



RESEARCH PAPER

Effects of Test Anxiety on Academic Performance of Under Graduate University Students

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ABSTRACT

Anxiety has been a key topic in psychological research for many decades. It is commonly defined as a state of excessive fear, worry and apprehension accompanied by physiological symptoms relating to the arousal of the autonomic nervous system. The current study was carried out to find out effect of test anxiety on students' academic performance. The current study was descriptive in nature and survey method was used to collect the data. 1192 students of department of education of three universities (Women University of Azad Jammu & Kashmir Bagh, University of Poonch Rawalakot AJ&K and University of Azad Jammu and Kashmir Muzaffarabad) were the population of the study. 300 students selected randomly were the sample of the study. A researcher adapted standardized questionnaire having five point Likert scale. Data was analyzed by using regression. It is concluded that anxiety before, during and after test has significant effect on academic performance. It is recommended that; friendly environment may be created before conducting the test.

Keywords: Academic Performance, Test Anxiety, Undergraduate, University Students

Introduction

Test anxiety is defined as a "set of phenomenological, psychological, and behavioral responses that accompany concern about possible negative consequences or failure of an exam or similar evaluation situations, one of the most common anxiety types considered to be present among students, as one of the most pervasive reactions that individuals have to stress, is test anxiety. Test anxiety is commonly analyzed as a bi-dimensional construct with affective and cognitive components. In this regard, the cognitive dimension includes worry and negative thoughts, self-criticism or worry about the negative consequences of failure in exam situations. It also makes students mentally frozen and unable to recall the information they needed. In addition, the emotional component describes the student's nervousness during the test, manifested as muscle tension, increased heart rate (Rezazadeh & Tavakoli, 2009). According to Rana & Mahmood (2010) the components of anxiety are thought to affect students' emotions, bodies, and cognition. The cognitive aspects of test anxiety have played a role in the decline in academic performance of students. Students' common approach to school may be influenced by inspiration, their relationship with their teachers, how much time and energy they spend thinking, how much support they look for when fighting, their performance on exams, and many other teaching perspectives. Knowledgeable teachers, educational programs, or schools cannot improve their academic performance, and even in some cases, it may not be possible if they do not promote student learning. However, according to other views, students' academic performance is not only related to their level of participation, but also to their behavior, cognition, and emotion (Brooks, Alshafei, & Taylor, 2015).

Many factors are thought to affect test anxiety. A set of factors that affect student performance and stress levels have been assessed students' perceptions of their knowledge

and their inability to improve their learning ability (Carveth, Gesse, and Moss, 1996). This factor is manifested in students complaining that there is not enough time to prepare for exams or study course materials, or they are not satisfied with the academic results obtained in previous assessments. During university studies, the level of test anxiety is considered to be different. A large number of studies have shown that most psychological barriers are obvious among first-year students. It has been determined that the most common psychological changes exhibited by first-year students are often related to the students' financial problems and the academic pressures they encounter. In addition, it has been determined that signs of student stress are also the most common among students who have difficulty adapting to university life. The professor's teaching and evaluation methods are also considered to be factors affecting students' academic performance and anxiety (Chapell, Blanding, Takahashi & McCan, 2005).

In educational institutions, the most stressful factors affecting students are evaluation and competition among students, academic failures of students, and unhealthy relationships between students and course teachers. Achievement is characterized as quantifiable conduct in an institutionalized course of action of tests. Achievement test is ordinarily created and institutionalized to measure capability in school subjects. "Accomplishment" is a few of the time utilized rather than achievement. Educator achievement is evaluated by institutionalized achievement tests made for school subjects. This implies educational achievement is assessed in association with what is accomplished toward the wrap up of a course since it is the accomplishment of medium or long pull objective of instruction (Lotz & Sparfeldt, 2017).

It is accepted that useful learning strategies assist researcher with assuming liability in their examinations, empowering them to be autonomous and foster their own ideas identified with the subjects they instruct. Other factors that affect students' stress levels include the lack of adaptability of university infrastructure, semester operation methods, and the limited ability of academic institutions to support students' academic efforts.

Research studies show that anxiety disorders are rising among students day by day. Furthermore, according to numerous research findings, test anxiety influences students' academic performance (Dendato & Diener, 1986) and it impacts on their cognitive functioning and emotional wellbeing (Berk & Nanda, 2006). However, there is no evidence of relevant scientific researches, which have identified the most common sources of student test anxiety. Hence, researcher is going to conduct a research to find out the Effects of test anxiety on academic performance of university students in AJ&K.

