

## **A Study of test Anxiety on Academic Performance of Secondary School Students in Quetta City**

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### **Abstract**

*Test anxiety is one of the significant factors that undermines the capabilities of the students and prevent the complete expression of their abilities. The present study aimed at inquiring the test anxiety levels among secondary school students in Quetta and its impact on academic achievement of them. The population selected for our research included all the Secondary schools operational in Quetta city. Achievement Anxiety Test questionnaire ([Alpert & Haber, 1960](#)) was translated to obtain secondary data from the students of secondary schools. The questions were culturally adapted to identified variables chosen for the research. The independent variables include Test Anxiety, Exam Pressure, Emotional Distress and the dependent variable is Academic performance. Among these variables around 8 Questions were formed for the Variable of Test Anxiety, 5 Questions were formed for the Exam Pressure, 7 Questions were formed for Emotional Distress and 9 Questions were formed for the dependent variable i.e. Academic Performance of students. A five 5 point scale system is used for obtaining the responses. SPSS software of IBM version 20, for the interpretation and analysis of the following data obtained from the respondents. tests conducted over the acquired data include Correlation Test. Our research sample comprised of 432 respondents in which 162 were male and 270 were female students belonging from high schools in Quetta City. The sample from the selected population included the students aged*

*between 10 - 16 studying in 9th and 10th classes in Quetta city. Total reliability was applied over the translated questionnaire of the research. The result shows that the value was 0.719 which was a good and reliable value for our Questionnaire. The Correlation of the data shows that all the variables are positively correlated to produce a positive effect over academic performance. It indicates that a change of 0.423 in the test anxiety will produce a change in academic performance. Exam Pressure and Emotional Distress are correlated as 0.335 and 0.334 respectively. The value of Test anxiety which is 1.372 indicates that a change in the Test Anxiety by 1.372 will produce a change in the Academic Performance of the students. While a change of 0.106 in the Exam pressure techniques will produce a same change in the Academic Performance. While a change of 0.205 will produce a change in the academic Performance. The test anxiety had been found to have the negative relation with academic performance. The academic performance of the high school students badly suffered from this factor. It impeded the learning goals and objectives and thus ultimately the skilled and learned human capital.*

## **Introduction and Background**

The constitution of Pakistan offers the egalitarian perspective for education on the basis of the values that respond to the requirements of the economic growth. In the article 38(d) of the constitution it states of introducing the moral values and of providing education to all the citizens irrespective of caste, creed, gender or race. The article 37(b) explicitly mentions that the state of Pakistan will endeavour to eliminate barriers to eliminate illiteracy and providing free and compulsory secondary education. Article 34 of the constitution of Pakistan requires that the steps would be taken to assure full participation of women in all the quarters of the national life ([Daud, 1998](#)).

An education system can't remain isolated of the challenges and opportunities offered by globalization which are in the field of business and commerce, technology, cultural values, identity and many more. Regrettably, a comprehensive national analysis and debate on the potential impact and possible benefits of globalization has remained major deficit.

The education goals of vision 2030 emphasize on providing globally competitive and quality education, training and research for the development. Along with the National Education Policy of Pakistan 2009, are the Sustainable Development Goals (SDGs) whose major aim is to boost development through improving social and economic conditions in the developing countries ([Mukolwe, 2015](#)). The SDGs focus also emphasize on developing human capital among others. Education remains the key in the human capital. Through examinations the educational outcomes and achievements of learners are assess and graded ([Chinta, 2005](#)). In fact, the tests are common in day to day life; from subject specific tests in schools to the tests taken during jobs to move up. This adds an immense pressure on the test achievement and grades. Hence, in most cases, this leads many people to become anxious when subjected to examinations ([Huberty, 2010](#)). This form of anxiety is referred as the test or examination anxiety. Spielberg defines test anxiety as “a situation specific trait that refers to the anxiety states and worry conditions experienced during examinations. The level of anxiety can fluctuate over time in response to both internal and external stimulation” ([Spielberger & Vagg, 1995](#)).

