

# A STUDY OF EXAM ANXIETY AMONG HIGH SCHOOL STUDENTS

*PARESH R. KHANESA*

**Ph.D Scholar, Gujarat University, Ahmedabad**

## **INTRODUCTION**

Omizo, Omizo and Suzuki (1988), write on academic anxiety as generated in students should be of concern to all because it has negative effects on the physical, emotional, social, and psychological component of the children. Thus, with mounting standards, rising stress on intellectual content and sharpening competition, we are adding to the number who show the symptoms of tension and stress. The current educational and technological revolution has generated in student especially a feeling of helplessness, meaninglessness and consequent stress. This all gives the birth to the academic anxiety.

During adolescence period, a number of anxieties take birth and bloom due to adolescents' rapid developmental changes, new social relationships, worries about career and future making and new responsibilities which they have to take. They are anxious about the evaluations of others about them, about being a part of group for which they are chosen, about ability to live up to parental expectations or not. In short, the sources of anxiety in the environment are numerous. At this times, adolescents are so much worried and anxiety ridden that it becomes very difficult for them to cope and adjust with the environment. Because of these anxieties and problems this period of the person is a period of great stress and strain. Certain psychologists like Hall, Smith and Freud found academic anxiety to be a kind of state anxiety which relates to the impending danger from the environment of academic institutions including teachers, certain subjects like mathematics, English etc. have labelled this period as "a period of great stress and strain, storm and strife".

In the high school, adolescents have a high anxiety because of academic stress. A high competition during high school time generates anxiety among students. Some of the students have anxiety about excelling in examinations. Others have anxieties about getting through an examination. They are also very anxious about their careers because they are not sure whether they have chosen the right streams to settle down in life.

## **REVIEW OF LITERATURE:**

Mohamad Mohamadia , Zahra Alishahib , Nooshin Soleimanic (2014). This study set out to explore the relationship between test anxiety and self-actualization as well as test score. The role of gender in the participants' level of test anxiety was also taken into consideration. To this end, two classes of BA students studying nonEnglish majors in the University of Tehran were selected. They all had taken a course in English as a foreign language (N=55); they all knew at least one language aside from their mother tongues. The questionnaire of test anxiety developed by Carver and Scheier (1991), and the Self-Actualization Index (SAI) by Jones and Crandall (1986) were administered to the participants. Participants were also asked to write their feelings regarding the anxiety they had gone through in that particular exam. The results of Pearson product-moment correlation coefficient revealed a significant negative relationship between test anxiety and self-actualization ( $R = -0.67$ ). The findings of independent-samples t-test also indicated that neither males nor females tend to experience a higher level of anxiety in exam settings. The relationship between test anxiety and test score is examined with regard to the whole sample in general and the extreme scores in particular. Participants' psychological experience before taking the test is also descriptively discussed. The results of this study suggest that test anxiety could be one of many variables which have a potential influence on the exam score. Therefore, rather than solely relying on a final exam, using ongoing assessments like portfolio or dynamic assessment seem more appropriate.

Clark-Bland and Iris (2004) had conducted "a study on the effects of teaching mathematics strategies and keeping mathematics journals to reduce mathematics anxiety". This mixed method study examined how different strategies of learning mathematics and keeping a mathematics journal in a remedial mathematics class in a community college affected mathematics anxiety and mathematics learning. Students were administered validated algebra pre and post tests and mathematics anxiety pre and post tests. The findings led to the following recommendations; (a) To break the cycle of mathematics anxiety, elementary high schools teachers who are mathematically anxious should take measures to lessen their own anxiety; (b) Educators should teach several strategies for learning mathematics; (c) Additional studies of journaling in mathematics to alleviate mathematics anxiety should be conducted; (d) Educators should solicit a mathematics autobiography form studies.

Anthony Gbenro Balogun, Shyngle Kolawole Balogun and Chidi Victor Onyencho (2017). This study investigated the moderating role of achievement motivation in the relationship between test anxiety and

academic performance. Three hundred and ninety three participants (192 males and 201 females) selected from a public university in Ondo State, Nigeria using a purposive sampling technique, participated in the study. They responded to measures of test anxiety and achievement motivation. Three hypotheses were tested using moderated hierarchical multiple regression analysis. Results showed that test anxiety had a negative impact on academic performance ( $\beta = -.23; p < .05$ ). Achievement motivation had a positive impact on academic performance ( $\beta = .38; p < .05$ ). Also, achievement motivation significantly moderated the relationship between test anxiety and academic performance ( $\beta = .10; p < .01$ ). These findings suggest that university management should design appropriate psycho-educational interventions that would enhance students' achievement motivation.

Schonwetter (1997) found that low test anxious males showed higher achievement outcomes, perceived more success over their performances, and felt more confident than high test-anxious females. Hong, (1999) found that female students reported higher trait test anxiety and statistics course anxiety than males did. This view was corroborated by Williams(1996) where females were reported to experience higher worry than emotionality, while little difference in components was found in males.