Literature Review

Test Anxiety is a physiological condition wherein individuals experience outrageous pressure, uneasiness and distress during as well as before the test. The researcher approach towards students in common can be influenced by inspiration, how they relate to teachers, how much time and energy they give to their learners, how much support they look for when they're struggling, how they perform on tests, and numerous other perspectives of instruction. This tension makes a significant snag to learning and execution. Studies have shown that a serious level of enthusiastic pain is straightforwardly identified with the decrease in academic execution (Cassidy & Finch, 2020).

In educational institutes, assessments are an inescapable and significantly unavoidable truth, and formal evaluations happen at the summit of most learning projects (Keogh, Bond, French, Richards, and Davis, 2004). On the off chance that the outcomes are firmly identified with the future training, work or profession chances of a singular youngster, tests and assessments are designated "high danger Subsequent to beginning a profession, more choices might be founded on additional tests, tests, or different types of assessment. For some, reasons, including the significance of formal tests to individual

future freedoms, contrasting execution and peers, and surprisingly the method involved with taking and taking the actual test, it isn't shocking that, for some researchers, tests are a source of anxiety (Mennin, Heimberg, & Fresco, 2005).

Notwithstanding, for certain individuals, these sentiments are portrayed by extreme dread, called test anxiety. Test nervousness alludes to the distinction in the propensity of people to assess the test, or comparable execution assessment models are undermining, prompting a progression of intellectual and physiological responses. The distinction between test nervousness and general uneasiness is that it is viewed as explicit to the assessment setting and scholarly assessment setting (Friedman and Bendas-Jacob, 1997). For this situation, individuals with test nervousness will in general experience more significant levels of test anxiety when their presentation is judged. Test anxiety was first conceptualized to incorporate numerous assessment related elements, like perspectives toward learning foundations, courses, instructors and speakers, and the actual test (McCarthy and Goffin, 2005). The legal tests, casual homeroom tests, coursework and tasks, and oral reports, all of which might have been conducted at various degrees of instruction are of vital importance. Hypothetically, the test anxiety design can be applied to tests that occur outside of the instructive climate, for example, driving tests or other manual expertise tests; notwithstanding, the present circumstance is uncommon in academic writing. What this load of types of appraisal share for all intents and purpose is simply the supposed "undermining" (Uhde, Cortese & Vedeniapiin, 2009).

This happens when an individual's presentation is assessed by others, and decisions are made on the individual's capacities or abilities; if the achievement of these assignments is considered critical to the singular's confidence, then, at that point, the disappointment and its results will be consider it compromising. The prizes of performance or the results of disappointment are connected circumstances, for example, tests that decide a singular's situation in a college. However, it must be regarded as an outcome variable, among which is the correlation between power, social internal components, self-cognition and impulsive behavior. It is the central point of consideration. Along these lines of thinking, the results of such inspections will be variable in successive events and will be followed to understand the inspiration of the work and how to use powerful strategies to influence the execution of competitors (Trivitt& Wolf, 2011). Although the amount of research on test anxiety has declined in past decades, due to policy changes that have led to an increase in accountability and courses that have become more result-oriented, test anxiety has reappeared at the forefront of research in recent years (Khammo, 2015).

The method of defining the test anxiety structure varies according to the theoretical perspectives of researchers in the field. Early research on test anxiety focused on motivational structure and psychological drive, and reflected general anxiety (Eshet, 2004); while Achievement is characterized as quantifiable conduct in an institutionalized course of action of tests. Achievement test is ordinarily created and institutionalized to measure capability in school subjects. Much of the time, as shown by them. "Accomplishment" is a few of the time utilized rather than achievement. Educator achievement is evaluated by institutionalized achievement tests made for school subjects (Lorig& Holman, 2003).

This implies educational achievement is assessed in association with what is accomplished toward the wrap up of a course since it is the accomplishment of medium or long pull objective of instruction. Achievement is seen as action of wrapping up or accomplishing by exertion. It subsumes anything won by exertion, an achievement, a recognized and productive action. To prove that an achievement test implies to gage think instruction and planning in school occupation towards an expectedly recognized illustration of capacities or learning. Many subjects may well be joined into an achievement battery for evaluating common school capability either in point scores or achievement (Buck, 2018).

