, known as test anxiety (Hammoda, 2012).

Test anxiety is defined as an emotional state that affects a student's emotional stability and their ability to recall the subject during the test. This state may include psychological and physical symptoms such as stress and agitation. Therefore, it is a form of pathological fear disorder that has a large impact on a person's behavior. A heightened anxiety level is called debilitating anxiety, which pushes some students to escape or be absent from school out of fear of being tested. A moderate level of anxiety is called facilitating anxiety, which is considered normal (Qabaili, 2015).

If tests cause this much anxiety, post-basic education students with learning disabilities also experience this kind of anxiety, given that they realize that only success or failure awaits and that their passage to the next grade depends on those tests. Therefore, they experience increased anxiety levels when they hear about how hard and competitive the tests will be. Abu Muslim (2014) describes this voracious event as a "marathon" that demands more concern. Therefore, the researchers conducted this study to identify the level of test anxiety among post-basic education students with learning disabilities in the Sultanate of Oman.

### 1.1 Problem Statement

The study period is one of the most significant times in students' lives, involving many tests and evaluations accompanied by anxiety and stress that negatively reflect on their performance. The current researchers noticed that post-basic education students, especially students with learning disabilities, encounter severe test anxiety, as confirmed by Buatrah (2020).

Testing is an important way to evaluate students and measure their academic achievement. Al-Ramamnah et al.

(2017) confirmed that tests are the most common effective and essential tool for evaluating students' knowledge and goal achievement.

Given the significance of tests in student life, all stages of education include tests. Al-Maskari & Al-Dhafri (2021) stated that school tests are consecutive experiences through which every student should go to move to the next grade. Thus, tests differ based on the study grade; some, such as post-basic education tests, could determine a student's future.

Abu Muslim (2014) stated that the total marks scored by students with learning disabilities in the post-basic education tests determine whether a student progresses to the twelfth. Rumors about difficulty and competitiveness may affect students with learning disabilities.

Wang & Chung (2025) confirmed that a test is a primary source of anxiety for most students and particularly for students with learning disabilities. How students respond to test anxiety differs based on their circumstances and on the methods used. The authors of the current study intend to answer the question, "What is the level of test anxiety among post-basic education students with learning disabilities in the Sultanate of Oman?"

### 1.2 Study Objectives

The purpose of the study is to

- Determine the level of test anxiety encountered by post-basic education students with learning disabilities at Sultanate of Oman.
- Identify the difference in test anxiety levels between male and female post-basic education students with learning disabilities in the Sultanate of Oman

## 2. Literature Review

Since the 1950s, psychologists have recognized the significance of investigating anxiety and its correlation with learning. The resulting studies showed that some students achieve less than their actual capabilities in some test situations. They called this state "test anxiety" and considered it a kind of generalized anxiety that appears in test situations and makes a student feel nervous and distressed (Al-Damen, 2003).

Therefore, test anxiety elicits specific concern given its relation to students' scientific and educational destiny and their social position, creating a very real dilemma for many students and their families.

### 2.1 The Concept of Test Anxiety

Test anxiety has many different definitions. Many specialists and concerned researchers in this field have provided multiple definitions. Al-Meqbali and Al-Dhahadha (2016) indicated that the term "test anxiety" consists of four interacting dimensions: the mental dimension, which includes students' thoughts and beliefs; the emotional dimension, which includes emotions like nervousness; the physiological dimension, which includes sweating and increased heart rate; and the behavioral dimension, which includes reactions to situations such as escape or avoidance.

Al-Rashidi (2014) described two dimensions of test anxiety: the disturbance dimension, which is the student's discomfort and distress, causing them to be nervous and disturbed; and the emotionality dimension, the physiological state that may result in headaches, dizziness, nausea, elevated heart rate, and dry throat.

The *Encyclopedia of Psychiatry Psychology and Psychoanalysis* defined test anxiety as "a state of nervousness, anxiety and fear a person is exposed to a test situation, whether to move to a higher academic class or to determine his qualification for a certain job. Increasing anxiety level affects test scores which reduces his efficiency in passing the test or performing that job" (Qandil et al., 2011). Mabrouka (2019) mentioned that test anxiety is "an emotional and psychological state that occurs to a student in a test situation which leads to non-restfulness and fear of failure or not passing the test in a way that affects the student's cognitive, emotional and physiological status" (Mabrouka, 2019, 25).