Test anxiety is a nervousness which occurs when a student is subjected to an examinations in any form and at any level ([Spielberger & Vagg, 1995](#)). There are plethora of research studies reporting text anxiety as the major cause of underachievement of students and their low performance during various levels of educational life ([Oludipe, 2009](#)) and it has been observed that it affected students' ability to gain from instructions

([Schonwetter, 1995](#)). Test anxiety is a prevalent phenomenon when the extreme nervousness arising from an anxiety producing test situation prevents one from demonstrating their true potential and hence lowers performance especially in the educational setting ([Karatas, Alci, & Aydin, 2013](#)).

According to Crooks, there is a range of factors that contribute to the variance in students' cognitive and effective outcome. Some of these factors are maturity, capability of students, teaching methodologies, motivational levels, environment at homes and the peer group inside and outside the classroom ([Crooks, 1988](#)). There are many factors, which have effect on achievement of students in different subjects, like test anxiety, attitude, gender, race, socioeconomic status, self-efficacy, peers, teachers, parents, motivation, ability, and learning environment etc ([Rodriguez, Jones, Pang, & Park, 2004](#)).

The strain of tests and examinations is considered to keep some individuals to reach their academic potential. It's been pointed out that students constantly perceive examinations as a source to elevate anxiety and any situation full of unfairness /uncertainty to let them exhibit their true potential ([Spielberger & Vagg, 1995](#)).

According to McDonald, about 2/3rd of the students of high school appear to have been experiencing extremely high levels of test anxiety. Undoubtedly, for many students the high school examinations and higher exams are the most anxiety-inducing experiences during their academic career. Test anxiety is found to have a negative relationship with academic success ([McDonald, 2001](#)).

Test-anxious children have been found to be more likely receiving poor grades, repeat their grades and perform below par on tasks that require new learning ([Beidel, Turner, & Trager, 1994](#)). Similarly, a study carried out by Nicholson to find out the effects of test anxiety on the achievement of students in 11 students, which revealed that the anxiety and achievement are related to each other ([Nicholson, 2009](#)).

These anxiety related behaviors during testing conditions affect the academic performances of students in one way or the other. Of course a minute amount of anxiety is required to stimulate human beings in order to respond rapidly and proficiently but when it exceeds it may render poor responses ([Jing, 2007](#)). Therefore, higher anxiety during examination interferes with the focus of students over the test, hence lowering their performances in examination. Due to the significance of the exam points, students are supposed to develop test anxiety symptoms as soon as their examination approaches near ([Huberty, 2010](#)).

Most of the research work that has been done on the effects of test anxiety over academic performance of students indicates a negative relationship between performance and test anxiety ([Huberty, 2010](#)).

The present study aimed at exploring the impact of test anxiety among the secondary school students and how these levels of anxiety, if any, affects the academic performance of the students in class as well as during examination in private and public schools of Quetta city.

### **Statement of the Problem**

Anxiety is one of the prevailing mood states associated to the anxiousness, feelings of strain and worry, nervousness and apprehension. It exhibits among students as the feelings of worriedness and nervousness generally known as test anxiety. In their educational career number of the students undergo test anxiety and get to suffer through lowered academic achievements. However, if it is identified, it can be lowered to the point at which it has the minimal affect on students' academic performance.

Thus, it was important to investigate and consider the relationship between exam anxiety and academic performance of students in Quetta and also considering the relationship between exam anxiety and academic performance with consideration of the gender and medium of education. In addition, due to scarcity of research literature on these variables locally, it was important to investigate variables to add more research literature relating to the widely publicized influence of examination anxiety on academic performance of students.

## **Objectives of the Study**

1. To evaluate the impact of test anxiety on the academic achievement of students.
2. To evaluate the impact of test anxiety on the academic achievements under emotional distress.
3. To assess the different anxiety levels among matric level students of under exam pressure.

## **Research Tools**

This research was based on quantitative research method. Secondary data and the culturally adapted Achievement Anxiety Test by Haber was used in this research as a tool.

## **Population and sample**

Population of the study was the students of the secondary schools of Quetta studying in 9th and 10th grade.

Following 11 schools were randomly selected for the purpose of data collection

- a. Govt. Sandeman Boys High School Quetta.
- b. Govt. Girls High School Mission Road Quetta.
- c. Govt. Technical Boys High School Quetta.
- d. Govt. Ahmed Boys High School Quetta.
- e. Govt. Satellite Town Girls High School Quetta.
- f. Govt. Lady Sandeman Girls High School Quetta.
- g. Islamia Girls High School Quetta.
- h. Folkways City High School Quetta.
- i. Tameer-i-Nau Model School Quetta.

