

# Test Anxiety and Its Relation with the Academic Performance of the Final Year B.Sc. Students

<sup>1</sup> Avineeta Sikidar and Dr. Sima Pal<sup>2</sup>

<sup>1</sup>Research Scholar, <sup>2</sup>Associate Professor,

<sup>1</sup>Assam University, Silchar, Assam, India, <sup>2</sup> Assam University, Silchar, Assam, India.

Anxiety is faced by everyone in their day to day life and it is a very common problem with the persons involved in education. Especially the students face lots of anxiety during their study or during / before their test. Sometimes the anxiety of the students affects their performance on the test. The present study investigated the impact of anxiety on the test performance of the B.Sc. final year students. The investigator developed an Anxiety Scale for the collection of data. The sample was selected from degree Science colleges under Hojai district and from the total population of final year B.Sc. students 15%-20% were taken for the study. Mean, SD and t-test were used to analyze the data.

Key words: Test Anxiety, High anxiety, Average anxiety, Academic Achievement.

## Introduction

In the present day competition and ambition both are found almost in every sector like family, society, business, education, sports etc. and it results to a very common problem of the present society i.e. Anxiety. In almost every field of work people are suffering from anxiety and like other sectors, in educational sectors also teachers and students are suffering from anxiety and like other sectors, in educational sectors also teachers and students are suffering from anxiety. In the field of education competition for success is very high and day by day the teachers, the students, the parents themselves are becoming very ambitious and high ambition results the problem of anxiety among them. Beside this sometimes burden of study, desire to get a good job and a good social status etc. leads to anxiety and student's unrest in the society and all the factors sometimes affect the test performance of the students.

## Anxiety

Anxiety is a feeling of fear, worry or nervousness. It can occur both physically and psychology and sometimes may occur without a cause or based on real situation but may be out of proportion to what would normally be expected. In behavioural terms Sarason (1980) defined anxiety as a conditioned response to a perceived threatening stimulus which could be learned or inherited. Similarly May (1977) viewed anxiety as a maladjusted behaviour. According to Huberty and Dick (2006), anxiety can manifest in three ways-behaviourally, an individual may begin to feel fidgety, become irritable and avoid the situation causing anxiety of fail to complete the activity. Physiological responses can include rapid heartbeat, flushing of the skin, headaches or nausea. Cognitive responses can include problems with concentration, perfectionism, oversensitivity and cognitive dysfunction (Huberty and Dick, 2006).

Many researches have been conducted worldwide to determine the factor contributing to an individual's anxiety level and performance on test. Due to the progress in research the researchers have moved from anxiety being the main cause of poor test performance to anxiety being influenced and combined with various external and internal contributing factors. Jamey Brannon has mentioned various factors of anxiety such as negative thoughts and worries, poor study habits, lack of learning skills, expectations etc. in his research study.

## **Anxiety and Test Performance**

Anxiety is an important determinant of test performance. Anxiety during or before a test effect student's test performance. Mandler and Sarason (1952) believed that high test anxiety interferes with test performance by impairing the performance, while low test anxiety helps to improve test performance.

### **Significance of the study**

Anxiety is a very common problem of the society. It is experienced by everyone more or less in their day to day life. In the field of education, anxiety of the students in relation to their study is a burning problem. Especially among the college students, the anxiety disorders have become more prominent. According to Anxiety Disorder Association of America (ADAA), the most common mental health problems in college campuses are anxiety disorders. A student's anxiety may develop from the pressures associated with tests, grades etc. the college students at present day are facing a lot of pressures due to their academic performance because for getting a good job or for getting a good social status, a good academic career is required and it has been recognized that anxiety plays a significant role in students learning and academic performances (Tobias, 1979). But it has been estimated that as many as 20% of all college students suffer from test anxiety that severely impacts their academic achievements (Test Anxiety, 2004; UT Learning Centre, 2006). Sometimes small amount of anxiety can help some individuals to work harder and achieve more; anxiety can become so severe for others that they suffer from emotional, behavioural cognitive and physical effects (Bodas and Ollendick, 2005; UT Learning Centre, 2006), which are related to poor test performance and academic achievement (Bodas and Ollendick, 2005; Test Anxiety, 2004). Sometimes individuals may experience anxiety blocks (Huberty and Dick, 2006) in which the information is known before taking the test but unable to recall the information during the time of the test. Though every student suffers from anxiety but especially the final year bachelor students have a lot of anxiety because after completion of the course they want a good social status, a good job etc.

