## Influence of Test Anxiety on Students' Academic Achievement at Secondary Level

**Erum Aslam Khan,** Assistant Professor, Department of Education, Bahauddin Zakariya University, Multan, Pakistan. Email: erumkhan63@hotmail.com

\*Dr. Hina Munir, Assistant Professor, Department of Education The women university.

E-mail: hinamunnir@gmail.com)

**Dr. Afrina Afzal,** Assistant Professor, Department of Education B.Z.U Multan

Marium Mahmood Ansari, M. Phil scholar department of Education B.Z.U Multan. E-mail:

Mariumansari991@yahoo.com

Abstract. Anxiety is one of the major setbacks of academic performance. Students with anxiety disorder display a passive attitude in their studies such as lack of interest in learning, poor performance in exams and low academic achievement etc. In this context, main objective of this study was to analyze the influence of test anxiety on students' academic achievement at secondary level in Multan district by using marks of students and responses on questionnaire who passed their 9th class Board examination (BISE) in 2018. This article also deals with investigation of relationship between test anxiety factors and students exams' score and explore the gender differences in effect of test anxiety on academic achievement of students at secondary level. This article contributes to an understanding to what extent test anxiety influence on student-achievement, whereas 8 private schools and 4 public schools both (male & female) at secondary level were taken as a sample at Multan district by using simple random technique. Total number of sample students was 187 both male and female who enrolled in 10th class and completed their 9th Board examination (BISE) in 2018. For the selection of the sample from the population convenient sampling technique was used. Being the descriptive-nature study, survey method was used. Selfdeveloped a Likert scale questionnaire consist of 34 restricted response items to measure the anxiety among the student at secondary level (close-ended with Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree, options) was designed and scoring from 5 to 1, descending was allotted to each level. Reliability analysis of the questionnaire was also computed through Cronbach's Alpha Model where the value of 0.834 was deducted which shows the scale was very consistent and reliable. Then the instrument was used to collect the data towards secondary school level for measuring the effect of anxiety on students 'academic performance. Collected data was tabulated analysis and interpreted in the light of objectives of study. Descriptive and inferential statistics were performed to obtain the answers of research questions. The filled back questionnaires were sorted school wise, scored and feed into computer for calculations. Frequency, mean performance, standard deviation, correlation, and independent sample t-test was used for analysis. Data analysis revealed that anxiety really matters for students during, before and after the exams because of fear of failure, competition with other classmates and friends or fear of losing the race of competition influences the performance of students. But it was also found the weak relationship between the results of students and score on scale. It was also revealed in gender wise comparison, on most of the statements there was no significance mean difference observed between male and female students. It was suggested that further studies can be made to explore the measures to control the test anxiety among students that could support them to rise up for competition with zeal and zest to achieve their study targets efficiently and effectively.

Keywords: Anxiety, Academic achievement, Performance, BISE

Received: 26.11.2020 Accepted: 29.12.2020 Published: 19.01.2021

#### **INTRODUCTION**

Education is considered the major source of progress in all over the world. It is accepted the main component in improvement and efficient source of raising quality of life. Education is a dominant feature for improving the societal, monetary and wellbeing of nation entirely. Education cautiously strength the ethics, customs, beliefs, experiences, practices, information, traditions, expertise and likely ways of life and behaviours, moved from one generation to the coming generations (Aleed, 2016; Peleg, 2009). Test is major component in education. Test anxiety is pervasive problem in the modern society. As the information age continues to evolve, test scores will become even more important than they are today in evaluating applicants for demanding jobs and candidates for admission into highly competitive educational programs. Because test anxiety generally causes decrements in performance and undermines academic achievement, the development of effective therapeutic interventions for reducing its adverse

effects will continue to be an important priority for counsellors, psychologists and educators (Putwain, 2008). Anxiety is a normal reaction to a stressor and it may help an individual to deal with a demanding situation by motivating him/her to cope with it, but when anxiety becomes excessive it can have a serious impact on daily life and interferes with the normal functioning of a person (Hartley & Phelps, 2012). Anxiety can be identified by a variety of physical, emotional, cognitive and behavioural symptoms. Palpitations, sweating, trembling, shortness of breath, sense of choking, chest pain, headache, nausea, stomach upset, dizziness, numbness or tingling, chills or hot flashes, restlessness, fatigue, muscle tension and sleep problems are the physical changes (Bourne, 2005).

Anxiety is universal and everyone experiences this feeling in varying degree. It is an emotional reaction characterized by fearful anticipation of an unpleasant event in the future. Fear is a reaction to a real external danger that threatens the person with possible injury and has no real external stimulus but the individual himself (Beleta, 2008). Worry may give rise to anxiety. It is more often imaginary than real and a generalized emotional state rather than specific one. In short, the individual is not anxious about specific things. Worry for students relates primarily to cognitive concerns about the consequences of failure. Students who think or verbalize a negative or pessimistic expectation manifest worry (Ballesteros, 2005). Anxiety is one of the emotional components of human life. Every task performance to an extent is accomplished by some measures of anxiety. Anxiety is regarded as a common psychological problem among human beings with its physical, emotional, and social manifestations. Anxiety is the sensation of feelings, fear, or nervousness (Nwimo 2006). Anxiety may also be inferred from many cognitive and perceptual processes. An anxious person may report sensory- perceptual distortions of non-psychotic proportions which may reflect in attention processes. Cognitive performance and information processing may be critically affected by anxiety (Woolfork 2009). Anxiety may develop during their adolescence stage when they are predisposed to a kind of environment they were situated, particularly at home and family. Sometimes, overly critical parents whose high expectations could give a negative feeling on the children. Parents who are self-critical and anxious about the failure of their children because they failed to meet their expectations. Perhaps, there are parents who are overly protective and would always give a notion that the environment is not safe. Above all, the greatest challenge a child may encounter in his/her life is the fear of being abandoned by their parents (Ngwoke, 2010).

