

**ANXIETY PREVALENCE AND ITS ACADEMIC INFLUENCES
AMONG UNIVERSITY STUDENTS**



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**INSTITUTE OF EDUCATION AND RESEARCH
UNIVERSITY OF PESHAWAR
2013**

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AMONG UNIVERSITY STUDENTS**



**Khisro Kaleem Raza
(2000-I-130)**

*Submitted in partial fulfillment of the requirement for the degree of Doctor of
Philosophy in Education with specialization in Educational Psychology at Institute
of Education and Research, University of Peshawar, Peshawar.*

**INSTITUTE OF EDUCATION AND RESEARCH
UNIVERSITY OF PESHAWAR
2013**

DEDICATION

This effort is dedicated to

MUSA KHISRO

My loving son

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

FORWARDING SHEET

The thesis titled **Anxiety Prevalence and its Academic Influences among University Students** submitted by **Khisro Kaleem Raza**, in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Education has been completed under my guidance and supervision. I am satisfied with the quality of this research work.

Dated

(Dr. Arbab Khan Afridi)
(Supervisor)

DECLARATION

I Khisro Kaleem Raza, Roll No.15, Registration No. 2000-I-130, as students of Ph.D. at Institute of Education and Research, University of Peshawar do hereby solemnly declare that the Thesis titled **Anxiety Prevalence and its Academic Influences among University Students**, submitted by me in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Education, is my original work, except where otherwise acknowledged in the text and has not been submitted or published earlier and shall not in future, be submitted by me for obtaining any degree from this or any other university or institution.

Dated

Khisro Kaleem Raza

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ABSTRACT

Naturally, every individual strives for getting satisfaction and to avoid negative outcomes. A future oriented fear of a sort without avoidance refers to anxiety, which, in its mild state acts as a source of motivation, however, it may lead to malfunctioning in its severe form. The present study aimed to investigate the prevalence of anxiety among the students at university level and to find out its influences over academic performance. The study also focused on the major causal factors or correlates of anxiety among university students.

Few researches have been carried out on anxiety as a vital psychological aspect of academic performance and to analyze its causal factors among university students, specifically in Pakistan. The main objective of the study was to determine the anxiety levels of university students and to compare it with their academic grades in the last exam. The study was significant as its findings and conclusions may support the university teachers, administrators and examination conducting authorities to adopt appropriate strategies for teaching and evaluation, while keeping in view the anxiety levels of students. It also seems helpful for university students to overcome academic dysfunction caused by severe anxiety.

To achieve the stated objectives, the master level students of 16th grade of University of Peshawar, Khyber Pakhtunkhwa, Pakistan were selected out of which thirty percent (proportionate) sample from 32 postgraduate departments of all of the six faculties, for the session 2011-12 was taken. The total number of students taken was 758, ($n=758$), including 442 males and 316 females.

The research involved a descriptive non-experimental correlation design. The anxiety levels of students were determined through the standard self-report mechanism by applying the Beck Anxiety Inventory (BAI). The academic grades in the form of

percent score in the last annual examination were taken and compared among the university students having anxieties of high and low level. The data collected was tabulated, analyzed and interpreted through SPSS v.19, by using means, percentages and Pearson's product moment correlation coefficient (r). The causal factors of anxiety among university students were determined through academic, environmental, social and future oriented correlates.

On average, the students with high and low levels of anxiety were found with a ratio of 40 to 60, respectively, while the students with high and low academic grades were found with a ratio of 65 to 35, respectively. The study concluded with an inverse relation between anxiety and academic grades of university students ($r=-0.38$) and the academic correlates were found to be the only causal factors of anxiety among the university students. Finally, discussions were made and hierarchic suggestions were presented to optimize the severe anxiety among university students to ensure better academic performance.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Anxiety is derived from Latin *anxietās* which means fear, worry or apprehension. According to Freud (1920), anxiety is a signal to the ego when things do not go right characterized by an inner unpleasant feeling which people tend to avoid. Anxiety is a psychological and physiological state accompanied by somatic, emotional, cognitive and behavioural components (Seligman et al, 2007). The word anxiety is rooted in the meaning of trouble; either in the presence or absence of a stressor, which may create the feelings of uneasiness, fear, worry and dread (Bouras and Holt, 2007). It appears as a basic human feeling whenever there is a threat to self esteem or ego while facing an uncertain situation of future oriented fear (Sarason, 1988).

Anxiety may also refer to a forecasted state of mood, where an individual gets ready to deal with a negative event of the future (Barlow and David, 2002), which provides measures to differentiate anxiety from fear, i.e. anxiety is a future oriented state of mood while fear is a condition to face the threats at present (Sylvers et al, 2011).

According to the Quick Reference Dictionary for Occupational Therapy (2004), Anxiety is an expectation of happening of something bad, characterized by a sense of overwhelming and apprehension.

Kaplan and Sadock (1996), proposed that anxiety refers to a diffuse, vague and unpleasant sense of sadness accompanied by autonomic symptoms such as palpitation, headache, sweating and gastric discomfort leading to overall unrest. They also argue that anxiety is a feeling experienced by all human beings, however its symptoms and effects may differ from person to person. There may also be variety of causes of anxiety for every individual and it may also be situational for a single

human being, i.e. the sources, conditions, feelings and effect of anxiety varies from person to person.

There may not be an identified stimulus for anxiety, while considering it as a generalized condition of mood. It is distinguished from fear, which is considered as a specific behaviour of avoidance and escape, while anxiety is uncontrolled and unavoidable (Ohman, 2000).

In normal conditions, anxiety is considered as a reaction to any stressor or a source of facing the everyday problems. However, in its severe cases, it may fall under the category of anxiety disorders (National Institute of Mental Health, 2008). To avoid dangerous situations, it happens as a helping tool but in its extreme cases, the results are unwarranted.

According to Hatcher and Prus (1991), there are a number of correlates influencing the anxiety of students and their academic grades, out of which, the psychological, social, cognitive, natural and environmental variables, all are important. They termed these factors as academic situational constraints. For example, the severity of need for cooperation from friends, the separation of a closed one, during the critical situations of studies and examinations, job responsibilities, parental care etc. all influence students' anxiety and in turn their academic performance.

The symptoms of anxiety include headache, increased heart beat, mouth drying, increased breath rate, hand cooling, muscular spasm, and nausea etc. (Zeidner, 1998). Anxiety can also improve learning and achievements, provided it is at a mild level (Myers, 2007).

1.2 Anxiety among Students

Stress and anxiety of high levels have been reported among students in a number of studies (Firth-Cozenz, 2001). Academic demands, helplessness, inability to cope, mental tension, exams and work load etc. have been considered as the major

causes of anxiety among students (Shaikh et al, 2004). During such situations, the students overemphasize the negative results and consider themselves as helpless individuals (Zeidner, 1998).