Lazarus and Folkman defined the method of "using cognitive methods for stress reduction" as "the total efforts exerted by a person to change his emotional status related to the stressor. For example, using avoidance and escaping to drive attention away from the problem to reduce stress; but the impact of that solution is temporary" (Saed, 2019, p. 17).

Thus, test anxiety is defined as follows:

- Test anxiety consists of four aspects (i.e., cognitive, emotional, physiological, and behavioral dimensions).
- A student experiences test anxiety from fear of failure.
- Test anxiety is considered a student personality trait.

## 2.2 Theoretical Perspectives on Test Anxiety

Many psychological and educational theories addressed test anxiety given its significance for student success.

### 2.2.1 Behaviorism Theory:

Behavioralists such as John Watson, Pavlov, and others consider test anxiety a kind of acquired anxiety due to various stipulation processes that generate an acquired fear that pushes a person to escape or show avoidant behavior. This means that test anxiety is a behavior a person acquires through the environment in which they live, accompanied by positive or negative support (Al-Aynani, 2005).

According to the behaviorism theory, test anxiety is a negative strategy reflecting physical and psychological withdrawal from a problematic situation. There are behavioral patterns that prove its existence, such as crying and the inability to hold a pen to write (Abu Azab, 2008).

Biological perspectives suggest a biological and chemical disorder that causes test anxiety, to central nervous system receptors and an inherited factor of test anxiety, thus suggesting that a person's response to a test is not acquired but a genetic generalized anxiety.

### 2.2.2 Cognitivism

Cognitivists have argued that test anxiety is due to a person's wrongful thoughts and beliefs about a test, as they play an essential role in creating anxiety feelings. Cognitivists believe that students experiencing test anxiety are suffering from a cognitive disorder that make them feel that they will fail the test. Oltmans and Thomas clarified that there is a difference in thinking patterns and that negative thoughts precede the test situation, which make the student overestimate the test and retreat to encounter the situation (Abu Fouda, 2011).

### 2.2.3 Michonism and Welluter Theory

The founders of this theory focused on the difference between students who are anxious about the test and those who are not. Anxious students are distinguished by excessive self-talk and differ in terms of how they study and prepare for tests. They expect failure and are afraid of losing others' admiration (Aqil, 1982).

### 2.2.4 Anxiety State and Characteristic Theory

This theory argues that "considering anxiety as a personality trait, the individual differences are relatively stable and are not found in the behaviors but could be concluded by the repetition of anxiety status for a person throughout time and severity of the status" (Fayed, 2001, p. 47).

This theory suggests that anxiety is a student personality trait that has no direct effect on the student's performance but affects their anxiety status, as anxiety increases when the student realizes the consequences, threats, and dangers of the situation.

### 2.2.5 Theory of Data Preparation:

Benjamin et al. stated that students who experience a high level of test anxiety have an issue with student data organization, learning, and reviewing due to their reliance on memorization (Fayed, 2001).

## 2.3 Types of Test Anxiety

### 1- Facilitating Test Anxiety

Moderate anxiety with a positive and supportive impact, as it encourages students to study, recall, and seek high achievement and prepare them fully for the test (Abu Azab, 2008).

### 2- Debilitating Anxiety

High anxiety with a negative impact that hinders student performance; causes stress that increases fear and anxiety; leads to improper responses; directly affects student's comprehension, recall, and focus. (Zahrn, 2000).

## 2.4 Previous Studies

Many studies have addressed test anxiety and attributed it to various factors. The researchers found no studies that addressed test anxiety for students with learning disabilities in the Sultanate of Oman.

Al Khalifa (2007) aimed to explore differences in test anxiety in all of its three forms, mental absence, physical reactions and general anxiety, amongst learning disabled students and normal students in the elementary level of education (fifth and sixth grades) (male/female) in the kingdom of Bahrain. The results revealed that there were essential and statistically significant differences in the levels of test anxiety between those 5th -and 6th-graders with learning disabilities and normal students, there were statistically significant differences in the anxiety levels with regard to the type of difficulty in favor of those with learning disabilities in mathematics, there were no statistically significant differences in the levels of test anxiety with regard to type of gender, the test anxiety levels do not differ with regard to students' level of education (5th-grade or 6th-grade), and there were statistically significant interaction between the genders and the type of disability (reading/mathematics) in students' performance on the test anxiety scale.