Most people find examinations stressful and many focuses on expectations of failure and the undesirable consequences of personal inadequacy (Soffer, 2008). Test and anxiety may be influenced by a wide range of factors such as environmental factors (Aremu & Sokan, 2003) teacher factor and psychological factors within the students. Such psychological factors encompass the individual's cognitive variables such as motivation, adjustment, study skills, gender and others, (Ngwoke, 2010). Academic reasons like enormous syllabus, the difficulty of the curriculum, long studying hours, and emotional factors like lack of peer support, competitive environment, rigid authoritative and non-encouraging faculty, lack of recreational activities, staying away from home, financial problems, uncertain future, cultural and minority issues, mismatch between capability and expectation are some reasons of stress and anxiety among medical and engineering students (Foster & Spencer, 2003; Schneider, 2007). However, there can be other reasons for anxiety among the students like stress due to family problems, a natural disaster, victimization by crime, physical abuse, medical illness, intoxication etc. Students also have test anxiety, performance anxiety and choice anxiety. With so many options, students in the present era are faced with greater choice, more competition and less time to consider their options or seek out the right advice which many a time leads to anxiety (Downey, 2008).

Hancock (2001) investigated the effects of students' test anxiety and teacher's evaluation practices on students' achievement and motivation at post the secondary level. He found statistically significant results which revealed that all students, especially students with high anxiety level, performed poorly and were less motivated to learn. Thus, he concluded that when students who are particularly test-anxious are exposed to a highly evaluative assessment environment in their educational institution, they perform poorly and are less motivated to perform (Hancock, 2001). A research study conducted by Cassady and Johnson (2002) to investigate the effect of cognitive test anxiety on students' academic performance and found that cognitive test anxiety exerts a significant stable and negative impact on academic performance measures. Albero, Brown, Eliason and Wind (1997) on the basis of their research study, concluded that students having high test anxiety had significantly lower scores. A study conducted to explore how test anxiety affects students' performance levels in the sciences, especially in Physics, and concluded that low test performance was exhibited due high level of anxiety (Oludipe 2009).

In a study conducted by Buchanan and Seligman (1995) learned optimism techniques were found to significantly reduce depression in a class of college freshmen. A research Study by Darvill and Johnson (1991) on college students revealed that subjects who believed that positive events were more likely to occur and negative events were less likely to occur felt that they were in moderate to strong control over event occurrence. Studies have also shown a positive relationship between optimism and performance of a task to reduce the anxiety among the pupils (Dixon & Schertzer, 2005; Green, Medlin & Whitten, 2004; Jensen, Luthans, Lebsack, & Lebsack, 2007; Kluemper, Little & DeGroot, 2009; Medlin & Green, 2009; Yousef & Luthans, 2007). Some of the studies on school students and psychology graduates have also indicated a significant positive relation between optimism and academic achievement for the reduction of stress (Ruthig, Haynes, Perry & Chipperfield, 2007; Owayed 2005). But Rand (2009) found no significant relation between optimism and grade expectancy. As the findings on optimism and academic performance are not very consistent and they could not be generalized across population and culture.

Anxiety is a major factor which influences the students' achievement in different subjects. According to Kaya (2004) it has created interest among educators, researchers, and psychologists. Many research studies have been conducted in different countries to find out the relationships and differences of test anxiety with students' achievement in different subjects (Ali, 2012). Several researchers explored gender differences with respect to test anxiety and found that females have higher levels of overall test anxiety than males (Bandalos, Yates & Thorndike, 1995; Cassady & Johnson, 2002; Chapell, Blanding, silverstein, Takahashi, Newman, Gubi & McCaann, 2005). Cassady and Johnson (2002) explained that one explanation for differences in test anxiety on the basis of students' gender is that males and females feel same levels of test worry, but females have higher levels of emotionality. Zeidner (1990) on the basis of his research, concluded that difference in test anxiety scores of male and female is due to gender difference in scholastic ability. It is quite evident from the arguments given above and results of the studies reported that text anxiety affects achievement along with other variables such as motivation to learn, ability to benefit from formal instruction and gender. This diversification of effects of text anxiety led researchers to think of text anxiety as at least bi-dimensional construct (Berk & Nanda, 2006; Cassady & Johnson, 2002; Chapell et al., 2005) with affective and cognitive components.

Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important. Individual differences in academic performance have been linked to differences in intelligence and personality. For better academic performance, apart from IQ, other competencies like emotional self-awareness, selfcontrol, optimism, achievement motivation, and communication skills are also required. For example, students who are higher in conscientiousness (component of emotional intelligence linked to effort and achievement motivation) and curiosity tend to achieve highly in academic settings (Sophie, Benedikt, & Tomas, 2011). According to O'Hara, cited by Johnston (2005) in Stanford University report, we are still very much in a state of mixed findings when it comes to gender and brain processing. Therefore, more gender studies are needed that address constructs like anxiety, optimism and academic performance. Gender stereotypes that males have a better understanding of science and mathematics-based subjects whereas females are better at languages and social sciences (Azar, 2010) is generally prevalent in many societies. But most of the research findings do not support this notion (Ceci, Williams & Barnett, 2009; Azar, 2010). Many research studies have been conducted to explore the effects of test anxiety with students' achievements in different areas on the basis of gender, race, locality, language, ethnicity, parent's socioeconomic status etc. (Ali, 2012; Chapell et al., 2005; Hong, 1999; Hembree, 1988; Kaya, 2004; Mcdonald, 2001; Nicholson, 2010; Peleg, 2009; Williams, 1992). Most of the research studies indicated that test anxiety was negatively correlated with students' achievement in different subjects. Highly test anxious students had lower academic achievements and low-test anxious students had higher achievements. A study conducted by Nicholson (2009) to explore the effects of test anxiety on student achievement of grade 11 students, revealed that anxiety and achievement are related to each other. Khalid and Hasan (2009) conducted a study on a purposively selected sample of 187 undergraduate students to explore the relationship between test anxiety and academic achievement and found that students with academic achievement have low test anxiety scores and vice versa Chapell et al., (2005) conducted a research study to explore the relationship between test anxiety and academic performance. They collected data from a large sample of graduate and undergraduate students and found a significant and negative relationship between test anxiety and academic achievement.