Academic anxiety is not only due to tests or surrounding examinations, rather it includes a number of factors like a given subject, language, studying, reading etc. (Cassady, 2010). According to Putwain (2007), a percentage of 25-40 of students face academic anxiety where female students are prevailing. Humberg (1988), reported more academic anxiety among female students as compared to male students.

According to Zollar and Ben-chain (1990), examination is a source of students' perception regarding their increased anxiety which may hinder their true achievements due to their perceived feelings of uncertainty and unfairness. Nicholson (2009), studied the anxiety of students at grade 11 and found that there is a close association between anxiety and academic achievements. Humberg (1988), investigated that the cognitive concern or worry means a worry related to the negative expectations of one's performance, thus anxiety and performance are closely associated with each other.

Hammer et al (1998), found that besides anxiety, there are also prevailing factors leading to ups and downs in academic grades of the university students, such as family and home, health status, time span of studies etc. The physical activities and exercises also influence the academic achievements of students as revealed by the study of Trockel et al (2000). It was interesting to come across an inverse relation between physical exercises and academic grades of students, as students doing exercise seven or more hours a week obtained low academic grades in their examinations as compared to those who exercised for six or fewer hours a week or not at all.

Pine et al (1998), state that the symptoms of anxiety in children and adolescents can influence the personal, social and academic skills. The cognitive

functions and memory are closely correlated with anxiety (Pine et al, 1999). Spikell (1993), suggests that learning is more effective when a learner is actively involved in the learning situation rather than considering it a passive process, where anxiety is a tool to involve students actively in learning process or otherwise to motivate them. In contrast, academic performance can badly be affected by severe anxiety (Wittchen et al, 1999), which can then cause psychological problems (Ameringen et al, 2003). In females, it may cause academic failure while in males it may also be a reason for disruptive behavioural problems along with academic failure (Kessler et al, 1994). Poor academic performance can in turn lead to the severity of anxiety which can in turn lead to low self esteem and other personal and social problems, thus it enhances a self-maintaining cycle (Masi et al, 2001).

Leyfer et al (2006), suggest that Beck Anxiety Inventory (BAI) is a best scale to assess panic symptoms. It has also been used successfully for anxiety patients of different ages like adolescents and elderly people (Osman et al, 2002).

A number of studies have been conducted to maintain a mild level of anxiety among students, where mostly the point of focus is to reduce the test and exam anxiety. Lucas (1990), argued that success at early stages improves the self confidence and motivation of students. Similarly, good results in first tests ensure future success in subsequent tests (Guskey, 1988). A periodic chain of testing avoids severe anxiety expected in final exams (Lowman, 1984). According to Mealey and Host (1992), advising appropriate study strategies enable students overcome most of their difficulties. They further suggested that group study enhances recalling abilities and reduce the anxiety caused by academic inadequacy and isolation.

1.3 Anxiety Assessment

A number of psychological instruments have been utilized to measure the anxiety among students, which reported that the major causes of anxiety include academic, financial and social demands of the environment to which they belong

(Guthrie et al, 1998). Some of these methods include clinical interviews and self report instruments.

The Diagnostic and Statistical Manual of Mental and Psychological Disorders (DSM IV TR) provides a number of correlates to be measured for anxiety assessment. The clinical interviews like Structured Interview for DSM-IV by Gibbon et al (2004), and Anxiety Disorder Interview Schedule for DSM-IV by Nardo et al (1994), are lengthy and comprehensive interviews of semi structure nature which measure the anxiety in terms of its severity and additional commonly co-occurring diagnoses. Similarly, Mini International Neuropsychiatric Interview by Sheehan et al (1997), is another tool of measuring the anxiety by considering the DSM-IV criterion in a briefer manner.

The self report instruments are designed for providing data about the various aspects of anxiety, being given by the DSM-IV, which may include PROMIS Item Bank v.10- Emotional distress-Anxiety (2008), which is a part of the online battery of questionnaires, designed by the PROMIS Health Organization, State Trait Anxiety Inventory by Spielberger et al (1993), which has two parts, each consisting of 20 items used for assessing state and trait levels of anxiety respectively, Anxiety Disorder Diagnostic Questionnaire, having four sections given by Norton and Robinson (2010), which measures the aspects and specific symptoms of anxiety in a detailed manner and The Beck Anxiety Inventory (BAI).

Beck Anxiety Inventory (BAI)

Beck et al (1988), created an anxiety measuring scale called The Beck Anxiety Inventory (BAI). It consists of 21 questions which are provided with multiple choices and serves as a self-report inventory. It determines the severity of anxiety in an individual. It has a score range from 0 to 63 dividing the anxiety levels into minimal, mild, moderate and severe. According to Piotrowski (1999), it is the third most commonly used research tool for measuring anxiety. Borden et al (1991), used a non

clinical sample for anxiety evaluation and after concluding their study, they argued that the Beck Anxiety Inventory is a powerful instrument of measuring anxiety among the university students.

1.4 Statement of the Problem

A number of studies have been conducted on the vital issue of anxiety in the world, out of which a few researches have been carried out in Pakistan. Keeping in view the above discussion, the overall purpose of the study was to investigate anxiety prevalence and its academic influences among university students.

1.5 Major Research Question

The major research question upon which the investigations were based was “is there any relationship between anxiety prevalence and academic achievements of students at university level?”

1.6 Subsidiary questions

The following subsidiary questions were formulated for the study.

- Is there any difference in the anxiety prevalence and academic grades of students at university level?
- What are the correlates or causal factors of academic anxiety among students at university level?
- Is there any relation between anxiety and
 - Subject of studies
 - Gender
 - Social dealings, including family, friends and teachers.
 - Classroom environment
 - Academic affairs including surprise tests, courses and examinations
 - Future oriented tasks and career

1.7 Objectives of the study

The following objectives were formulated for the study:

1. To determine the anxiety levels of male and female students at university level.
2. To find out the anxiety prevalence among male and female university students at various departments and faculties.
3. To explore the academic influence of anxiety prevalence among university students.
4. To determine the correlation between anxiety prevalence and academic grades of students at university level.
5. To find out the prevailing correlates of anxiety among the university students.
6. To suggest methods to overcome the severe levels of anxiety.