Abdul-Qawi and Al-Aqraa (2014) aimed to identify the efficiency of self-academic perception and its relationship regarding testing students who have learning difficulties compared with normal students. The study used a sample of students in the intermediate and secondary schools in Kuwait. It applied a measure of efficiency of self-consciousness, and the measure of test anxiety. The results showed low awareness of the efficiency of self-academic and a high sense of concern. The test is statistically significant in terms of people with learning difficulties compared to normal students. There was a significant reverse correlation between learning difficulties for efficiency with perception of academics and sense of concern test and a higher feeling with learning difficulties in the intermediate stage related to testing than for learning disabled high school students. The results were interpreted in the light of the theoretical framework and previous studies. Recommendations were also presented.

Al-Awdat (2014) aimed to compare test anxiety among students with and without learning disabilities from 3rd to 6th grade and to study the effect regarding gender and grade level variables. To achieve the purpose of the study a sample (270) students was chosen from Amman schools, and a "children's test anxiety scale" applied (Benson & Wren, 2004), After verifying the validity and reliability of the scale on sample of Jordanian students. The study results revealed the presence of statistically significant differences at  $\alpha=0.05$  on the test anxiety levels and its dimensions among students with and without learning disabilities in favor of learning disabilities students. Similarly, the results showed the presence of statistically significant differences at  $\alpha=0.05$  on the autonomic reactions dimension, and for the test as whole, the average for females was higher than males. The results also show the presence of statistically significant differences at  $\alpha=0.05$  among students with learning disabilities on grade variable, in favor of sixth grade.

Yassin (2018) aimed at predicting Test Anxiety for learning disability students in relation to achievement motivation, locus of control, and academic self-concept. The sample of the study has consisted of 150 male and female (male: 63, female: 87) students who are diagnosed as having learning disabilities: with 50 students of each fourth grade, fifth grade and six grade. The students have been deliberately selected from public and private schools in the capital city of Amman which offer services for learning disabilities students. The researcher used the Sarason scale for test anxiety for students with learning disabilities. The results of the study revealed that the rate of test anxiety for students with learning disabilities was medial; the average of total score according to the test anxiety scale was 95.96.

Al-Ajmi (2019) attempted to determine the anxiety level among students with learning disabilities and identify the differences between them and ordinary students in the seventh grade concerning their responses on anxiety scale and identifying differences among them in the sub-scales included in the scale; as well as identifying the highest anxiety scales of students with learning disabilities compared with ordinary students. The study sample included 70 students in the seventh-grade intermediate stage: 35 students with learning disabilities in special needs classes and 35 seventh-grade students with no learning disabilities in public education schools in Kuwait. The researcher used the anxiety test for intermediate and secondary students of the Kuwaiti Ministry of Education. The scale includes six sub-scales distributed on 90 items, namely the scale of anxiety symptoms, the scale on health, the future anxiety scale, the school anxiety scale, the family anxiety scale, and the environmental anxiety scale. The results showed high levels of anxiety among students with learning difficulties compared with ordinary students. The average score on the test as a whole for students with learning disabilities was 47.14, whereas ordinary students reached the average grade (34.42).

Ammar (2020) aimed to verify the efficiency of cognitive load theory strategies in psychology teaching to develop essential thinking skills and reduce test anxiety for slow-learning students at the high school stage. The study was conducted on seven slow-learning high-school students. The study results proved the efficiency of cognitive load theory in teaching psychology to develop essential thinking skills for slow-learning high school students, as there

was a statistically significant difference between the sample score means on both pre and post-measurements in the summarization, goal setting, asking questions, and explanation skills in favor of the post-measurement with z values of 3.40, 3.20, 3.29, and 3.19, respectively. The impact size values were 0.661, 0.59, 0.61, and 0.601, which are significantly large. The results also showed a statistically significant difference at the significance level of 0.01 among the students' score means in the pre- and post-measurements for the essential thinking skills in favor of the post-measurement with a Z value of 3.40 and a large impact size value of 0.61, which reflects the impact of teaching psychology in light of the cognitive load theory on developing the essential thinking skills for slow-learning high school students and the efficiency of cognitive load theory strategies in reducing test anxiety for slow-learning high school students. There were also statistically significant differences at the significance level 0.01 between students' score means in the pre- and post-measurements on the test anxiety scale in favor of the post-measurement with a Z value of 1.39 and a moderate level of impact size (0.37) that does not reflect a large impact which means that there is an impact for teaching strategies in light of the cognitive load theory on the test anxiety score mean for slow-learning high school students. Therefore, it is clear that test anxiety may have other causes other than the matters related to the cognitive load which explains the moderate impact scores that do not reflect a large impact.