In a cross cultural study conducted by Sharma and Sud (1990) it was found that female high high school students experience higher level of test anxiety than do males, irrespective of cultural background It was concluded that the major factor involved in gender related differences in test anxiety among high high school students was greater role expectation conflict among females than among males.

#### **OBJECTIVES:**

1. To study and compare exam anxiety between urban and rural high school students.
2. To study and compare exam anxiety between urban male and urban female high school students.
3. To study and compare exam anxiety between rural male and rural female high school students.
4. To study and compare exam anxiety between arts male and arts female high school students.
5. To study and compare exam anxiety between commerce male and commerce female high high school students.
6. To study and compare exam anxiety between arts and commerce high school students.

#### **HYPOTHESIS:**

1. There will be no significant difference exist between urban and rural high school students with regard to exam anxiety.
2. There will be no significant difference exist between urban male and urban female college students with regard to exam anxiety.
3. There will be no significant difference exist between rural male and rural female college students with regard to exam anxiety.
4. There will be no significant difference exist between arts male and arts female college students with regard to exam anxiety.
5. There will be no significant difference exist between commerce male and commerce female high high school students with regard to exam anxiety.
6. There will be no significant difference exist between arts and commerce high school students with regard to anxiety.

#### **SAMPLE:**

In present study random sampling technique was used for the selection of the participants. The sample consisted of 600 high school students with regard to gender- male and female, area of residence-Urban and rural, faculty- Arts and commerce each cell 50 high school students were selected. Sample was taken from different areas of Valsad District.

#### **VARIABLES:**

In present research gender, area of residence and faculty were considered as Independent variables and Scores of exam anxiety was considered as Dependent variable.

#### **TOOL:**

##### **EXAMINATION ANXIETY SCALE BY DR. SUBHASH SARKAR (2015).**

The examination scale was developed to measure individual differences in examination as a situation-specific personality trait (Spielberger, 1972: Spielberger et. al., 1978). The EAS includes 50 statements and space for recording responses. The respondents are asked to report frequently experience specific symptoms of anxiety before, during and after examinations.

Liebert and Morris (1967). Having identified worry and emotionality as the two major components of examination anxiety, defines worry as cognitive concern about the consequences of failure and emotionality as

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reactions of the automatic nervous system that are evoked by evaluative stress. The construction, development and standardization of the EAS was guided by these concepts of test anxiety.

• **SCORING SYSTEM:**

All the statements are positively worded and the scoring systems are as per Table 1.

	Agree	Undecided	Disagree
Score	2	1	0

As such the minimum and maximum possible score on this scale is 00 to 100.

• **RELIABILITY:**

The reliability of this scale was calculated by Split –Half (Odd-Even) method. The coefficients of correlation are given in Table 4.

**Reliability Co-efficient**

Sample	N	r. (Split-half)	Significant Level
Boys	901	0.80	0.01
Girls	1099	0.79	0.01
Total	2000	0.79	0.01

• **VALIDITY:**

The EAS validity was established on 3 levels:

1. Expert's opinion where 100 agreements of the experts was the first criteria of selection- elimination of item.
2. First Try-out and as per difficulty level, selection and elimination of items.
3. Item Analysis by finding out the t- difference between the mean of high scoring group (27%) and low scoring group (27%) and on basis elimination of items and final selection of the items.

The scale has successfully completed all the above criterions.

**PROCEDURE:**

After establishing the rapport with selected high school students, Examination anxiety scale by Dr. Subhash Sarkar (2015) administered in small manageable group of students. After completion of data collection scoring was done by scoring key of Examination anxiety scale.

**STATISTICAL ANALYSIS:**

To analyzed the data 't' test was used.

**RESULTS AND DISCUSSIONS:**

**Table No. 1**

**Showing mean, SD and t value of exam anxiety of urban and rural high school students**

Variable	N	Mean	SD	t value	Level of significant
Urban	50	62.5	39.09	1.75	NS
Rural	50	75.76	36.54		

The mean scores of exam anxiety of urban High school Students is 62.5 with SD 39.09 and mean scores of exam anxiety of rural High school Students is 75.76 with SD 36.54. The obtained 't' value is 1.75 which is not significant. It means significant difference does not exist between urban and rural High school Students on exam anxiety.

**Table No. 2**

**Showing mean, SD and t value of exam anxiety of urban male and female high school students**

Variable	N	Mean	SD	t value	Level of significant
Urban Male	50	74.02	44.67	2.37	0.05 level
Urban Female	50	91.46	28.09		

The mean scores of exam anxiety of urban male High school Students is 74.02 with SD 44.67 and mean scores of exam anxiety urban female high school Students is 91.46 with SD 28.09. The obtained 't' value is 2.37 which is significant at 0.05 level. It means significant difference exist between urban male and urban female High

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school Students on exam anxiety. Urban female High school Students have more exam anxiety than urban male high school students.