1.8 Significance of the Study

The psychological factors such as phobia, anxiety and depression have a considerable influence over the academic, personal, social and vocational life of an individual. It has been established that an optimum level of anxiety has great contribution in improving the academic grades of students. Anxiety in its original sense is a source of motivation for every individual. It serves as motivating factor for doing a number of actions in order to avoid the future oriented problems. However, it is considered as a psychological and mental disorder in cases of its severity. To maintain a mild level of anxiety, a number of studies have been conducted, where the focal point is to reduce the test anxiety. The present study is beneficial for the researcher to improve his own knowledge about the prevalence of anxiety among the university students through various correlates like gender, discipline, subject and social dealings. It is supportive for the university teachers in adopting specified instructional strategies in accordance with the anxiety of students. The study is beneficial for university administration and examination conducting authority in

selecting appropriate methods of evaluation so as to deal with the psychological factors of students in association with their academic performance and excellence. It is also beneficial for the university students in maintaining strong academics by knowing the causes of extreme anxiety and suggesting coping strategies for its optimization.

1.9 Limitations of the Study

Based on the stated objectives of the study, it is limited to the assessment of anxiety levels and academic grades of students at university level. It also points out fewer of the anxiety correlates among the university students, up to a limited range of the academic, social and environmental factors presumed to cause anxiety among university students.

1.10 Delimitations of the Study

Keeping in view the time shortage and availability of resources, the study was further delimited to the students of University of Peshawar, Khyber Pakhtunkhwa, focusing over the anxiety levels and academic grades of the students of master level, out of which the students of final year (16th grade) were taken as subject of concern.

1.11 Definition of the Terms

The numerous terms used in the study are defined operationally, as follows.

University Students

In the given study, a university student refers to an enrolled student of Master level in final year of the University of Peshawar, for the session 2011-2012, belonging to any faculty, department, centre or institute.

Anxiety

In this study anxiety refers to the stress and uneasiness experienced by a regular master level student related to a particular subject, teacher, friends, tests, course, teaching method, classroom environment, examination, family and home, and future oriented tasks.

Academic Influence

Academic influence of anxiety means how and to which extent does anxiety affect the study habits, motivation, zeal of learning, academic grades, and study interests of a student at university level.

Anxiety levels

The anxiety levels of the university students were initially classified into four categories namely minimal, mild, moderate and severe, following the standard procedure of anxiety categorization through the use of Beck Anxiety Inventory. Furthermore, the minimal and mild levels of anxiety were termed collectively as low level of anxiety while the moderate and severe levels of anxiety were given the name of high level of anxiety in the given study.

Academic Grades

Under the annual system of examinations, the University of Peshawar divides the academic achievements of students into three concentric levels, i.e. the first, second and third divisions. Students with marks equal to or above 60% fall under first division. Students with marks below 60% and equal to or above 45% fall under second division while students with marks equal to or above 33% and below 45% fall under third division. The gradation in the present study is based on further subdivision into A1, A, B, C and D grades as follows (Appendix 4).

- *A1 Grade:* It refers to the score equal to or above 80%, represented as outstanding.
- *A Grade:* It means the score equal to or above 70% and below 80%, represented as excellent.
- *B Grade:* It means the score equal to or above 60% and below 70%, represented as very good.
- *C Grade:* Students scoring equal to or above 50% and below 60% fall under this category, represented as good.

➤ *D Grade*: It is the category of score below 50%, represented as fair.

Furthermore, in the given study, the A1, A and B Grades are collectively combined as High Grades while the C and D grades are collectively given the name of Low Grades.

Anxiety Correlates

The causal factors upon which anxiety of an individual depends are collectively termed as anxiety correlates in the given study.

CHAPTER 2

REVIEW OF RELATED LITERATURE

2.1 Anxiety Correlates

Lynn et al (2012), investigated the correlates of anxiety among parents with disabled children. They took data from parents and came to the conclusion that the birth of a premature or critically ill infants acts as a significant causal factor of parental anxiety. Using an explanatory correlational design, they found that disabilities among children can result in high anxieties among parents, hindering their routine activities and family functioning.

The academic anxiety influences the overall performance of students and in case of its severity, the academic malfunctioning is resulted. The students with parental involvement become more consequence-centered and hence they try to get more success as per the parental demands. A mild anxiety created by parents is effective for reforming the study habits of their children; however, an extreme stress created by parents leads to academic unfair means among students. The students while coping with severe anxiety created by their parents become task-centered and hence they try to achieve it by any means, Norman and Yosef (2010).

Crystal et al (2008), found that academic correlates of anxiety highly influence students' performance. Students with more anxiety have low self efficacy and hence they have lesser abilities of self-regulated learning and vice versa. Academic stress also hinders the expectations of students up to a significant extent.

Bauer et al (2005), conducted a study on the prevalence and distinct correlates of anxiety. They utilized a sample of 328 inpatients and collected data through the self-report instruments. They came to the conclusion that the individuals with young age prevailed in the correlates of current anxiety regarding the substance abuse and combined comorbidity.

Subject anxiety is closely associated with individual differences. It has been established that the age and gender of students influence the subject anxiety. When college students were analyzed for the subject of statistics, it was revealed that the age is a significant correlate of the anxiety regarding the subject of statistics, where the old students were found more anxious than the younger (Mustafa, 2003).

The epidemiological correlates of anxiety have been found to be more prevalent among people, where during the situations of epidemics, there occurs an increase in anxiety, which may lead to anxiety disorders (Freeman et al, 2002).

According to Barbara et al (1999), the anxiety of students is closely correlated with self esteem, where the high self esteem reduces the anxiety which in turn influences the academic performance. Students with low academic grades are most likely to have low self esteem and higher anxieties.

Academic experiences at childhood enable the students towards higher performance in their later lives. Conducting a qualitative study on the determinants of under-achievements among students through observations and interviews, it was found that lack of academic experiences in early life hinders the academic performance in later ages (Eva, 1998).

Anxiety, attitude, motivation and study habits are the significant correlates of academic achievements of students. Considering these as the affective correlates, when the college students were analyzed for motivation, study habits and attitudes, it was found that the stated correlates had significant influence over the academic achievements, (Khan, 1996).

Harve et al (1994), found that anxiety and depression and physical illness are significantly correlated among the college students. They further argue that anxiety at early ages leads to the affective malpractices at later life, thus it is more important to avoid anxious experiences in children so as to secure their future.

Anxiety of students depends upon the situational factors like novelty, subordinate status, dissimilarity and prior history, etc. among students. Improvement of instructional methods can be supportive in order to reduce the high levels of anxiety (Michael, 1988).

Anxiety is closely related to the age and gender and it may vary significantly with these correlates. Studies of Samuel & Stanley (1984), on the prevalence and correlates of anxiety in older adults revealed that 17.1 percent among the males and 21.5 percent among the females were with anxiety at risk. They found an inverse relation between anxiety and education, urban dwelling, physical health and socioeconomic status. They utilized a sample of 713 males and 1338 females with age range of 55. They suggested the early therapeutic measures to be followed for minimizing the risk factors of anxiety at old ages.