Al-Maskari & Al-Dhafri (2021) aimed to predict academic achievement based on test anxiety, subject value, and achievement goals, as well as determining the variable levels and differences between both genders. The study sample consisted of 644 second-cycle students from schools in the Sultanate of Oman (358 males and 286 females). The researchers used the test anxiety scale, subject value scale, and goal direction scale, whose validity, reliability, and suitability for the Omani environment were verified by previous studies. The results showed a high level of academic achievement, master-forward goal direction, performance-forward goal direction, and performance-backward direction, as well as a high level of test anxiety and subject value for the sample individuals. Regression analysis results indicated predictability (0.01) through test anxiety and direction toward academic achievement at a significance level less than zero (for both performance-forward and performance-backward goals). The results also showed statistically significant differences between the goal directions of master-forward, performance-forward, and performance-backward and academic achievement and test anxiety attributed to gender in favor of females. The results also showed no statistically significant differences between the subject value and direction of the master goal attributed to gender. The study recommended conducting counseling programs for students regarding ways to deal with test anxiety and the impact of goal directions on their academic achievement.

Al-Masry (2022) aimed to identify academic procrastination and its relationship with achievement motivation and test anxiety for students with learning disabilities. The study sample consisted of 53 students with learning disabilities enrolled in resource rooms in public schools of Amman ranging in age from 9 to 11 years. To achieve the objectives of the study, the researcher developed three scales: an Academic Procrastination Scale, an Achievement Motivation Scale, and a Test Anxiety Scale. Then the researcher found evidence for scale validity and reliability that justified their use for the purposes of her study. The results showed no statistically significant differences among levels of academic procrastination attributed to the variables of achievement motivations, test anxiety, and gender. The researcher recommended conducting further research about academic procrastination for students with learning difficulties on diversified variables and environments.

Al-Saad (2024) aimed to examine the levels of self-advocacy, test anxiety, and academic performance among a sample of high school students with learning disabilities and to identify any differences between male and female students in test anxiety. The sample consisted of 279 high school students with learning disabilities, including 142 males and 147 females. The study utilized the learning disabilities diagnostic scale (Al-Zayat, 2015) and the test anxiety scale (von der Embse et al., 2021). The results indicated that the levels of test anxiety among the sample were moderate. No significant gender differences were found in test anxiety.

The previous studies had various objectives. Some addressed test anxiety and its correlation with other variables, whereas few addressed test anxiety and psychological pressures at the same time. Moreover, various scales were used to study the test anxiety. By reviewing the previous studies, the researchers noticed that there are different methods to address this subject and that some studies that addressed test anxiety found no statistically significant differences in the level of anxiety between males and females. However, other studies found statistically significant differences between males and females in favor of females which suggests the need for further study to investigate the test anxiety level.

The researchers reached many useful insights by reviewing many of the previous studies in terms of identifying the problem and its significance. The researcher found that many studies addressed test anxiety by using different instruments which facilitate choosing one to measure the anxiety tests given their suitability for the Omani

environment and the objectives of this study.

### 3. Materials and Methods

#### 3.1 Approach

The descriptive approach was used in this study for to its suitability for the study's nature, as it aims to investigate the correlation with some variables considering their gender to achieve the study objectives and answer its questions.

#### 3.2 Study Sample

The study population consisted of all students with learning disabilities in the Ad Dakhiliyah Governorate, Sultanate of Oman, enrolled in the academic year 2022/2023. The population consisted of 2154 students from all 81 basic education schools (MoE, 2023).

The main study sample was chosen randomly. 299 responses were returned; therefore, the study sample consisted of (299) students with learning disabilities in the Ad Dakhiliyah governorate (which constitutes 14%, of the population of Oman) [see Table 1].