Researches show that parental pressure is associated with greater worry, test irrelevant thoughts, and stronger bodily symptoms relating to anxiety during a test (Putwain, Woods & Symes, 2010). Other

causes of test anxiety may include fear of failure, procrastination, and previous poor test performance. As well, characteristics of the test environment such as: nature of the task, difficulty, atmosphere, time constraints, examiner characteristics, mode of administration and physical setting can affect the level of anxiousness felt by the student (Salend, 2012). Researchers Putwain and Best (2011) examined test performance among elementary children when the teacher put pressure on the students in an attempt to create a higher stress environment. Their findings showed that students performed worse in high threat situations and experienced more test anxiety and worrisome thoughts than when in a low threat environment. Test anxiety is known to develop into a vicious cycle. After experiencing test anxiety on one test, the student may become so fearful of it happening again they become more anxious and upset than they would normally, or even than they experienced on the previous test. If the cycle continues without acknowledgement, or the student seeking help, the student may begin to feel helpless in the situation (Cherry, 2012). People who experience test anxiety often have parents or siblings who have test anxiety or other types of anxiety. Anxiety does seem to have some genetic components (Putwain et al.., 2010). Though the issue of effect of test anxiety on students' academic achievement is highly discussed and researched topic across the globe, but in Pakistan, this has not been taken under serious consideration particularly at secondary level. Keeping this situation in view, present study was conducted to investigate the effect of test anxiety on students' academic performance at secondary level. This article also deals with investigation of relationship between test anxiety factors and students exams' score and explore the gender differences in effect of test anxiety on academic achievement of students at secondary level.

#### **Statements of the Problem**

Aanxiety is a common problem in the world. It affects student's performance. Test anxiety affects student academic achievement. It is the general problem of high school students. Test anxiety may be an important factor influencing student's academic achievement. From this point of view, it seems appropriate to examine the effect of anxiety on students' academic achievement at secondary level.

## **Objectives of Study**

This study specifically strives to achieve the following objectives:

- 1. To explore the causes of test anxiety among the students at secondary school level.
- 2. To examine the relationship between anxiety levels and student achievement at secondary level.
- 3. To find out the difference in student anxiety level on the basis of gender.
- 4. To suggest some solutions to overcome this problem.

## **Research Questions**

To what extent does anxiety affect students' academic performance at secondary school level?
 What is the association between academic achievement and test anxiety of secondary level students?

#### **METHODOLOGY**

The present study was descriptive and quantitative in nature. For this study, marks of students and their responses on questionnaire who passed their 9th class board examination (BISE) in 2018 and were enrolled in 10th class, served as a data. Results of the only 187 students 43 (male) and 144 (female) from the1177(students) whole population included, because the students were busy in preparation of 10th class board examination. Total number of schools whose examination data were included in the study, was twelve schools (8 private & 4 public) both male and female at Multan district. The researcher personally dispatches questionnaires to all sample students. The response options were ranging from strongly agree to strongly disagree. It was divided in to two parts, part a covers demographical information and part b was about survey questions. Collected data was tabulated analysis and interpreted in the light of objectives of study. Descriptive and inferential statistics were performed to obtain the answers of research questions. The filled back questionnaires were sorted school wise, scored and feed into computer for calculations. Frequency, mean performance, standard deviation, correlation, and independent sample t-test was used for analysis by using the SPSS software version 20. Table 1 shows number of students who passed their 9th class board examination (BISE) in 2018 and enrolled in 10th class in twelve schools (8 private & 4 public) both male and female at Multan district Multan.

**Table 1.** Population and sample distribution for research study

Sr.	Name of Schools	No of Students	Total	Total Sample
		6401	Population	
		Sections of 10th class		
		Sections of 10th class		

			A B C			2					
	Private schools	M	F	M	F	M	F	M	F	M	F
1	Zamir Public school (male & female)	23	47	19	38	21	35	63	120	08	25
2	Nishat Public school (male & female)	20	34	22	37	16	39	58	110	05	23
3	Allied public School (male & female)	17	43	19	40	-	38	36	121	10	21
4	Zakariya Public School (male & female)	21	46	18	42	17	30	56	118	06	18
				Public	Scho	ols		•	•	•	
1	Govt Comprehensive school (male & female)	41	58	31	48	22	45	94	151	11	31
2	Junior Model School (male & female)	33	50	25	52	31	59	89	161	03	26
	Total			11	77	•		396	781	43	144

The data used in this research study were marks of students and responses on questionnaire who passed their 9th class board examination (BISE) in 2018 and were enrolled in 10th class of twelve schools (8 private & 4 public) both male and female at Multan district. Researchers personally visited office of the Controller of Examination to obtain the record of students securing passed marks in 9th class board examination.

## **RESULTS**

## A. Statements wise Analysis

In this section describes the overall test anxiety of the students at secondary level. All the statements were aanalyzed on the basis of mean values the related data were showed in the following table 2.