Culler and Holahan (1980), found that the anxiety modifies the study behaviours of students. When students were analyzed for their anxieties and academic scores, an inverse relation was found between anxiety and students' GPA. Similarly, students with more anxiety were found with poorer study habits and those with low anxiety were found with good study habits in contrast.

2.2 Theories of Anxiety

Strongman (1995), summarized and published the various theories of anxiety in a concise form, from the view points and perspectives of various psychological schools of thoughts. The psychoanalytic, behaviouristic, cognitivistic and existential paradigms about the anxiety have difference in opinions, a brief account of which is given as follows.

2.2.1 *The Psychoanalytic Theory*

This psychoanalytic approach in psychology emphasizes over the unconscious mind, and thus focuses over the human behaviour to be a reflection of whatever being present in one's unconsciousness. The psychoanalytic theory of anxiety was put

forward by the father of psychoanalysis, Freud (1917, 1926), in two different forms, respectively. According to these theories, anxiety is an everyday phenomenon and it is a way of explanation of neuroses. It further states that anxiety of everyday life is related to the fear of real object and hence termed as realistic anxiety. It is commonly called fear instead of anxiety. The anxiety (or neurotic anxiety) refers to the panic attack specifically used for a phobic situation. In his first conception, Freud regarded anxiety as a result of repression when libidinal energy is transformed in the form of panic attack, unconsciously. Thus when an individual represses the acts aroused from libido (sexual drive) continuously, it results in anxiety, without the awareness of the individual concerned. In turn, the anxiety is expressed in the form of a variety of symptoms, so as to avoid further development of anxiety.

In his second formulation, Freud reversed the same idea, in terms that a regular occurring of anxiety leads to repression of thoughts, again unconsciously. In this second concept, when a person is about to face a situation of danger, it develops anxiety and to avoid such a danger, repression is developed. In both cases, the main focus is on the avoidance of situational unrest, but in the first theory, the major concern is that with the automatic anxiety, i.e. the fear arouses without the will of the individual concerned.

In Freud's view, infancy is a stage of getting primary anxiety due to the helplessness of an individual, in terms of fixation or separation of mother, etc. Castration anxiety, being perceived by male children as a threat to be deprived from sexual activities, may also be a prevailing factor of anxiety in early childhood. Such feelings lead to the flooding of mental apparatus, resulting in emotional unrest and hence uncontrolled feelings of anxiety are emerged at later stages of life.

The psychoanalytic approach views anxiety both as inherited as well as learned behaviour. Other psychoanalytic theorists like Sullivan (1953), focus over the environmental aspects which lead to an individual's anxiety, rather than separation, in

the same manner as by Freud. Izard (1977), considers anxiety as an adaptive behaviour being dependent over cognitive functions of an individual.

2.2.2 *Behavioural Theory of Anxiety*

The learning or behavioural approaches of psychology refer back to the conditioning phenomena introduced by Pavlov and Watson, which were reinstated in the forms of classical and operant conditioning later on. According to this approach in psychology, the behaviour emerges as a response to the stimulus in terms of conditioning, gain, drive reduction and so on. Mowrer (1953), and Dollard and Miller (1950), developed the behavioural theory of anxiety, according to which, anxiety is a form of fear learned by an individual, especially in the situations, when the source or stimulus is unclear. It is rooted in the concept of drive reduction, according to which, overstimulation or increase in the threats of primary drives leads to the establishment of fear or anxiety as a secondary drive, and hence, the new behaviour is adopted through the drive reduction. In this theory, the terms fear and anxiety are used synonymously. In short, this theory emphasizes over the learning process in terms that anxiety is a learnt behaviour and once it is learnt, it is used to motivate the maladaptive behaviour.

Staats and Eifert (1990), presented the behavioural theory as a connection between the cognitive and behavioural approaches, according to which, a central emotional response forms the basis of anxiety and which emerges it through aversive conditioning or symbolically in the form of language. This concept focuses over the truth that anxiety may not be a product of the traumatic events; rather it can be emerged from the negative emotions or simply from the words associated with an emotional situation. As a result, anxiety is established as a sort of self-conditioning.

Eysenck (1957), presented the theory of anxiety in terms of a partly inherited and partly learnt behaviour. His theory of anxiety is based on his famous theory of personality where the extraversion/ introversion and neuroticism are the major

dimensions. According to him, a neurotic individual is more sensitive to the stimuli which provoke anxiety. In turn, the sensitivity is related to the autonomic nervous system and thus the individual has inherited apparatus for anxiety. In his second aspect of anxiety, it can be learned from the traumatic events in the form of unconditioned fear. Such a fear becomes conditioned in related situations, eliciting the maladaptive behavior in the form of anxiety as a conditioned response.

2.2.3 Physiological Theory of Anxiety

The physiological paradigm of psychology focuses on the organic causes of behaviour, where the bodily physiological activities, the release of hormones and action of neurotransmitters control the behaviour under the instructions of the nervous system. The physiological theory of anxiety was put forward by Gray (1982, 1987), based on his experimental work of taking lesions in the septo-hippocampal areas and observing the effects of anti-anxiety drugs over the taken brain lesions. He concluded a complex system of nervous system which controls the anxiety and other emotions of humans in the form of a behavioural inhibition system. The major areas of brain responsible for the regulations of such behaviours include the septo-hippocampal system, neocortical projection of the septo-hippocampal system in the frontal lobe and the monoaminergic afferents of the brain stem. The theory states that whenever there is an unwanted threatening behaviour, it is suppressed by the behavioural inhibition system by developing another system to avoid the threat. This threat-avoiding system is more likely as fight/flight system which when exhibits, produces feelings of negative outcomes, in the form of anxiety. Panksepp (1982, 1991), also proposed the same theory in terms of physiological activities of central nervous system to be the source of anxiety.

2.2.4 Existential/Phenomenological Theory of Anxiety

The existential or phenomenological approaches in psychology refer to the behaviour of an organism as a counter part of the natural occurrences. Every organism

lives freely in nature and it behaves accordingly. The concept refers back to the work of Kirkegaard (1844), who framed the idea of human development and maturity as a function of freedom, which in turn depends upon the awareness of existing possibilities in life. Considering such possibilities in life, there must also be the involvement of anxiety to occur. Every individual is presented with a number of choices at every step of life and hence at every step, there is to select among the given alternatives, which creates anxiety. Thus in order to become self-actualized, an individual must face anxiety and cope with it.

Kirkegaard (1844), presented a demarcation line between fear and anxiety in terms as fear is an emotional condition due to a known specific object while anxiety is independent of object. A fearful individual moves away from the object causing fear while an anxious individual has to face the situation as a conflict with no choice of avoidance.