**Table 1.** Sample Distribution Based on the Study Variables

Variable	Type	Number	Percentage
Gender	Male	153	51.2%
	Female	146	48.8%
Total		299	100%

#### 3.3 Study Instrument

The Test Anxiety survey has been adopted after a review of the theoretical literature and previous studies (Abu Azab, 2008; Abdul-Qawi & Al-Aqraa, 2014; Al-Awdat, 2014; Yassin, 2018; Al-Ajmi, 2019; Ammar, 2020; Al-Maskari & Al-Dhafri, 202; Al-Masry, 2022; and Al-Saad, 2024) concerning test anxiety. The test anxiety survey was customized for the Omani environment. The survey consisted of (51) items distributed to four dimensions: psychological (21 items) social (11 items), physical (12 items), and mental (7 items).

The study instrument was applied on a pilot sample of 50 students to verify the psychometric characteristics of the instrument. To verify the survey validity, content validity and internal consistency analyses have been conducted. The survey was reviewed by 10 experts specializing in psychological counseling, mental health, and educational psychology. They provided consensus on the suitability of the survey items for the study's purpose, alignment with the study's objectives, and linguistic clarity; consequently, some items were deleted from the survey. Therefore, the survey consisted of (41) items.

**Table 2.** Pearson Correlation Coefficients between Each Item and Its Dimension

Psychological				Social		Physical		Mental	
No. item	P	No. item	P	No. item	P	No. item	P	No. item	P
1	0.689**	10	0.616**	18	0.619**	27	0.679**	36	0.783**
2	0.665**	11	0.625**	19	0.635**	28	0.723**	37	0.801**
3	0.714**	12	0.416**	20	0.689**	29	0.676**	38	0.785**
4	0.725**	13	0.599**	21	0.642**	30	0.736**	39	0.845**
5	0.758**	14	0.543**	22	0.640**	31	0.707**	40	0.809**
6	.0726**	15	0.456**	23	0.607**	32	0.692**	41	.0738**
7	0.715**	16	0.648**	24	0.641**	33	0.704**		
8	0.683**	17	0.557**	25	0.557**	34	0.815**		
9	0.668**			26	0.565**	35	0.655**		

After verifying the content validity of the study instrument, the validity of the items was calculated to determine the internal consistency of the survey items using the following procedures. First, Pearson correlation coefficients were calculated to determine the correlation for each item on the survey with its dimension as shown in Table 2.

Table 2 shows that all items of the test anxiety survey have a high and statistically significant correlation coefficient at the significance level (0.01), which suggests that the coefficient suits the items.

Second, calculating the correlation coefficient for each dimension of the test anxiety survey with the survey total score as shown in Table 3.

**Table 3.** Pearson Correlation Coefficient for Each Dimension of the Survey with the Survey Total Score

Test Anxiety Survey dimensions	Pearson correlation coefficient
Psychological dimension	0.921**
Social dimension	0.783**
Physical dimension	0.853**
Mental dimension	0.809**

Table 3 shows that the scores of all four dimensions of the survey have statistically significant relationships at the significance level (0.01) with the survey total score. The correlation values ranged from 0.921 to 0.783 for the four dimensions, which is a good indicator for survey validity.

To verify the test anxiety survey reliability, the reliability coefficient has been separately calculated for each dimension, then the total reliability coefficient has been calculated using the Cronbach's Alpha coefficient.

**Table 4.** Cronbach's Alpha Values for Each Dimension and for the Whole Survey

Surveys dimension	Number of Paragraphs	Cronbach Alpha
Psychological dimension	17	0.907
Social dimension	9	0.801
Physical dimension	9	0.876
Mental dimension	6	0.882
Test Anxiety Survey	41	0.949

Table 4 shows the Cronbach's Alpha coefficient for test anxiety survey and its dimensions, which indicates that the test anxiety survey has proper reliability for the purposes of this study.

The survey used in this study includes 41 negative items divided into four dimensions (psychological, social, physical, and mental dimensions). The respondents respond to the items according to the five-point survey: (5) Extremely High, (4) High, (3) Moderate, (2) Low, (1) Extremely Low. A low score reflects a low degree of test anxiety, and a high score reflects a high degree of test anxiety.