**Table 2.** Overall test anxiety of the students at secondary level

Statement	N	M	SD
I have visible signs of nervousness right before test.	187	3.6	1.326
My mind goes blank during a test.	187	3.23	1.203
I feel difficulty in choosing questions to answer.	187	3.6	1.18
I make mistakes on easy test questions.	187	3.52	1.142
I have an upset feeling before taking the final exam.	187	3.63	1.261
I perspire while taking an important exam.	187	3.47	1.292
During tests, I find myself thinking of the consequences of failing.	187	3.94	1.275
After important tests, I am very tense.	187	4.1	1.205
While taking an important exam, I find myself thinking of bright students.	187	3.41	1.212
When I have to take a difficult course, I am worried about test.	187	2.7	1.35
During exams, I find myself thinking of things unrelated to the course material.	187	2.98	1.479
During exams I frequently get so nervous that I forget facts that I already know.	187	3.39	1.147
I usually get depressed after taking a test.	187	3.2	1.087
I feel panicky when I have to take a surprise test.	187	3.09	1.442
When taking a test, I feel I have done better than I could actually do.	187	3.02	1.416
Getting a good grade on one test doesn't increase my confidence	187	3.38	1.136

for the second test.			
My heart beats very fast during important exams.	187	3.62	1.187
I feel confident and relaxed while taking tests	187	3.48	1.215
Thinking about the grade interferes with my work on tests.	187	2.73	1.449
The harder I work at taking a test, the more confused I get.	187	3.73	1.341
Thoughts of doing poorly interfere with my concentration on tests.	187	3.51	1.188
I am anxious even when I am well prepared for a test.	187	3.41	1.247
I wish that examinations would have not bothered me.	187	3.45	1.258
During important exams, I am so tense that my Stomach gets upset.	187	3.05	1.26
The more difficult the examination, the less efficient I become.	187	3.66	1.218
I feel anxious before the start of an exam, but once I start, I forget my anxiety.	187	2.49	1.276
I enjoy taking an easy exam more than a hard one.	187	3.28	1.413
I am worried my if your classmates get marks better than me.	187	3.77	1.289
I feel intensely if the teacher asks me to correct my own mistakes.	187	3.75	1.104
I don't like if other students correct my written work.	187	3.84	1.1
I think that anxiety facilitates my learning.	187	2.93	1.488
I am not in trouble, sleeping at the night before a test.	187	3.96	1.217
I do not feel comfortable whenever I hear the word test.	187	3.7	1.181
I feel strong when it is time for test.	187	3.25	1.284

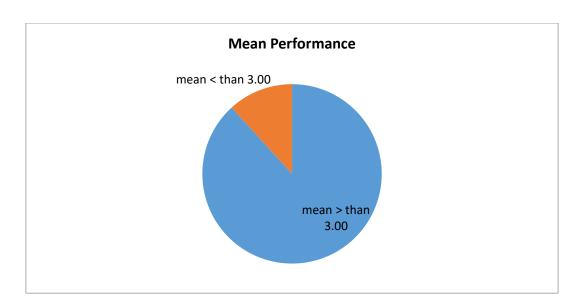
The table 2 shows the mean performance analysis of each statement and indicate overall test anxiety of the students at secondary level. According to the table (above), on statement No. 8, (i.e., after important tests, I am very tense) mean score was the highest at 4.1 which indicates the high level of acceptance on the statement according to the norm of acceptance of mean. However, statements No.10, 11, 19, 26 and 31 have mean below than 3.00 which shows low acceptance on the statement according to norm of acceptance of mean. These statements are when I have to take a difficult course, I am worried about test (10), during exams, I find myself thinking of things unrelated to the course material (11), thinking about the grade interferes with my work on tests (19), I feel anxious before the start of an exam, but once I start, I forget my anxiety (26) and I think that anxiety facilitates my learning (31) respectively. Rests of the statements were found moderately acceptable as per the norm of acceptance criteria of mean.

**Table 3**. B: Mean Performance Wise Analysis

Total No of statements	Statements having mean greater (>) than 3.00	Statements having mean greater (>) than 3.00
34	29	5

This table 3 shows the mean performance wise analysis of student's responses. According to the table 29 statements have mean greater than 3.00, while 05 statements have mean lower than 3.00.

Figure 1:



**Table 4.** C: Comparison of test anxiety among male and female students

-	-		Std.		Df	Sig. 2-
Gender	N	Mean	Deviation	T		tailed $(p)$
Male	43	113.465	19.06424			
		1		1.055	105	. 0.202
Female	144	116.562	16.20529	-1.055	185	0.293
		5				

This table 4 shows the comparison of male and female students regarding test anxiety. It shows that p value (0.293) is greater than 0.05 (level of significance), which shows that there is non-significant difference between male and female behaviour towards test anxiety among students at secondary level. However, the difference of mean indicates greater test anxiety in female students as compare to the male students.

Figure 2:

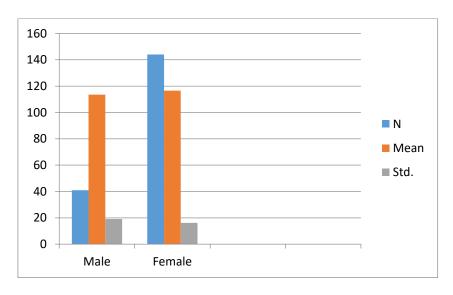


Table 5. D: Gender differences in effect of test anxiety on academic achievement of secondary school students

Sr	Statements	T	df	Sig.
1	I have visible signs of nervousness right before test.	.556	185	.579
2	My mind goes blank during a test.	-2.778	185	.006