- j. Garrison Academy High School Quetta.
- k. Wisdom Public School Quetta.
- l.

## **Methodology**

### **Research Design**

The present study was correlational based on observation. Correlational design explores the relationship between variables using statistical analysis. However it does not affect cause and effect it is mostly observational in nature

### **Instrument**

The researcher culturally adapted the standardized scale to measure the variable of the study. Items to measure exam anxiety were adopted from Dr. Ralph Norman Haber's AAT to evaluate academic achievement and test anxiety.

### **Sample Selection**

The sample of our research included students from the higher schools of Quetta city studying in secondary classes i.e 9th and 10th class. The sample was chosen by the method of making equal groups/ strata from the selected population for the research. the respondents were selected according to the method of random sampling method. In this method every respondent had an equal opportunity to be selected for the response. Sample comprised of 432 respondents in which 162 were males and 270 were female students belonging from high schools of Quetta city.

### **Conceptual framework**

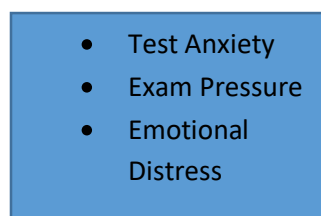
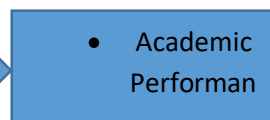
In the foregoing description of the problem investigated in this study and the theoretical guidelines to the study. The following conceptual framework was developed by the researcher to aid in the conceived relationship between independent and dependent variables of the study.

The variables used for our research included the following.

**Independent Variables:** Test Anxiety, Exam Pressure, Emotional Distress.

**Dependent Variable:** Academic performance of Students in School.

All these variables were allocated specific Questions in order to reach the specific results that are required. Among these variables around 8 Questions were formed for the Variable of Test Anxiety, 5 Questions were formed for the Exam Pressure, 7 Questions were formed for Emotional Distress and 9 Questions were formed for the dependent variable i.e. Academic Performance of students.

**Independent Variable****Dependent Variable****Data Analysis**

The collected data was analyzed through SPSS and the results were presented in the tables.

**Analysis and Results**

Total Reliability Statistics:

The value of cronbach's alpha is 70% obtained from the three independent and 1 Dependent variable used in the research as shown in the table below

Variables	Cronbach's Alpha Based on Standardized Items	No of Items
Test Anxiety	.674	8
Exam Pressure	.725	5
Emotional Distress	.721	7
Depd: Academic Performance	.726	9

Table 4.1

**Individual Reliability Statistics:**

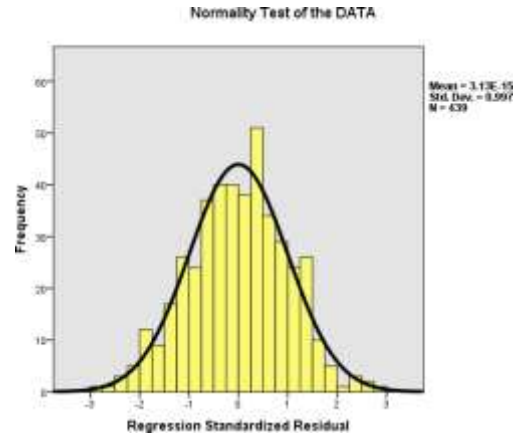
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.719	.719	4

Table 4.2

According to the above results it is clear that for each and every individual variable the values are quite reliable and they are feasible for collecting the data and for analyzing each variable. In the above table the lowest value is for test anxiety which is 67% leading to 70% whereas all the other variables have the value of alpha greater than 70%.



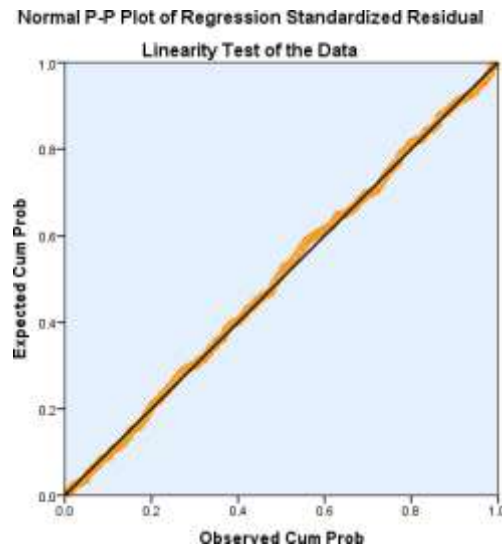
### Test for Normality of Data:



The Normality Test for the data shows all the bars are lying in the bell shaped structure in above graph. This means that the data is normally distributed and we can assume the assumption of normal distribution for our data, as shown above.