To determine the range for the five-point survey, the range (highest value - lowest value) was determined, resulting in a range of 4 ( $5 - 1 = 4$ ). To obtain the category width, the range was divided by the highest value in the survey (5), yielding a category width of 0.8. Then, the category width was added to the lowest value in the survey (1) to determine the upper limit for each category. The adopted standard for determining the level of test anxiety is as follows: Extremely Low,  $1 - 1.79$ ; Low,  $1.80 - 2.59$ ; Moderate,  $2.60 - 3.39$ ; High,  $3.40 - 4.19$ ; and Extremely High,  $4.20 - 5$ .

Regarding research ethics, the survey included instructions regarding confidentiality and the use of information solely for research purposes. An addition, the researchers obtained approval from the Research Ethics Committee at the University of Nizwa and the Ministry of Higher Education at the Sultanate of Oman to conduct the current research.

#### 4. Results

To answer the question "What is the level of test anxiety among post-basic education students with learning disabilities at Sultanate of Oman?" the means and standard deviations for test anxiety level were calculated as shown in Table 5.

**Table 5.** Means and Standard Deviations for Test Anxiety

No.	Dimensions	Mean	Standard Deviation	Rank	Level
1	Psychological Dimension	3.12	0.88	3	Moderate
2	Social Dimension	3.17	0.86	2	Moderate
3	Physical Dimension	3.06	1.03	4	Moderate
4	Mental Dimension	3.32	1.07	1	Moderate
	Total Test Anxiety	3.15	0.80		Moderate

Table 5 shows a moderate level of test anxiety ( $M= 3.15/ SD= 0.80$ ). The mental dimension ranked first with a moderate level ( $M= 3.32/ SD= 1.07$ ). The social dimension ranked second, with a moderate level ( $M= 3.17/ SD= 0.86$ ). The psychological dimension ranked third, with a moderate level ( $M= 3.12/ SD= 0.88$ ). The physical dimension ranked fourth, with a moderate level ( $M= 3.06/ SD= 1.03$ ).

To answer the second question, “Are there statistically significant differences in the test anxiety level among post-basic education students with learning disabilities at Sultanate of Oman attributed to gender?” means, standard deviations, and T-test of test anxiety level according to gender are shown in Table 6.

**Table 6.** Means, Standard Deviations, and T-test of Test Anxiety Dimensions According to Gender

Test Anxiety Dimensions	Gender	No.	<i>M</i>	<i>SD</i>	T	df	Sig.
Psychological Dimension	Male	153	3.00	.85	-2.509	296	.013
	Female	146	3.25	.89			
Social Dimension	Male	153	3.01	.88	-3.440	296	.001
	Female	146	3.35	.82			
Physical Dimension	Male	153	2.85	1.01	-3.581	296	.000
	Female	146	3.27	1.01			
Mental Dimension	Male	153	3.19	1.04	-2.290	296	.023
	Female	146	3.47	1.09			
Total Test Anxiety	Male	153	3.00	.78	-3.430	296	.001
	Female	146	3.31	.79			

The results of the statistical analysis shown in Table 6 indicate statistically significant differences between the means of males' ( $M= 3.00/ SD= 0.78$ ) and females' ( $M= 3.31/ SD= 0.79$ ) responses on the test anxiety survey, and the T-test value was (-3.430) at the significance level (0.05).

## 5. Discussion

The results show a moderate level of test anxiety for post-basic education students with learning disabilities. We should not neglect the impact of test anxiety on students with learning disabilities, given that the post-basic education year is a grade that prepares students to pass to the twelfth grade, which largely affects the students' future and puts that test in a critical and significant position for students, which causes a reasonable amount of test anxiety.

This moderate level of test anxiety could be attributed to the nature of the academic stage in which the eleventh grade ends and the twelfth grade starts, given that this stage will determine a student's future and destiny by going through tests to evaluate students' academic achievement. This explains students' test anxiety accompanied by mental, psychological, emotional, or physical dimensions that determine the extent of their response and acceptance of test anxiety.

The schools in the Sultanate of Oman are distinguished by providing psychological stability for students, as well as other counseling services that help them to handle and mitigate test anxiety and enable them to reach a moderate level of test anxiety.

We cannot neglect the role of the family in mitigating test anxiety among students and the appropriate environment it provides and encouraging students to prepare well for the test, given the significant role that environmental and genetic factors play in decreasing the level of test anxiety. Zahran (2000) confirmed that the most important cause of



test anxiety is the environmental factors that make students feel internal and external threats as well as the problems they experience during childhood and adolescence that lead to a high level of anxiety.