I have an upset feeling before taking the final exam1.090 185 .277  I perspire while taking an important exam672 185 .502  During tests, I find myself thinking of the consequences of failing.  After important tests, I am very tense2.205 185 .029  While taking an important exam, I find myself thinking of bright students. 1.143 185 .254  Uwhen I have to take a difficult course, I am worried about test. 1.143 185 .254  During exams, I find myself thinking of things unrelated to the course material. 1.139 185 .256  Uming exams I frequently get so nervous that I forget facts that I already know. 1.141 185 .074  I usually get depressed after taking a test078 185 .938  I lifeel panicky when I have to take a surprise test1.411 185 .160  When taking a test, I feel I have done better than I could actually do329 185 .742  Getting a good grade on one test doesn't increase my confidence for the second test968 185 .335  My heart beats very fast during important exams1.569 185 .118  I feel confident and relaxed while taking tests .3.142 185 .002  Thinking about the grade interferes with my work on tests899 185 .370  The harder I work at taking a test, the more confused I get842 185 .401  Thoughts of doing poorly, interfere with my concentration on tests449 185 .654  Lam anxious even when I am well prepared for a test1.606 185 .110  I wish that examinations would have not bothered me476 185 .634  During important exams, I am so tense that my Stomach gets upset654  The more difficult the examination, the less efficient I .212 185 .833	3	I feel difficulty in choosing questions to answer.	405	185	.686
I perspire while taking an important exam.  I puring tests, I find myself thinking of the consequences of failing.  After important tests, I am very tense.  While taking an important exam, I find myself thinking of bright students.  When I have to take a difficult course, I am worried about test.  During exams, I find myself thinking of things unrelated to the course material.  During exams I frequently get so nervous that I forget facts that I already know.  I usually get depressed after taking a test.  Jeel panicky when I have to take a surprise test.  When I kaking a test, I feel I have done better than I could actually do.  Getting a good grade on one test doesn't increase my confidence for the second test.  My heart beats very fast during important exams.  Jeel confident and relaxed while taking tests  Ji feel confident and relaxed while taking tests  Thinking about the grade interferes with my work on tests.  Ji Thoughts of doing poorly, interfere with my concentration on tests.  Lam anxious even when I am well prepared for a test.  Ji wish that examinations would have not bothered me.  Ji wish that examinations would have not bothered me.  Ji Leel anxious before the start of an exam, but once I start, I actually calls.	4	I make mistakes on easy test questions.	502	185	.616
During tests, I find myself thinking of the consequences of failing.  After important tests, I am very tense.  -2.205 185 .029  While taking an important exam, I find myself thinking of bright students.  When I have to take a difficult course, I am worried about test.  During exams, I find myself thinking of things unrelated to the course material.  During exams I frequently get so nervous that I forget facts that I already know.  I usually get depressed after taking a test.  Jeel panicky when I have to take a surprise test.  When taking a test, I feel I have done better than I could actually do.  Getting a good grade on one test doesn't increase my confidence for the second test.  My heart beats very fast during important exams.  Jeel confident and relaxed while taking tests  Jifeel confident and relaxed while taking tests  Thinking about the grade interferes with my work on tests.  Jimportant exams are the more confused I get.  Thoughts of doing poorly, interfere with my concentration on tests.  Jimportant examinations would have not bothered me.  Juring important exams, I am so tense that my Stomach gets upset.  Lifeel anxious before the start of an exam, but once I start, I 2213 185 028	5	I have an upset feeling before taking the final exam.	-1.090	185	.277
failing2.129 165 .035  8 After important tests, I am very tense2.205 185 .029  9 While taking an important exam, I find myself thinking of bright students1.250 185 .213  10 When I have to take a difficult course, I am worried about test. 1.143 185 .254  11 During exams, I find myself thinking of things unrelated to the course material. 1.139 185 .256  12 During exams I frequently get so nervous that I forget facts that I already know1.797 185 .074  13 I usually get depressed after taking a test078 185 .938  14 I feel panicky when I have to take a surprise test1.411 185 .160  15 When taking a test, I feel I have done better than I could actually do3.29 185 .742  16 Getting a good grade on one test doesn't increase my confidence for the second test9.68 185 .335  17 My heart beats very fast during important exams1.569 185 .118  18 I feel confident and relaxed while taking tests -3.142 185 .002  19 Thinking about the grade interferes with my work on tests899 185 .370  20 The harder I work at taking a test, the more confused I get842 185 .401  21 Thoughts of doing poorly, interfere with my concentration on tests1066 185 .110  22 I am anxious even when I am well prepared for a test1.606 185 .110  23 I wish that examinations would have not bothered me476 185 .634  24 During important exams, I am so tense that my Stomach gets upset1902 185 .059  25 The more difficult the examination, the less efficient I become185 .833	6	I perspire while taking an important exam.	672	185	.502
While taking an important exam, I find myself thinking of bright students.  When I have to take a difficult course, I am worried about test.  During exams, I find myself thinking of things unrelated to the course material.  During exams I frequently get so nervous that I forget facts that I already know.  I usually get depressed after taking a test.  O78 185 .074  I feel panicky when I have to take a surprise test.  When taking a test, I feel I have done better than I could actually do.  Getting a good grade on one test doesn't increase my confidence for the second test.  My heart beats very fast during important exams.  I feel confident and relaxed while taking tests  Thinking about the grade interferes with my work on tests.  Physical Rep 185 .370  The harder I work at taking a test, the more confused I get.  Thoughts of doing poorly, interfere with my concentration on tests.  I wish that examinations would have not bothered me.  I wish that examinations would have not bothered me.  I feel anxious before the start of an exam, but once I start, I 2113 185 028	7		-2.129	185	.035
bright students.  10 When I have to take a difficult course, I am worried about test.  11 During exams, I find myself thinking of things unrelated to the course material.  12 During exams I frequently get so nervous that I forget facts that I already know.  13 I usually get depressed after taking a test.  14 I feel panicky when I have to take a surprise test.  15 When taking a test, I feel I have done better than I could actually do.  16 Getting a good grade on one test doesn't increase my confidence for the second test.  17 My heart beats very fast during important exams.  18 I feel confident and relaxed while taking tests  19 Thinking about the grade interferes with my work on tests.  20 The harder I work at taking a test, the more confused I get.  21 Thoughts of doing poorly, interfere with my concentration on tests.  22 I am anxious even when I am well prepared for a test.  23 I wish that examinations would have not bothered me.  24 During important exams, I am so tense that my Stomach gets upset.  25 The more difficult the examination, the less efficient I become.  26 I feel anxious before the start of an exam, but once I start, I  20 213 185 028	8	After important tests, I am very tense.	-2.205	185	.029
test.  11 During exams, I find myself thinking of things unrelated to the course material.  12 During exams I frequently get so nervous that I forget facts that I already know.  13 I usually get depressed after taking a test.  14 I feel panicky when I have to take a surprise test.  15 When taking a test, I feel I have done better than I could actually do.  16 Getting a good grade on one test doesn't increase my confidence for the second test.  17 My heart beats very fast during important exams.  18 I feel confident and relaxed while taking tests  19 Thinking about the grade interferes with my work on tests.  20 The harder I work at taking a test, the more confused I get.  21 Thoughts of doing poorly, interfere with my concentration on tests.  22 I am anxious even when I am well prepared for a test.  23 I wish that examinations would have not bothered me.  24 During important exams, I am so tense that my Stomach gets upset.  25 The more difficult the examination, the less efficient I become.  26 I feel anxious before the start of an exam, but once I start, I 2213 185 028	9		-1.250	185	.213