### Test for Linearity of Data

The Linearity Test for the data shows all the dots are lying on the straight line as shown above. It indicates that data follows a linear approach and are not resulting in any strange and unexpected results other than the research format.



Graph 2

### Correlation Analysis:

The Correlation Analysis of the data shows that all the variables are positively correlated to produce a positive effect over the Dependent Variable i.e. Academic Performance, as shown above. Among all these variables the most affecting variable

Variables		Academic Performance	Test Anxiety	Exam Pressure	Emotional Distress
Pearson Correlation 2 tail test	Academic Performance	1.000	.423	.315	.335
	Test Anxiety	.423	1.000	.446	.334
	Exam Pressure	.315	.446	1.000	.292
	Emotional Distress	.335	.334	.292	1.000

is test anxiety which is 0.4232 (Correlated) with the dependent variable. It indicates that a change of 0.423 in the independent variable (Test Anxiety) will produce a change in the dependent variable i.e. Academic Performance. While other variables i.e. Exam Pressure and Emotional Distress are correlated as 0.335 and 0.334 respectively.

### Discussion

Test anxiety is a significant and influential aspect in learning. The aims of teaching are impeded by the test anxiety and the hindrance in learning results in inadequate knowledge retention and poor academic outcomes. The results of the present study also endorse and reflect it.

The two tailed Pearson correlation test presents a positive correlation between the variables. The most significant correlation is found between the test anxiety and the academic performance i.e .423. Other variables also have a positive correlation which means the dependent variable will be affected if the independent variables are subjected to change. The correlation value of exam pressure was .335 and that of emotional distress was .334

The individual reliability statistics applied on the questionnaire showed that the each variable is feasible, consistent and reliable for conducting the data collection and drawing out reliable results through analysis. Significantly the chronbach's alpha value of academic performance came out 0.726 with shows its high reliability along with that of test anxiety .674, exam pressure .725 and emotional distress .721.

Now taking into consideration the Education has proven to be a key in human capital and the means of its measurement are the examinations.

The results of the present study reflect the results of the previously conducted studies over time in which the examinations have been a cause of concern and worry among students and eventually resulting in the lower grades and poor academic performance.

The test and examination stress has been found to prevent individuals from expressing their true academic potential and this fact is endorsed by previous studies ([Spielberger & Vagg, 1995](#); [Zollar & Ben-Chain, 1990](#)). The present study found out that the apprehension of exam lowers the concentration and focus of the students. A study by Cassady & Johnson also revealed that too much anxiety during examination may interfere with students' concentration on the test, thus lowering their performance in examination ([Cassady & Johnson, 2002](#)).

### **Conclusion**

In the light of above discussion following conclusions can be drawn out;

1. The test anxiety is one of the major cause of the poor academic performance of the students.
2. The inadequate academic performance results into the shattered and lower confidence among the students than those of the peers who are performing better.
3. The reduced academic performance is responsible for the unsatisfactory human capital despite the huge spending under the head of education budget.
4. The test anxiety can be a significant factor in hindering achieving SDG for Education which demands that by 2030 it should be ensured that all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development.

### **Recommendations**

The recommendations for the policy makers, educationists and the researchers are as follows.

1. Curricula development should be more focused on assessing the learning and retention.
2. The barriers in learning should be mitigated than merely grading the students in examinations.
3. Physical barriers needs to be removed in order to provide a healthy environment of learning for the students.

4. The psychological barriers should also be taken into consideration during curricula development and teaching.
5. Effective teaching strategies and pedagogical practices needs to be implemented in the class rooms in order to enhance the learning process.
6. Feedback technique could prove most effective in order to evaluate the learning and retention in the class rooms. This will eventually boost up the confidence of the text anxious students and make them able to cope with test anxiety.

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