### **Statement of the Problem**

Test Anxiety and its relation with the academic Performance of the Final Year B.Sc. students.

### **Objective of the Study**

The objective of the study is to find out the relation between Test Anxiety and the academic Performance of the Final Year B.Sc. students.

### **Hypothesis**

$H_0$  There will be no significant relationship between High Anxiety and test performance of the final year B.Sc. students.

$H_0$  There will be no significant relationship between low Anxiety and test performance of the final year B.Sc. students.

### **Methodology**

The study was descriptive (survey) in nature. The data were collected by the investigator with the use of the anxiety scale.

### **Population and sample**

The students of B.Sc. final year of Hojai district constituted the population of the study. The sample of the study was taken randomly as 15%-20% of the total population of B.Sc. final year students of urban and semi urban degree colleges of Hojai district.

## Instrumentation

An anxiety scale developed by the investigator for the collection of data.

## Statistical Analysis

The collected data were analyzed by using mean, SD and t-test.

## Delimitation

1. The present study is delimited to the both male and female final year B.SC. students of Hojai district.
2. The study is delimited to the two degree Science colleges of urban area and semi urban area of Hojai district.

## Analysis and Interpretation of Data

Table 1. High Anxiety and Test Performance of the Science Male Students of Urban College and Semi-urban College.

For Urban Collegedf=10 and for Semi-urban Collegedf =10

M- mean, SD- Standard Deviation, t- t value.

Table 1 showed the High Anxiety and test performance of the Science male final year graduate students of Urban College and Semi-Urban College. The mean scores of Anxiety received from the data analysis of the respective colleges were 36.67 and 35.5 and of Test Performance were 40.5 and 50.33. The SD of Anxiety was 3.45 and 4.75 and of Test performance were 15.26 and 18.29. The t values were 0.54 and 1.75 which was not significant in 0.01 levels. It indicated that in case of the male Science students of Urban College and Semi-urban College, the High Anxiety and test performance did not showed significant relationship. Therefore, the hypothesis i.e. “there will be no significant relationship between High Anxiety and test performance of the final year B.Sc. students” for male students is rejected.

Table 2. High Anxiety and Test Performance of the Science Female Students of College 1 and College 2.

Variables	Urban College			Semi-urban College		
	N=14			N=10		
	M	SD	T	M	SD	t
Anxiety (High)	36.43	2.29	2.47	33.5	3.58	4.73
T/P	43.36	10.09		50.1	9.82	

For Urban Collegedf =26 and for Semi-urban Collegedf =18

M- mean, SD- Standard Deviation, t - t value.

Table 2 showed the High Anxiety and Test Performance of the Science female final year graduate students of Urban College and Semi-urban college. The mean scores of Anxiety received from the data analysis of the respective colleges were 36.43 and 33.5 and of Test Performance were 43.36 and 50.1. The SD of Anxiety was 2.29 and 3.58 and of Test Performance were 10.09 and 9.82. The t values were 2.47 and 4.73 among which 2.47 was not significant in 0.01 level and 4.73 is significant in 0.01 level. . It indicated that in case of the female Science students of Urban College, there was no significant relationship found between the High Anxiety and Test Performance but for the students of Semi-urban College, the High Anxiety and Test Performance showed significant relationship. Therefore, the hypothesis i.e. “there will be no significant relationship between High Anxiety and test performance of the final year B.Sc. students” for female students is rejected.