the course material.  12 During exams I frequently get so nervous that I forget facts that I already know.  13 I usually get depressed after taking a test.  14 I feel panicky when I have to take a surprise test.  15 When taking a test, I feel I have done better than I could actually do.  16 Getting a good grade on one test doesn't increase my confidence for the second test.  17 My heart beats very fast during important exams.  18 I feel confident and relaxed while taking tests  19 Thinking about the grade interferes with my work on tests.  20 The harder I work at taking a test, the more confused I get.  21 Thoughts of doing poorly, interfere with my concentration on tests.  22 I am anxious even when I am well prepared for a test.  23 I wish that examinations would have not bothered me.  24 During important exams, I am so tense that my Stomach gets upset.  25 The more difficult the examination, the less efficient I become.  26 I feel anxious before the start of an exam, but once I start, I  27 213 185 0.028	10		1.143	185	.254
that I already know.  13 I usually get depressed after taking a test.  14 I feel panicky when I have to take a surprise test.  15 When taking a test, I feel I have done better than I could actually do.  16 Getting a good grade on one test doesn't increase my confidence for the second test.  17 My heart beats very fast during important exams.  18 I feel confident and relaxed while taking tests  19 Thinking about the grade interferes with my work on tests.  20 The harder I work at taking a test, the more confused I get.  21 Thoughts of doing poorly, interfere with my concentration on tests.  22 I am anxious even when I am well prepared for a test.  23 I wish that examinations would have not bothered me.  24 During important exams, I am so tense that my Stomach gets upset.  25 The more difficult the examination, the less efficient I become.  26 I feel anxious before the start of an exam, but once I start, I  27 213 185 0.028	11		1.139	185	.256
14 I feel panicky when I have to take a surprise test. 15 When taking a test, I feel I have done better than I could actually do. 16 Getting a good grade on one test doesn't increase my confidence for the second test. 17 My heart beats very fast during important exams. 18 I feel confident and relaxed while taking tests 19 Thinking about the grade interferes with my work on tests. 20 The harder I work at taking a test, the more confused I get. 21 Thoughts of doing poorly, interfere with my concentration on tests. 22 I am anxious even when I am well prepared for a test. 23 I wish that examinations would have not bothered me. 24 During important exams, I am so tense that my Stomach gets upset. 25 The more difficult the examination, the less efficient I become. 26 I feel anxious before the start of an exam, but once I start, I 2 213 185 028	12		-1.797	185	.074
When taking a test, I feel I have done better than I could actually do.  Getting a good grade on one test doesn't increase my confidence for the second test.  My heart beats very fast during important exams.  I feel confident and relaxed while taking tests  I feel confident and relaxed while taking tests  Thinking about the grade interferes with my work on tests.  The harder I work at taking a test, the more confused I get.  Thoughts of doing poorly, interfere with my concentration on tests.  I am anxious even when I am well prepared for a test.  I wish that examinations would have not bothered me.  The more difficult the examination, the less efficient I become.  I feel anxious before the start of an exam, but once I start, I 2213 185 028	13	I usually get depressed after taking a test.	.078	185	.938
actually do.  Getting a good grade on one test doesn't increase my confidence for the second test.  My heart beats very fast during important exams.  I feel confident and relaxed while taking tests  Thinking about the grade interferes with my work on tests.  The harder I work at taking a test, the more confused I get.  Thoughts of doing poorly, interfere with my concentration on tests.  I am anxious even when I am well prepared for a test.  I wish that examinations would have not bothered me.  The more difficult the examination, the less efficient I become.  I feel anxious before the start of an exam, but once I start, I 2213 185 028	14	I feel panicky when I have to take a surprise test.	-1.411	185	.160
confidence for the second test.  17 My heart beats very fast during important exams.  18 I feel confident and relaxed while taking tests  19 Thinking about the grade interferes with my work on tests.  20 The harder I work at taking a test, the more confused I get.  21 Thoughts of doing poorly, interfere with my concentration on tests.  22 I am anxious even when I am well prepared for a test.  23 I wish that examinations would have not bothered me.  24 During important exams, I am so tense that my Stomach gets upset.  25 The more difficult the examination, the less efficient I become.  26 I feel anxious before the start of an exam, but once I start, I  27 213 185 028	15		329	185	.742
I feel confident and relaxed while taking tests  -3.142 185 .002  Thinking about the grade interferes with my work on tests.  .899 185 .370  The harder I work at taking a test, the more confused I get.  Thoughts of doing poorly, interfere with my concentration on tests.  -449 185 .654  I am anxious even when I am well prepared for a test.  I wish that examinations would have not bothered me.  Juring important exams, I am so tense that my Stomach gets upset.  The more difficult the examination, the less efficient I become.  I feel anxious before the start of an exam, but once I start, I 2213 185 .028	16		968	185	.335
Thinking about the grade interferes with my work on tests899 185 .370 The harder I work at taking a test, the more confused I get842 185 .401 Thoughts of doing poorly, interfere with my concentration on tests449 185 .654  I am anxious even when I am well prepared for a test1.606 185 .110 I wish that examinations would have not bothered me476 185 .634  During important exams, I am so tense that my Stomach gets upset. 1.902 185 .059  The more difficult the examination, the less efficient I become212 185 .833	17	My heart beats very fast during important exams.	-1.569	185	.118
The harder I work at taking a test, the more confused I get. Thoughts of doing poorly, interfere with my concentration on tests.  -449  I am anxious even when I am well prepared for a test.  I wish that examinations would have not bothered me.  I wish that examinations would have not bothered me.  The more difficult the examination, the less efficient I become.  I feel anxious before the start of an exam, but once I start, I 2213  The more difficult the examination are exam, but once I start, I 2213  The more difficult the examination are exam, but once I start, I 2213  The more difficult the examination are exam, but once I start, I 2213  The more difficult the examination are exam, but once I start, I 2213	18	I feel confident and relaxed while taking tests	-3.142	185	.002
Thoughts of doing poorly, interfere with my concentration on tests.  1 am anxious even when I am well prepared for a test.  1 wish that examinations would have not bothered me.  1 wish that examinations would have not bothered me.  1 pouring important exams, I am so tense that my Stomach gets upset.  1 more difficult the examination, the less efficient I become.  2 less anxious before the start of an exam, but once I start, I 2 213 185 028	19	Thinking about the grade interferes with my work on tests.	.899	185	.370
on tests.  1 am anxious even when I am well prepared for a test.  1 wish that examinations would have not bothered me.  1 wish that examinations would have not bothered me.  1 buring important exams, I am so tense that my Stomach gets upset.  1 more difficult the examination, the less efficient I become.  1 feel anxious before the start of an exam, but once I start, I 2 213 185 028	20	The harder I work at taking a test, the more confused I get.	842	185	.401
I wish that examinations would have not bothered me476 185 .634  During important exams, I am so tense that my Stomach gets upset. 1.902 185 .059  The more difficult the examination, the less efficient I become212 185 .833	21		449	185	.654
During important exams, I am so tense that my Stomach gets upset.  1.902 185 .059  The more difficult the examination, the less efficient I become.  2.12 185 .833  1.902 185 .059	22	I am anxious even when I am well prepared for a test.	-1.606	185	.110
gets upset.  25 The more difficult the examination, the less efficient I become.  26 I feel anxious before the start of an exam, but once I start, I 2213 185 028	23	I wish that examinations would have not bothered me.	.476	185	.634
become212 185 .833  26 I feel anxious before the start of an exam, but once I start, I 2213 185 .833	24		1.902	185	.059
/ / I 3	25		.212	185	.833
	26		2.213	185	.028
27 I enjoy taking an easy exam more than a hard one128 185 .898	27	I enjoy taking an easy exam more than a hard one.	.128	185	.898
I am worried my if your classmates get marks better than me2.055 185	28	• •	-2.055	185	.041