**Table No: 3**  
**Showing mean, SD and t value of exam anxiety of rural male and female high school students**

Variable	N	Mean	SD	t value	Level of significant
Rural Male	50	73.58	44.73	1.06	NS
Rural Female	50	81.38	29.09		

The mean scores of exam anxiety of rural male High school Students is 73.58 with SD 44.73 and mean scores of exam anxiety rural female high school Students is 81.38 with SD 29.09. The obtained 't' value is 1.06 which is not significant. It means significant difference does not exist between rural male and rural female High school Students on exam anxiety.

**Table No: 4**  
**Showing Mean Scores of Anxiety of arts male and arts female high school students**

Variable	N	Mean	SD	t value	Level of significant
Arts Male	50	62.5	39.09	4.73	0.01
Arts Female	50	94.54	27.62		

The mean scores of exam anxiety of arts male High school Students is 62.5 with SD 39.09 and mean scores of exam anxiety arts female high school Students is 94.54 with SD 27.62. The obtained 't' value is 4.73 which is significant at 0.01 level. It means significant difference exist between arts male and arts female High school Students on exam anxiety. Arts female high schools Students have more exam anxiety then arts male high school students.

**Table No: 5**  
**Showing Mean Scores of Anxiety of commerce male and arts female high school students**

Variable	N	Mean	SD	t value	Level of significant
Commerce Male	50	91.76	28.09	2.54	0.05
Commerce Female	50	73.82	42.79		

The mean scores of exam anxiety of Commerce male High school Students is 91.76 with SD 28.09 and mean scores of exam anxiety Commerce female high school Students is 73.82 with SD 42.79. The obtained 't' value is 2.54 which is significant at 0.05 level. It means significant difference exist between Commerce male and Commerce female High school Students on exam anxiety. Commerce male high schools Students have more exam anxiety than commerce female high school students.

**Table No: 6**  
**Showing Mean Scores of Anxiety of arts and commerce high school students**

Variable	N	Mean	SD	t value	Level of significant
Arts	50	130.3	122.76	2.07	0.05
Commerce	50	93.3	29.35		

The mean scores of exam anxiety of arts faculty High school Students is 130.3 with SD 122.76 and mean scores of exam anxiety Commerce faculty high school Students is 93.3 with SD 29.35. The obtained 't' value is 2.07 which is significant at 0.05 level. It means significant difference exist between arts and Commerce faculty High school Students on exam anxiety. Arts faculty High school Students have more exam anxiety then commerce faculty high school students.

**CONCLUSIONS:**

1. Significant difference does not exist between urban and rural High school Students on exam anxiety.
2. Significant difference exists between urban male and urban female High school Students on exam anxiety. Urban female High school Students have more exam anxiety then urban male high school students.
3. Significant difference does not exist between rural male and rural female High school Students on exam anxiety.

4. Significant difference exist between arts male and arts female High school Students on exam anxiety. Arts female high schools Students have more exam anxiety then arts male high school students.
5. Significant difference exist between Commerce male and Commerce female High school Students on exam anxiety. Commerce male high schools Students have more exam anxiety then commerce female high school students.
6. Significant difference exists between arts and Commerce faculty High school Students on exam anxiety. Arts faculty High school Students have more exam anxiety then commerce faculty high school students.

**REFERENCES:**

- 01 Omizo, M. M., Omizo, S. A., & Suzuki, L. A. (1988). Children and stress: An exploratory study of stressors and symptoms. *High school Counselor*, 35(4), 267-274. Retrieved from <http://psycnet.apa.org/psycinfo/1989-06763-001>.
- 02 Anthony Gbenro Balogun, Shyngle Kolawole Balogun and Chidi Victor Onyencho (2017). Test Anxiety and Academic Performance among Undergraduates: The Moderating Role of Achievement Motivation. *The Spanish Journal of Psychology*. Volume 20.
- 03 Clark-Bland and Iris (2004) conducted “a study on the effects of teaching mathematics strategies and keeping mathematics”,*International journals to reduce mathematics anxiety, Dissertation Abstracts* , vol.63, No.5.
- 04 Hong, E. (1999). Test anxiety, perceived test difficulty, and test performance: Temporal patterns of their effects. *Learning and Individual Differences*, 7 7(4), 431-447.
- 05 Mohamad Mohamadia , Zahra Alishahib , Nooshin Soleimanic (2014). A Study on Test Anxiety and Its Relationship to Test Score and Self-actualization of Academic EFL Students in Iran. *Procedia - Social and Behavioral Sciences* 98 ( 2014 ) 1156 – 1164.
- 06 Sharma, S., & Sud, A. (1990). Examination Stress and Test Anxiety: A Crosscultural perspective, *Psychology and Developing Societies*, 2, 183- 220.
- 07 Williams, J. (1996). Gender-related worry and emotionality test anxiety or high achieving students. *Psychology in High schools*, 33, 159-162.