This circulation of consideration is thought to contrarily affect task execution. This shows that mastering or test-taking abilities experience issues coding and arranging scholarly materials; hence, they perform ineffectively on the test. This recommends that test anxiety is the after effect of their experience of rehashed disappointments because of absence of required abilities, not the reason for their academic challenges. As of late, preparing proficiency hypothesis (Eysenck and Calvo, 1992) and consideration control hypothesis have given a promising point by point clarification of what test anxiety means for people in appraisal circumstances, prompting task execution abandons. These appear to help and expand the intellectual purpose model for testing uneasiness (Hojat, Gonnella & Vogel, 2003).

Material and Methods

A descriptive, survey research design was chosen for this study. Data was collected by using questionnaire by the researchers. It focuses to analysis the experience students of the university of AJK. Three public Universities were taken for this study. All (1192) undergraduate students of the Department of Education of; Women University of AJ&K Bagh, University of Poonch Rawalakot, and university of Azad Jammu and Kashmir Muzaffarabad AJ&K were the population of the study. 80 students were selected randomly from Women University of Azad Jammu & Kashmir Bagh AJ&K, 74 students were selected randomly from University of Poonch Rawalakot AJ&K and 146 students were selected randomly from University of Azad Kashmir Muzaffarabad AJ&K makes the sample of 300 students.

For the data collection the researcher adapted standardized five point Likert scale questionnaire based on (NAA=Not at all, AL=A little, FA=A fair amount, M=Much, VM=Very much) and changed it according to the local situation. The questionnaire was based on three situations; anxiety before test, anxiety during test and anxiety after test. There were 41 statements in the questionnaire out of which 22 items were for anxiety before test, 8 items were of anxiety during test and 11 items identify anxiety after test. The percentage of the results of the selected students was taken as dependent variable. For this purpose their results of the session 2019-20 were considered. Data was collected by personal meet ups of the researcher with the sample. Regression analysis was used to find effect of test anxiety on academic performance of the students.

Results and Discussion

Table 1
Effect of Test Anxiety before Test on Academic Achievements of the Students (Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.928	.861	.860	.206

a. Predictors: (Constant), Anxiety before test

Table 1 shows the model summary of regression analysis of test anxiety before test and academic achievements of the students. According to model summary the correlation R is .928 and R- Square is .861. This table revealed that there was a significant effect of test anxiety before test on academic achievements of the students.

Table 2
Effect of Test Anxiety before Test on Academic Achievements of the Students (ANOVA Summary)

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	77.714	1	77.714	1.838	.000
	Residual	12.597	298	.042		

Total	90.311	299
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a. Predictors: (Constant), Anxiety before test
b. Dependent Variable: Achievements

Table 2 shows the ANOVA Summary of test anxiety before test and academic achievements of the students. This table revealed that the regression equation is significant $F(1, 298) = 1.838$ $p = .000 < .05$.

Table 3
Effect of Test Anxiety before Test on Academic Achievements of the Students
(Coefficient summary)

Model	Un.std. Coefficients		Std. Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.0333	.089	.928	.374	.000
	Anxiety before test	.990	.023		42.877	.000

a. Dependent Variable: Academic Achievements

Table 3 shows the coefficient summary of test anxiety before test and academic achievements of the students. This table showed the value of coefficients of test anxiety before test and academic achievements of the students was .928, its t value is 42.877 which was significant at the .05 level as $p = .000$. It means that there was a significant effect of test anxiety before test on academic achievements of the students.

Table 4
Effect of Test Anxiety during Test on Academic Achievements of the Students
(Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.763	.582	.581	.356

a. Predictors: (Constant), Anxiety during test

Table 4 shows the model summary of regression analysis of test anxiety during test and academic performance of the students. According to model summary the correlation is adjusted R-Square 58. This table revealed that there was a moderate effect of test anxiety during test on academic performance of the students.

Table 5
Effect of Test Anxiety during Test on Academic Achievements of the Students
(ANOVA Summary)

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	52.585	1	52.585	415.372	.000
	Residual	37.726	298	.127		
	Total	90.311	299			

a. Predictors: (Constant), Anxiety during test

b. Dependent Variable: Academic Achievements

Table 5 shows the ANOVA Summary of test anxiety during test and academic performance of the students. This table revealed that the regression equation is significant $F(1, 298) = 415.372$ $p = .000 < .05$. Model is fit.