Table 3. Low Anxiety and Test Performance of the Science Male Students of Urban College and Semi-urban College.

Variables	Urban College			Semi-Urban college		
	N=			N=		
	M	SD	t	M	SD	t
Anxiety (Low)	43.11	2.6	0.12	47.33	4.22	0.58
T/P	43.78	15.53		51.56	20.39	

For Urban Colledgf =16 and for Semi-Urban Colledgf =16

M- mean, SD- Standard Deviation, t - t value

Table 3 showed Low Anxiety and Test Performance of the Science male final year graduate students of Urban College and Semi-urban college. The mean scores of Anxiety received from the data analysis of the respective colleges were 43.11 and 47.33 and Test performance was 43.78 and 51.56. The SD of Anxiety was 2.6 and 4.22 and of Test performance were 15.53 and 20.39. The t values were 0.12 and 0.58 which were not significant in 0.01 levels. It indicated that in case of the male Science students of Urban College and Semi-urban College, the Low Anxiety and Test performance did not showed significant relationship. Therefore, the hypothesis i.e. “there will be no significant relationship between Low Anxiety and test performance of the final year B.Sc. students” for male students is rejected.

Table 4. Low Anxiety and Test performance of the Science Female Students of Urban College and Semi-Urban College.

Variables	Urban College			Semi-Urban College		
	N=			N=		
	M	SD	t	M	SD	t
Anxiety (Low)	43.4	4.03	3.10	44.88	3.72	4.07
T/P	57.4	8.14		61.75	10.10	

For Urban Colledgf =8 and for Semi-urban Colledgf =14

M- mean, SD- Standard Deviation, t - t value.

Table 4 showed Low Anxiety and Test performance of the Science female final year graduate students of Urban College and Semi-urban college. The mean scores of Anxiety received from the data analysis of the respective colleges were 43.4 and 44.88 and of Test Performance were 57.4 and 61.75. The SD of Anxiety was 4.03 and 3.72 and of Test Performance were 8.14 and 10.10. The t values were 3.10 and 4.07 among which 3.10 was not significant in 0.01 level and 4.07 is significant in 0.01 level of significance. It indicated that in case of the female Science students of Urban College the Low Anxiety and Test performance did not show significant relationship but in case of Semi-urban College, Low Anxiety and Test Performance showed significant relationship. Therefore, the hypothesis i.e. “there will be no significant relationship between Low Anxiety and test performance of the final year B.Sc. students” for female students is rejected.

## Findings

1. No significant relationship was found in between the High Anxiety and Test Performance of the male students of B.Sc. final year of Urban College and Semi-urban College.
2. No significant relationship was found in between the High Anxiety and Test Performance of the female students of B.Sc. final year of Urban College but in case of the female students of Semi-urban College the relationship was significant.
3. No significant relationship was found in between the Low Anxiety and Test Performance of the male students of B.Sc. final year of Urban College and Semi-urban College.

4. No significant relationship was found in between the Low Anxiety and Test Performance of the female students of B.Sc. final year of Urban College but in case of the female students of Semi-urban College the relationship was significant.

## Conclusion

Anxiety is an important factor, which affect the Test performance of the students. Thomas and Gadbois (2007) reported that test anxiety can significantly predict the mid-term examination grade. But Smith (1964) reported that test anxiety generally have negative effect on performance. In the present study the investigator has found that the high anxiety affect the test performance of the female B.Sc. Students but did not affect the male B.Sc. students and the Low anxiety affect the test performance of the female B.Sc. Students but did not affect the male B.Sc. Final year students.