Spielberger's trait anxiety theory confirmed that the anxiety trait does not affect an individual's performance but affects their state of anxiety. Therefore, the individual's recognition is correlated with dangers and threats, which leads to a high state of anxiety. Spielberger made a number of assumptions as follows. The level of anxiety is relatively connected to the amount of threat in the situation to which the individual is exposed. Likely, the student's level of test anxiety is relatively connected to the test anxiety (Mabrouka, 2019). The results of current study are in line with the results of Abu Fouda's study (2011) that the test anxiety level was moderate. However, the results of this study contradict the results of Buatrah's study (2020), which showed a high level of test anxiety.

With reference to the mean values, there are differences between males and females in the level of test anxiety in general in favor of females, and there are differences between males and females in the level of test anxiety in favor of females on four dimensions (social, physical, mental, and psychological dimensions). However, the level of test anxiety for females was moderate.

So it can be concluded that differences between males and females in the phenomenon of test anxiety are hard to prove. It is generally agreed that girls can easily express their anxiety more than boys who are expected to choose the manhood path of courage.

Accordingly, there were no major differences between males and females in the level of test anxiety, but there were slight differences in the dimension of test anxiety and its impact on males and females given that test anxiety affects the physical dimension of the female students, causing increased heartbeats and nervousness. Further, test anxiety also affects the mental dimension for female students, which may cause them to forget some information acquired and lose their ability to focus. However, the female students of the eleventh grade could control test anxiety dimensions and symptoms by gathering tests questions related to the study subjects and solving them, as well as getting assistance from their teachers to overcome test anxiety, as teachers introduced them to various methods of good recall and preparation for the tests and avoiding nervousness and tension. Moreover, we cannot ignore the role of psychologists in post-basic education schools in preparing group counseling programs that increase students' awareness about test anxiety and the methods of dealing with it.

Female students have been able to acquire experience and knowledge about the proper ways of recalling and preparing for the tests which make it easier for them to handle test anxiety. Thus, a moderate level of test anxiety becomes a motive to enhance their achievement. This is also confirmed by Sarason and Mandler's form of interference, which suggested that test anxiety impact happens within the test situation in a way that affects a student's ability to recall and use information (Abu Fouda, 2011). The results of this study are in line with the results of Buatrah (2020), which concluded that females are more anxious than males at the test anxiety level. However, the results of this study do not agree with Abu Fouda's (2011) study which concluded that there are no statistically significant differences between males and females in the test anxiety level.

## 6. Conclusion

In conclusion, this study established that post-basic education students with learning disabilities in the Ad Dakhiliyah governorate experience a moderate level of test anxiety. While minor gender differences exist in the expression and experience of anxiety across various dimensions, both male and female students ultimately demonstrate a similar, moderate overall level.

The results underscore the importance of the existing support structures in Omani schools and the critical role of the family environment. Importantly, the study demonstrates that a moderate level of test anxiety need not be debilitating; when properly managed through effective strategies and institutional support, it can even serve as a motivator for academic achievement.

Based on the results of this study, the researchers provided some recommendations as follows:

- It is essential to conduct guidance and counseling programs for parents by seeking the help of parents' councils at schools to educate them on the importance of using modern methods in dealing with their children, especially during the test period, by providing the appropriate family environment and encouraging students to study and giving them the proper motivations.
- It is important to hold workshops to train teachers to use modern methods of dealing with students with learning disabilities to help them overcome test anxiety.

- Support should be sought from specialists in the field of psychology and psychological counseling to give lectures in the methods of coping with test anxiety, making it easier for students to handle test anxiety.
- The current study addressed only eleventh-grade students with disabilities in the Ad Dakhiliyah governorate. Therefore, the researchers suggest conducting a study that includes all post-basic education students in other governorates.

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## Authors contributions

Dr. Ahmad Alfawair were responsible for conceptualized and designed the study, developed the methodology, and was primarily responsible for the original draft preparation and the final writing of the manuscript. He also handled the formal analysis and interpretation of the data. Researcher Tamadher Al Alawi played a key role in the investigation and data curation processes, including the collection of data. She contributed to the writing of the manuscript by reviewing and editing subsequent drafts. Researcher Somaiya Al Riyami contributed to the literature review, provided critical resources. She also participated in the writing process by reviewing and editing the manuscript. All authors have read and approved the final version of the manuscript to be published.

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