Table 6
Effect of Test Anxiety during Test on Academic Achievements of the Students
(Coefficient Summary)

Model	Un.std. Coefficients	Std. Coefficients	t	Sig.
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		B	Std. Error	Beta		
1	(Constant)	1.226	.125	.763	9.775	.000
	Anxiety during test	.665	.033		20.381	.000

a. Dependent Variable: Academic Achievements

Table 6 shows the coefficient summary of test anxiety during test and academic performance of the students. This table showed the value of coefficients of test anxiety during test and academic performance of the students was .763, its t value is 20.381 which was significant at the .05 level as $p=.000$. It means that there was a moderate effect of test anxiety during test on academic performance of the students.

Table 7
Effect of Test Anxiety **After** Test on Academic Achievements of the Students
(Model Summary)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.771	.594	.592	.351

a. Predictors: (Constant), Anxiety after test

Table 7 shows the model summary of regression analysis of test anxiety during test and academic performance of the students. According to model summary the correlation R is .771 and R-Square is .594. This table revealed that there was a moderate effect of test anxiety after test on academic performance of the students.

Table 8
Effect of Test Anxiety after Test on Academic Achievements of the Students (ANOVA Summary)

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	53.621	1	53.621	435.517	.000
	Residual	36.690	298	.123		
	Total	90.311	299			

a. Predictors: (Constant), Anxiety after test

b. Dependent Variable: Academic Achievements

Table 8 shows the ANOVA Summary of test anxiety after test and academic performance of the students. This table revealed that the regression equation is significant $F(1,298) = 435.517$ $p=.000 < .05$.

Table 9
Effect of Test Anxiety after Test on Academic Achievements of the Students
(Coefficient Summary)

Model	Un.std. Coefficients		Std. Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	1.215	.123	.771	9.877	.000
	Anxiety after test	.668	.032		20.869	.000

a. Dependent Variable: Academic Achievements

Table 9 shows the coefficient summary of test anxiety after test and academic performance of the students. This table showed the value of coefficients of test anxiety after test and academic performance of the students was .771, its t value is 20.869 which was significant at the .05 level as $p=.000$. It means that there was a moderate effect of test anxiety after test on academic performance of the students.

Test anxiety level is considered to be a very important factor which affects the progress of the students. The main goal of the study was to find out the situation of test

anxiety and the effect of test anxiety on academic performance of the university students. The results of current study showed that that the students have test anxiety before test, during test and after test, test anxiety before test have significant effect on academic performance of the students, test anxiety during test have moderate effect on academic performance of the students and test anxiety after test have moderate effect on academic performance of the students.

A similar study was conducted by Millar and Martin in England in 2008 to discover the impact of test anxiety on academic performance of the learner at elective degree of training. The results of their review showed that the students who have test anxiety get low scores. The result of this research is in-line with my research.

The results of this study showed that test anxiety before the test may lead to the good marks if students can manage the time for the study and it may vary time to time and test to test. The result of this research is in-line with my findings of the research. As (Putwain and Daly, 2014) it is generally acknowledged that test anxiety is a multidimensional construction with various intellectual and physiological parts.

This is a physiological condition where individuals experience outrageous pressure, anxiety and distress during as before the test. The Researcher approach towards students in common can be influenced by inspiration, how they relate to teachers, how much time and exertion they give to their learners, how much they look for when they are struggling, how they perform on the tests. This studies have shown that the anxiety play a great role in the academic performance of the students.

Researcher has proposed various methods to reduce test anxiety by managing external factors such as examination room environment, internal factors such as the examiner behavior and the teachers may ensure the self respect of the students after the marking of paper as students feel anxious when their teacher show anger on their poor grades.

Conclusions

1. It is concluded that the students have test anxiety before test, during test and after test.
2. It is concluded that the test anxiety before test have significant effect on academic performance of the students which is positive.
3. It is concluded that test anxiety during test have moderate effect on academic performance of the students.
4. It is concluded that test anxiety after test have moderate effect on academic performance of the students which is negative.

Recommendations

1. It is recommended that the teachers may create a friendly environment before the test in order to relax the students, so that a relax student may perform better in the test.
2. It is recommended that invigilators may adopt a relaxed and calm environment during the test. And teachers may take several formative assessments to bring the students out of stress of taking tests.
3. It is recommended that teaches may ensure the self-respect of the students after the marking of paper as students feel anxious when their teachers show anger on their poor grades.
4. The current study was find out only the effect of test anxiety on academic performance of the students, the further studies may also be conducted in order to find out the effect of test anxiety on the behaviour of the students at elementary, secondary and higher level of education.

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