## References

- Aguirre, Sofia (2010). Anxiety problems in college students rising. UTEP/EPCC Voices of Anxiety.
- Ali, Riasat, Akhter, Aqila, Shahzad, Saqib, Sultana, Najma, Ramzan, Muhammad. (2011) The impact of motivation on student's Academic Achievement in Mathematics in problem based learning environment. *Journal of Academic Research*. Vol-3, No-1, Part-1
- Bodas, J., & Ollendick, T. H. (2005) Test Anxiety: A Cross-Cultural Perspective. *Clinical Child and Family Psychology Review*, 8(1), 65-88.
- Burns, D. (2004). Anxiety at the time of the final exam: Relationships with expectations and performance. *Journal of Education for Business*, 80(2), 119-124.
- Carson, R. C., Butcher, J. N. & Mineka, S. (2003) *Abnormal Psychology and Modern life*. Pearson Education (Singapore) Pvt. Ltd. New Delhi.
- Chandler LeAnn (2006). Gender difference and test anxiety. Ph.D thesis. Marshall University.
- Chapel M.S., Blanding Z.B., Silverstein M.E., Takahashi M., Newman B., Gubi A. and McCann N. (2005). Test anxiety and academic performance in undergraduate and graduate students. *Journal of Educational Psychology*. Vol-97, No.2, 268-274.
- Huberty, T. J., & Dick, A. C., (2006). Performance and test anxiety. In G. G. Bear; K. M. Minke (Eds.), *Children's needs III: Development, prevention, and intervention* (pp. 459-472). Washington, DC: National Association of School Psychologists.
- Koul Lokesh (2009) *Methodology of Educational Research*. Vikas Publishing House Pvt. Ltd. Noida
- Mary R.A., Marslin G., Franklin G. and Sheeba C.J. (2014). Test anxiety level of board exam going students in Tamil Nadu, India. Hindawi Publishing Corporation, *BioMed Research International*, Vol-2014.
- Olatoye R.A. (2009) Students' Test Anxiety, Motivation for Examinations and Science Achievement in Junior Secondary Schools in Ogun State, Nigeria. *Journal of Psychology and Counselling*, Vol. 1(10), pp194-198.
- Page James D. (1947). *Abnormal Psychology*. Tata McGraw Hill Publishing Co. Pvt. Ltd. Bombay. New Delhi.
- Preiss, R. W., Gayle, B. M., & Allen, M. (2006) Test anxiety, academic self-efficacy and study skills: A meta-analytic review. In B. M. Gayle, R. W. Preiss, N. Burrell & M. Allen, (Eds.), *Classroom interaction and instructional processes: A meta-analytic review*, (pp. 99-111). Mahwah, NJ: Lawrence Erlbaum Associates.

Rana RizwanAkram and Mahmood Nasir (2010). The relationship between test anxiety and academic achievement. *Bulletin of Education and Research*.

Sarason, I. G. (1984) Stress, anxiety, and cognitive interference: Reactions to tests. *Journal of Personality and Social Psychology*, 46(4), 929-938.

Sidhu, Kulbir Singh (2009) *Methodology of Research in Education*. Sterling Publishers Pvt. Ltd.

Singh S. and Thukral P. (2009). The role of anxiety in achievement. *Journal of exercise science and physiotherapy*, Vol.5, No.2. 122-125.

UT Learning Center. (2006). *Are You "Test Anxious"?* Retrieved September 22, 2006, from The University of Texas at Austin: <http://www.utexas.edu/student/utlc/lnres/handouts/1305a.html>

Vitasari P., Wahab M.N.A., Othman A., Awang M.G. (2010). A research for identifying study anxiety sources among university students. *International Education Studies*, Vol.3, No.2.

Vitasari P., Wahab M.N.A., Othman A., Awang M.G. (2010). The use of study anxiety intervention in reducing anxiety to improve academic performance among university students. *International journal of psychological studies*, Vol.2, No 1.

Zeidner, M. (1998). *Anxiety: The state of the art*. New York: Plenum Press.

Zung. William W.K. (1971) A rating instrument for anxiety disorders. *Psychosomatics*.