29	I feel intensely if the teacher asks me to correct my own mistakes.	-1.488	185	.138
30	I don't like if other students correct my written work.	-1.602	185	.111
31	I think that anxiety facilitates my learning.	2.362	185	.019
32	I am not in trouble, sleeping at the night before a test.	-1.166	185	.245
33	I do not feel comfortable whenever I hear the word test.	1.046	185	.297
34	I feel strong when it is time for test.	1.277	185	.203

This table 5 shows that gender-wise mean difference of all statements of the scale. This shows that about in all statements, p values are greater than 0.05, which shows non-significance mean difference between male and female students on these statements towards anxiety. However, only in five statements (# 2, 8, 26, 28, and 31) the mean score was significantly different because the p value is found less than 0.05 level of significance which shows greater anxiety is exist in female as compare to male students at secondary level schools.

# E: Relationship Between Anxiety and academic Achievement

(Impact of academic achievement due to test anxiety)

In this section showed Analysis of the relationship between various factors of anxiety towards students' academic achievement at secondary school level. The relationship between various factors of test anxiety and student-achievement in 9th class board examination in 2018. For this purpose, the researcher determined by calculating Person Correlation Coefficient.

**Table 6.** Scores on Scales and Academic Achievement (Results of 9<sup>th</sup> class)

students 10 <sup>th</sup> class	Result of 9th class	Score of Scale	Respond #	Resul t of 9th class	Score of Scale	Respon d#	Result of 9th class	Score of Scale
1	283	129	40	270	134	79	388	131
2	306	109	41	323	132	80	417	107
3	355	121	42	228	128	81	283	118
4	230	115	43	309	138	82	348	119
5	237	142	44	344	131	83	228	119
6	430	134	45	270	91	84	381	125
7	326	116	46	344	121	85	285	98
8	285	108	47	274	114	86	283	136
9	356	120	48	305	123	87	358	132
10	296	109	49	300	119	88	318	127
11	315	146	50	226	135	89	315	140
12	266	139	51	434	128	90	390	98
13	416	122	52	433	137	91	275	148
14	328	122	53	305	134	92	275	116
15	470	92	54	258	101	93	369	114