The same theory was presented by Fischer (1970), in a detailed manner, according to which, every individual has an identity acting in the form of milestones in life. Whenever, a milestone of life is threatened, anxiety is resulted. Similarly, every individual has a network of relations and involvement of the life milestones, in the form of his/her world. Again, if the world of relations of an individual is threatened, anxiety will emerge. An individual's world and identity correlate through a motivation and there is always an action to achieve the given milestones. Finally, an individual must also have the ability to evaluate the life, at every step towards an uncertain competence.

2.2.5 Cognitive Theory of Anxiety

The Cognitive approach to psychology is based on the mental operations and processing of mind regarding a particular behaviour. There are different theories of anxiety in this paradigm out of which two are more common, i.e. the cognitive theory

by Eysenck (1990), and the information processing theory by Ohman (1993). Both of them consider the mental operation as a base for the emerging anxiety.

According to the cognitive theory of anxiety by Michael Eysenck, every individual has its own mood-state-dependent memory, and the retrieval of information related to a particular mood depends upon the cognitive structure or contents of memory. Thus people vary in moods and anxieties, due to differences in their cognitive structures and retrieval systems. Thus it influences the physiology and behaviour of an individual based on the attention given to a particular situation and makes anxiety as a prevailing trait.

The Ohman's theory of anxiety based on information processing model states that the information processing sources lead to defenses that are biological in nature and hence creates the feelings of anxiety. He argues that information goes through feature detectors and evaluators which automatically evaluate the relevance of the stimuli. There may be cognitive resources but present in the non conscious level of an individual. The arousal system gives signals to the significant evaluators and also provokes the system of conscious perception based on the emergency reaction of the autonomic nervous system. The emotions being organized in memory form the expectancy system forming a standard cognitive system. The combination of these systems recognizes the threat in environment. Thus a connection between the environmental threat and cognitive apparatus is maintained, which interprets the situation through the conscious perception. Anxiety emerges as alarm system by a continuum of mental processes to protect the individual from impending danger.

2.3 Defense Mechanism

Anxiety always creates an unpleasant feeling which is dealt through an individual's unconscious adaptations, in a manner that the unpleasant things or events are felt better for the individual. This mechanism is termed as defense mechanism or ego defense mechanism. It is the memory of unwanted things and events which never

vanishes away and exerts a force on the behaviour of an individual. A healing force, keeping these memories in the unconscious mind refers to the defense mechanism, (Freud, 1894,1896).

According to Freud (1933), the anxiety originates from the conflicts between the id and super ego, where the ego serves as the conflict resolution media. He further argues that life situations coming in conflicts with the id, ego and super ego result in three major types of anxiety; where a threat to the strength of id results in Neurotic Anxiety, the admission of weakness by ego causes Social or Reality Anxiety and the damaged super ego establishes Moral Anxiety.

It was formerly established that defense mechanism is not a subject of studies in academic psychology, however, based on coping strategies followed by students regarding their anxieties, it was regarded as an important issue to be included, Cramer (2000).

Gur and Gur (1975), found that the personality and individual differences play a key role in adopting a particular defense mechanism. They investigated studies on personality styles with defenses followed and argued that even the right and left handed individuals have different modes of defenses. They found that the right handed individuals follow projection and turning against others while the left handed people use repression and denial as their defenses.

For normal psychological development, following a proper defense mechanisms is indispensable, while coping with anxiety of any sort, (Phebe, 2002).

Coping with anxiety enables an individual to adopt behaviours of various sorts. A mechanism that gives satisfaction or facing the stressful situation may be alarming and hence it may lead to unwanted results. Sarah et al (2010), found that the anxiety at higher level is associated with acts like self injury and other negative behaviours. They carried out an internet based survey of the university students with a sample of 2843 students and came to the conclusion that students with higher anxiety,

eating disorders and family unrest adopt the behaviours of drug addiction and self injury, in order to cope with the stressful situations.

Resolving anxiety through defense mechanism and its determination is a better tool for treating the anxiety and personality disorders. The common defenses followed by such individuals include passive aggression, projection, acting out, fantasy, dissociation and hypochondriasis (Vaillant, 1994).

2.4 Types of Defense Mechanisms

A large number of defense mechanisms are followed by people with anxiety of different forms and levels. McLeod (2009), collected the important common defenses presented by Freud (1894), and his daughter Anna Freud (1937). Consider the following defense mechanisms.

2.4.1 *Repression*

The first defense mechanism discovered by Freud is the repression. It is the most important and more common method of resolving conflicts in a manner that harming thoughts are unconsciously moved or repressed so that they do not come to the conscious level. Mostly the thoughts causing guilt feelings are forgotten by this mechanism.

2.4.2 *Projection*

The defense mechanism, where others are made responsible for an unwanted act is called projection. In other words, the thoughts causing guilt or unpleasant feelings are attributed to others by the mechanism of projection.

2.4.3 *Displacement*

The symbolic substitution of the unpleasant feelings from a real target to neutral one is called displacement, i.e. when the aggression or similar feelings are moved away from original stimulus to an individual of no concern.

2.4.4 Sublimation

Displacement of thoughts in a positive or constructive manner is called sublimation, i.e. a situation or act leading to destructive behaviour is resolved by the mechanism of sublimation in a way that results in pleasant outcomes. For example, an aggressive individual start the sports like boxing, so as to satisfy his/her aggression. Freud regarded it as the cornerstone of civilized life and according to him; people of higher categories in the fields of arts, science, music etc. are the sublimated products of their sexuality.

2.4.5 Denial

Refusing the stressful situation from experiencing is termed as denial. It is actually the blocking of external events from one's conscious awareness. For example a smoker may not accept the harms caused by smoking through the mechanism of denial.

2.4.6 Regression

Getting back to the time of past and acting in a childish manner is called regression. The behavior of an individual may become more primitive while facing a stressful situation, for example, spending more time in school for a child may result in the action of thumb sucking or bed wetting so as to get more attention of parents and avoid the condition of being stressed at school.

2.4.7 Rationalization

It is the conscious act of making excuses with argumentation, where an individual makes the threatening situation less harming by his/her cognitive distortions. People with sensitive ego become so habitual with this mechanism that they are even unaware of their acts of making excuses.

2.4.8 Reaction Formation

Going beyond denial and acting in an opposite manner is called reaction formation. It is a mechanism of opposing the demands of id in reverse order. Freud

stated that a homosexual individual adopts a harsh anti-homosexual attitude in the form of reaction formation so as to face with the shame and guilt caused by this sort of action.

2.4.9 *Identification with the Aggressor*

This defense was discovered by Anna Freud, according to which an individual conquers the person or situation of which he/she is afraid, by adopting a behaviour in favour of that person or situation, i.e. following the behaviour of a sort which is being demanded.

2.5 Some other Defense Mechanisms

Besides the stated defense mechanisms of coping with anxiety, following are some additional mechanisms.