16	286	130	55	230	130	94	367	93
17	228	127	56	290	89	95	321	113
18	280	119	57	362	109	96	267	122
19	294	111	58	288	107	97	432	105
20	423	109	59	335	104	98	342	106
21	442	123	60	281	133	99	367	112
22	352	120	61	319	105	100	320	77
23	299	105	62	382	102	101	411	123
24	339	55	63	392	82	102	325	107
25	465	87	64	312	89	103	268	138
26	317	114	65	271	115	104	290	140
27	377	123	66	391	100	105	412	108
28	266	127	67	271	100	106	378	93
29	240	122	68	241	113	107	391	102
30	286	122	69	371	105	108	281	96
31	382	126	70	314	127	109	430	129
32	331	106	71	337	105	110	309	117
33	396	116	72	339	105	111	353	88
34	266	102	73	350	147	112	298	105
35	262	154	74	424	119	113	327	117
36	270	121	75	411	115	114	299	126
37	396	126	76	314	112	115	346	119
38	262	134	77	312	103	116	431	124
39	266	130	78	257	99	117	326	127
118	319	98	142	345	107	166	382	101
119	341	120	143	430	99	167	402	109
120	309	125	144	438	140	168	431	100
121	401	113	145	431	124	169	351	117
122	321	116	146	423	137	170	260	121
123	246	103	147	357	129	171	361	79
124	320	106	148	366	130	172	426	113
125	431	135	149	358	124	173	347	103
126	321	110	150	322	102	174	421	121

127	327	129	151	287	115	175	340	126
128	423	135	152	251	122	176	316	106
129	329	121	153	361	138	177	261	112
130	352	124	154	370	140	178	288	115
131	342	141	155	300	132	179	351	95
132	345	110	156	396	115	180	327	104
133	381	105	157	345	110	181	416	94
134	307	119	158	269	115	182	358	87
135	327	91	159	405	142	183	340	116
136	377	151	160	268	100	184	309	105
137	299	138	161	305	81	185	404	105
138	381	153	162	318	141	186	357	97
139	347	130	163	255	77	187	381	118
140	381	128	164	319	91			
141	325	115	165	413	64			

This table 4 shows the comparison between result of 9th class students and their score on scale. Statistical Correlation between them is given below under Pearson Correlation method.

**Table. 7.** Impact of academic achievement due to test anxiety.

		Result	Score
Result	Pearson Correlation	1	078
	Sig. (2-tailed)		.288
	N	187	187
Score	Pearson Correlation	078	1
	Sig. (2-tailed)	.288	
	N	187	187

Statistical Correlation between result of 9th class students and their score on scale

In the above table of correlation, Pearson's r value is -0.078. It shows a weak relationship between result of students and Scores on scale. This means that changes in one variable are not correlated with changes in the second variable. The correlation is negative, which means as one variable increases in value, the second variable decreases its value, and vice versa. The test of significance shows a significant difference between result of  $9^{th}$  class of students and their Scores on Scale, as the value of 0.288 is greater than 0.05 level of significance. It means increases or decreases in result variable do not significantly relate to increases or decreases in Scores variable of students at secondary school level.

#### DISCUSSION

Test anxiety like other phobias is a condition that people deal with daily. In the first step mean performance wise analysis was calculated. The statement no.8 was (i.e after important tests, I am very tense) mean score was the highest at 4.1 which indicates the high level of acceptance on statement according to norm acceptance of mean. However, statement no 10,11,19,26,31 have mean below than 3.00 which shows low acceptance of mean. These statements are when I have to take difficult course, I am worried about test 10 During exams, I find myself thinking of things unrelated to the course material 11, thinking about the grade interferes with my words on test 19, I feel anxious about the start of exam, but once I start, I forget my anxiety 26 and I think that anxiety facilitates my learning 31 respectively, Rest of statements were found moderately acceptable as per norm acceptance criteria of mean.

In the second step gender wise analysis calculated this shows that about in all statements p value is greater than 0.05, which shows non significantly mean difference between male and female students on these statements, however only in five statements (# 2,8,26,28 and 31) the mean score was significantly different because the value of p is found less than 0.05 level of significance.

The third major finding of the research was the significance of students test anxiety level determining students' performance in 9th class examination and their score on scale. Pearson's value is -0.078. it shows a weak relationship between the result of students and scores on scale. This means that changes in one variable are not correlated with changes in the second variable. The co relation is negative, which means as one variable increases in value, the second variable decreases its value. The test of significance shows a significant difference between the result of 9th class of students and their scores on scale as the value of 0.288 is greater than level of 0.05 level of significance. It means increase or decrease in result variable do not significantly relate to increase or decrease in score variables

#### Conclusion

The study concludes that:

- 1. Most of the students feel anxiety during exams. Their mind goes blank during a test. They feel nervous before test. They feel difficult in choosing question to answer. They make mistakes on easy test questions due to fear of exams. Even they feel much tense if they hear the word 'test'. They are even unable to correct their own mistakes if their teacher asks them to correct it.
- 2. Majority of students feel upset before taking the examination. They found much fearful of failure in exams during the test. Due to intensity of test stress, they got nervous and forget about the facts they already knew. Practice of surprising test was found much scary for them. They are unable to attempt the test well even prepared for that.
- 3. However, some students thinking of grades doesn't interfere with their working on tests. it is also found weak relationship between the score on scale and result of 9th class students 2018.

  To go over the main point, anxiety really matters for students during and before the exams because of fear of failures, competition with other class mates and friends or fear of losing the race of competition influences the performance of students.

## **Recommendations:**

This study suggests that:

- 1. Present study has limited the scope to find level of test anxiety at secondary level schools the future studies can also find the correlation between the urban and rural students
- 2. The present study comprises sample of one hundred eighty-seven. The future studies can be conducted on large sample.
- 3. In future studies, data analysis techniques can be increased; interviews and questionnaires both can be used in future studies.
- 4. The present study was delimited to secondary level. The future studies can be conducted at college or university level
- 5. Further researches can be made to explore the measures to control the test anxiety among students that could support them to rise up for competition with zeal or zest to achieve their study targets efficiently or effectively
- 6. It should be conducted at primary or grassroots level
- 7. Workshops should be conducted at institutes for developing confidence and interest among students to overcome fear of exams.
- 8. There should be activity-based study instead of mere cramming theory and definitions
- 9. Students should be admired and encouraged for conceptual study and attempt their tests and papers in their own word to boost writing skills and confidence among them.

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