2.5.1 *Dissociation*

It is the mechanism by which an individual becomes disconnected from the real world for some time and lives in a world totally different with no thoughts and memories of the unbearable nature. People of such types mostly have multiple personality disorders, where the loss of track of self or time is a common action.

2.5.2 *Compartmentalization*

A mild form of dissociation in which an individual partly ignores the real world and acts according to separate set of values is called compartmentalization. An honest person cheating in a situation may adopt this mechanism for a while, ignoring his real set of value system.

2.5.3 *Intellectualization*

Coming across an unwanted situation, an individual may adopt a mechanism of over-emphasis on thinking without the intervention of any emotion. Such a way of facing the threatening situation is called intellectualization. For example, a student punished by a teacher may think over the fruitless procedures of schooling, rather than getting sad.

2.5.4 *Undoing*

An attempt of taking back an unconscious behavior of hurting others in an acceptable way is called undoing. For instance, insulting a closed one unconsciously may be resolved by praising in a better manner which may result in balancing the negative feelings developed.

2.5.5 *Compensation*

It is the psychological counter-balancing of one's weaknesses by emphasizing over the strengths. For example, a student having weaknesses in the subject of English may focus his attention towards his strengths in the subject of Mathematics, by thinking that an individual can't be strong in all things.

2.5.6 *Assertiveness*

Human communication styles occur in the form of a continuum, with ranges from passive to aggressive, while the assertiveness lies between the two. People with passive styles have better listening abilities while those with aggressive styles have more leadership qualities but lesser ability to listen empathetically. People with assertive mechanisms communicate for themselves in a respectful and firm manner and they listen to others when needed.

2.6 Research Already Conducted

Aktekin et al (2008), published a research article in which prevalence of anxiety, depression and stressful life events among students of Turkey were taken into account. They selected all the first year students of medicine, economics and physical education enrolled in 1996, at the Akdeniz University of Turkey and collected data about their anxiety and depression by using Beck Anxiety Inventory, General Health Questionnaire and State-Trait Anxiety Inventory. They found that the anxiety, depression and stressful life events prevailed in the students of medicine as compared to those of economics and physical education.

Nauman et al (2008), conducted a cross-sectional study for determining the prevalence of anxiety and depression among the Medical students of Nishtar Medical College, Multan, Pakistan. They collected data from a number of 815 students by using the Validated Questionnaire for anxiety by the Aga Khan University. They concluded that female students had more anxiety than the male students. They further argued that age, marital status, locality and family income did not have any significant effect over the prevalence of anxiety.

Rab et al (2008), studied the rates of anxiety and depression among the female Medical students of Pakistan. They selected a sample of 87 students at a medical college of Lahore, Pakistan and collected data by using Hospital Anxiety and Depression Scale along with a Questionnaire designed for life events, social behaviour and past medical history. They found that 43.7% female students have significantly high anxiety and 19.5% have depression. Anxiety and depression prevailed in students living at hostels than those living at homes. Students with recent negative life events were found to be depressed while students having more friends were found to have a lower level of anxiety and depression.

Eisenberg et al (2007), conducted a study on prevalence and correlates of depression, anxiety, and suicidality among university students by using a web based survey. Data from university students was collected through Patient Health Questionnaire which showed the prevalence of anxiety among 15.6% undergraduates and 13.0% graduate students. 2% of students showed suicidal ideation while students with financial problems were found at high risks towards mental disorders.

Maria et al (2006), investigated the defense mechanisms followed by the medical students of Karachi, Pakistan, while coping with their higher levels of anxiety. They collected data from 682 students of five different Medical colleges of Karachi, by using Defense Style Questionnaire which divided the defense mechanisms into mature, immature and Neurotic categories. They concluded that

Neurotic defenses were more common in female students of medical colleges, while immature defense mechanisms were less commonly employed. They further mentioned that the use of Neurotic mechanism was probably due to the female gender, recent admission and enrolment in private colleges.

Mark et al (2005), studied test anxiety and academic performance in 4000 undergraduates and 1414 graduate students and found an inverse relation between test anxiety and GPA in both groups. Female students with low test anxiety showed B+ grades while those with more test anxiety showed B grades. In male students, however, there was found no significant difference in GPA for more and less test anxious cases.

Andrews and Wilding (2004), correlated the financial and other difficulties with the Anxiety level of British students at college level. They used a pre-test and Post-test experimental design and by analyzing data collected from a sample having 351 students through Hospital Anxiety & Depression Scale, they found that financial and other environmental factors increase the anxiety level of students significantly, which in turn decreases the exam performance up to a significant level.

Mirza (2004), conducted a research on the risk factors, prevalence and treatment of anxiety and depressive disorders in Pakistan by systematically reviewing the existing pool of published literature. He analyzed 20 studies and found that gender, age, education, economic conditions household relationships and domestic problems are the important factors leading towards anxiety and depression. He further argued that 34% of the overall population showed significant anxiety problems including 29% to 66% females and 10% to 33% males.

Ali et al (2002), studied the prevalence and factors associated with anxiety and depression among women in a lower middle class semi-urban community of Karachi, Pakistan. They took a sample of 1218 women between the ages 18 to 50 years in a cross-sectional survey. The data was collected by using the Aga Khan Anxiety and

Depression Scale along with socio-demographic questionnaire which revealed a 30% prevalence of anxiety. The causal factors of anxiety they found were verbal abuse, lack of education and increasing age among the subjects under study. They suggested that provision of education and reduction of domestic abuse can be a measure to decrease the prevalence of anxiety and depression in women.

McKenzie and Schweitzer (2001), analyzed the undergraduate students of Australian Universities for various predicting factors affecting academic performance. They took 197 undergraduate students as sample. By keeping the last exam result as a standard pre-test measure, they identified academic, psychological, cognitive and demographic factors as the key predictors of academic performance. They concluded that identifying these predictors can help in providing support services to the students at risk of academic problems.

Misra et al (2000), published their study conducted over a sample of 249 university undergraduate students by interrelating the anxiety, academic stress and time management with gender differences. They found that although females have more time management skills as compared to males, however, they experience more anxiety than males. They also mentioned that anxiety and time management are causal factors of academic stress. Anxiety reduction and leisure activities help to optimize academic stress.

Twenge (2000), undertook two meta-analyses of increasing anxiety with age and social indices, by reviewing the literature from 1950s to 1990s. Increasing pattern of anxiety in both adults and children was taken into account for which he suggested that increased environmental dangers are the factors of increase in anxiety. He further argues that economic factors have relatively low influence over anxiety.

Townsend et al (1998), investigated an experimental study over the students of educational psychology. The students were assessed for the subjects of social statistics and mathematics regarding their anxiety and self concept about the said subjects at the

beginning and end of the courses. By applying a positive environment of cooperative learning activities and class discussions, they found that students' anxiety about statistics was significantly reduced, which yielded an improved confidence in dealing with statistical problems. However, the mathematics anxiety was not significantly reduced due to their negative attitudinal factors about the subjects. They concluded that attitudinal factors are important to be considered along with other issues while designing instructions for mathematics-related areas.

Mumford (1998), conducted a cross cultural study by comparing the somatic sensations and psychological distress among the students in Britain and Pakistan. He collected data from the students of University of Leeds (UK) and University of Lahore (Pakistan), by using Bradford Somatic Inventory and General Health Questionnaire. He concluded that there was no significant difference between the two populations, however, females in both cases showed prevalence of somatic sensations and psychological distress than males.

Rapee and Heimberg (1997), presented a model of anxiety and social phobia by taking into account anxiety as a product of the processing and evaluating the information by the people with social phobia. They argued that people with social phobia feel a higher level of anxiety in social situation due to the distortions and biases of information received and processed.

Gorenstein et al (1995), contrasted the scores obtained with revised forms of Beck Depression Inventory and State-Trait Anxiety inventory for Brazilian University students. The scales were applied to a sample of 270 students from different Universities at Sao Paulo for which they found that using a Brazilian version of the said scales gave the same results as obtained by the original versions.

Lovibond and Lovibond (1994), compared psychometric properties of Depression Anxiety Stress Scales (DASS) with Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI). They used a normal sample of 717 individuals and

found a stronger correlation of 0.81 between DASS and BAI and a correlation of 0.74 between DASS and BDI.

Akinsola and Jegede (1989), performed a study on the anxiety prevalence among the students of biology while considering their perceptions about the subjects of ecology and genetics. They collected data from 138 students of pre-degree level and found that majority of them have a high anxiety level about the two subjects. For reducing their anxiety, they divided the students into experimental and controlled groups, having 63 and 75 students respectively. The experimental group was subjected to the approach of concept mapping, which resulted in optimizing their anxiety about ecology and genetics as compared to the controlled group.

Gotlib (1984), conducted a study on the validation of various self reported scales used for anxiety, depression and other maladaptive behaviours found in university students. The scales included Beck Depression Inventory and State-Trait Anxiety Inventory and five others. Data collected from a number of 443 students was when interpreted, it was concluded that all these scales were significantly inter-correlated; however care should be taken for high score obtained.

Quinn and Jimmy (1983), performed a study on the prevalence, causes and effects of anxiety among the university students. They reviewed the professional literature cited for anxiety among university students and found that anxiety level influences academic performance, where a low anxiety level improves academic performance while a high anxiety level with more intelligence also improves academic grades. An increased anxiety level of female students badly influences academic performance while environmental factors have significant correlation with anxiety and academic grades. Behavioural modification and counseling are effective techniques to optimize students' anxiety.

Nancy (1978), investigated the prevalence and correlates of subject anxiety among Mathematics students at college level. She took a sample size of 652 students

of mathematics subject and collected data by using State-Trait Anxiety Inventory and found that mathematics anxiety frequently occurred in female students as compared to males which resulted in the lower academic ranks of female students in mathematics. She suggested that attitude of students towards subject and the subject anxiety are important correlates to be taken into account while providing educational guidance and counseling services.

Charles et al (1962), found that college students with low intellectual ability showed low grades irrespective of anxiety level, while academic performance of students with middle range of intelligence is badly influenced with increased anxiety. For students with very superior intelligence, anxiety serves as a tool of increased academic grades.

CHAPTER 3

MATERIAL AND METHOD

3.1 Research Design

The overall purpose of the study was to investigate anxiety prevalence and its academic influences among university students. In order to establish relationship and difference between anxiety prevalence and academic achievements of university students, a descriptive correlational research design of non-experimental nature was followed.

3.2 Target Population

Presently, there are a total of 136 Universities/degree awarding institutes recognized by the Higher Education Commission, including 74 public sector universities/degree awarding institutes and 62 private sector (www.hec.gov.pk, Retrieved on May 11, 2013).

Among the public sector Universities/Degree awarding Institutes, 21 are chartered by the Central Government of Pakistan, 18 chartered by the Government of Punjab, 13 by the Government of Sindh, 15 by the Government of Khyber Pakhtunkhwa, 5 by the Government of Balochistan, and 2 by the Government of Azad Jammu and Kashmir.

Out of the 62 private sector universities/degree awarding institutes, 5 are chartered by the central Government, 21 by the Government of Punjab, 23 by Sindh, 10 by Khyber Pakhtunkhwa, 1 by Balochistan and 2 by the Government of Azad Jammu and Kashmir.

The population of the study consisted of all the students enrolled in the Universities of Khyber Pakhtunkhwa. It was delimited to the students of University of Peshawar, Khyber Pakhtunkhwa having six faculties. These faculties are namely Faculty of Arts and Humanities, Faculty of Islamic and Oriental Studies, Faculty of

Management and Information Sciences, Faculty of Social Sciences, Faculty of Life and Environmental Sciences and Faculty of Numerical and Physical Sciences.

3.3 Sampling

The existing campus enrolment at University of Peshawar includes a total of 14060 students (both male and female) at various faculties. There are 6320 students at bachelor level, 6544 at master level and 1196 at M.Phil/Ph.D level, (http://www.upesh.edu.pk/admissions/admissions_overview.html). The overall population of the study was limited to a total of 2507 students of Masters level (final year), including both male and female, out of which, the random sample to be taken would have to involve a total of about 330 students (Krejcie, 1970, Appendix 5). However, in order to reduce sampling error, increasing the sample size is important (Deborah, 2011). Thus to give proper weightage to the male and female students of all faculties, each post graduate department, institute or centre was considered as a stratum, out of which a proportionate number of subjects (males and females) was randomly selected. An overall 30% sample from males and 30 % sample from females of Masters (final year) students of all the post graduate departments was taken for the study.

The exact data of post graduate students of the whole university was taken from the Directorate of Admissions, University of Peshawar, where a gender-wise list of all the postgraduate students was made (Appendix 1,2). The following tables show the sample size calculated as 30% of the overall population of each department, centre or institute.

Overall Sample

Gender	Number of Students	Sample Taken
Male	1426	442
Female	1081	316
Total	2507	758

3.3.1 Faculty of Arts and Humanities

S.No	Department	Male	Sample	Female	Sample
1	Anthropology	42	13	09	03
2	Archaeology	19	06	09	03
3	English	22	07	65	20
4	History	20	06	18	06
5	Philosophy	15	05	06	02
Total		118	37	107	34

Total Sample: 71

3.3.2 Faculty of Islamic and Oriental Studies

S.No	Department	Male	Sample	Female	Sample
1	Arabic	06	02	12	04
2	Islamiyat	10	03	63	19
3	Pashto	20	06	02	01
4	Persian	06	02	02	01
5	Urdu	34	10	46	14
Total		76	23	125	39

Total Sample: 62

3.3.3 Faculty of Life and Environmental Sciences

S.No	Department	Male	Sample	Female	Sample
1	Botany	32	10	68	21
2	Environmental Sciences	16	05	43	13
3	Institute of Chemical Sciences	61	18	92	28
4	Geography	59	18	36	11
5	Zoology	30	09	49	15
Total		198	60	288	88

Total Sample: 148

3.3.4 Faculty of Management and Information Sciences

S.No	Department	Male	Sample	Female	Sample
1	Institute of Management Sciences	33	10	03	01
2	Journalism and Mass Communication	67	20	20	06
3	Library and Information Sciences	69	21	23	07
4	Quaid-e-Azam College of Commerce	108	33	03	01
Total		277	84	49	15

Total Sample: 99

3.3.5 Faculty of Numerical and Physical sciences

S.No	Department	Male	Sample	Female	Sample
1	Computer Science	76	23	26	08
2	Physics	98	30	30	09
3	Electronics	61	27	63	03
4	Mathematics	60	18	38	12
5	Statistics	59	18	28	09
Total		354	116	185	41

Total Sample: 157

3.3.6 Faculty of Social Sciences

S.No	Department	Male	Sample	Female	Sample
1	Economics	61	18	63	19
2	Education	33	10	72	22
3	Social Work	53	16	26	08
4	Sociology	74	22	14	04
5	Gender Studies	20	06	11	03
6	International Relations	58	18	25	08
7	Political Science	89	27	35	11
8	Psychology	15	05	81	24
Total		403	122	327	99

Total Sample: 221

3.4 Instrument

After going through different articles and researches, the researcher selected the standard Beck Anxiety Inventory (BAI) for measuring the anxiety levels of university students.

BAI is a four point Likert scale, having twenty one items each with four responses, i.e. Not at all, Mildly, Moderately and Severely, which divide the anxiety of an individual into four concentric levels i.e. the Severe, Moderate, Mild and Minimal. The standard form of BAI was used in order to achieve the objectives of the study (Appendix 3, Part 2).

Keeping in view the nature of the study, items related to demographic information and correlates of anxiety were also included as separate questionnaires.

The demographic information contained name of student, age, gender, district of domicile, financial status, boarding facility, percent score in last exam and email address, however, in order to achieve the objectives of the study, the gender, department and percent scores of students were taken into consideration (Appendix 3, Part 1)

To determine the causal factors of anxiety among university students, the important correlates were selected from the published research articles and hence nine items were added related to the academic, environmental, social and future oriented correlates of anxiety (Appendix 3, Part 3).

The original structure and sequence of the inventory was kept unchanged. In order to maintain structural consistency in the questionnaire, the additional items of the anxiety correlates were also given the format of BAI and the responses were divided in the same four points Likert scale.

The academic grades of students were taken in the form of their percent score in the last annual examination and gradations were made through the standard criteria (Appendix 4).

Reasons for Selecting Beck Anxiety Inventory

Based on the following pros and victorious properties of BAI, (Bryant & Panasetis, 2001; Nixon & Bryant, 2003), the inventory was selected for data collection.

- The identification of anxiety symptoms through BAI is simple and quick.
- It can be used as self-report questionnaire either in written form or it may also be administered orally.
- The 21 items provided for anxiety in BAI are accurate predictors of anxiety which make it useful for diagnosis.
- It can be used for determining an individual's baseline, which can then be used as starting point of therapy in cases of psychological and mental abnormalities.
- BAI is a useful tool for discriminating the symptoms of anxiety from depression, so it avoids confusing the two.
- Its measures have been found valid and reliable for a variety of cultures and countries.

3.5 Procedure

The students were approached in their respective departments, centers, colleges and institutes and the inventory was administered by the researcher personally. Initially, a pilot investigation was made over a sample of fifty students of Bachelor of Education, at institute of Education and Research, University of Peshawar. The sample taken for pilot study is not included in the original study. It revealed a difficulty in understanding the terminologies of the BAI. As per the suggestion of the supervisor, the inventory was translated into the national language (Urdu) for easy understanding. A second pilot test over a sample of ten students showed significant improvement in understanding the theme of each option in the inventory.

3.6 Choice of Statistical Analyses

The analyses were done through the use of SPSS v.19. To describe the overall sample size selected by gender, departments and faculties, simple means and percentages were used. Based on the objectives of the study, finding the relationship between anxiety (X) and academic grades of university students (Y), the Pearson's Product Moment Correlation Coefficient is being a simple way (Swinscow, 1997), thus it was employed through the formula as follows (Rodgers and Nicewander, 1988).

$$r = \frac{\sum_{i=1}^n (X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^n (X_i - \bar{X})^2} \sqrt{\sum_{i=1}^n (Y_i - \bar{Y})^2}}$$

3.7 Ethical Consideration

The head/incharge of each academic institute was informed for permission of data collection where as the students were briefed before filling the inventory about the significance of the study under investigation and importance of reliable responses. For this purpose, one subject teachers at each department was contacted and request was made for briefing the students at their respective classrooms. Each item of the inventory was thoroughly discussed and the students responded on the spot according to their own will.

3.8 Non Respondents

A total of 87 students did not respond to the questions or left it incomplete, including 35 males and 52 females. The overall rate of non respondents was 11.4%. The inventory was administered in a period of three months for data collection.

CHAPTER 4

DATA AND DATA ANALYSES

4.1 Organization of Data

The data collected through the inventory was tabulated and analyzed in a number of steps. The details of the steps followed are given as under.

1. Sequencing the inventory on the basis of respondents.
2. Gender-wise arrangements
3. Calculating the anxiety levels of students
4. Calculating the academic grades of students
5. Calculating the averages and percentages of male and female students at a given department, centre and institute.
6. Calculating the average responses of students at a given faculty.
7. Calculating the grand average of all the students at the university.
8. Graphing the data.
9. Calculating the Correlation Coefficient of anxiety and academic grades of students.
10. Finding out the prevailing causes of anxiety at each department, centre and institute.
11. Presenting the data in the form of tables and charts.

4.2 Anxiety Prevalence and Academic Grades of Students

Data collected from students regarding their anxiety and academic grades was organized first on the basis of departments at each faculty. The responses of all male and female students were ordered in a single table for each department. The departments were then arranged in faculties and finally the grand average of all the students was taken and given in a single table. The correlation coefficient of anxiety and academic grades of students was determined for each department and faculty.

Each table of data was plotted in the form of a simple Bar Graph and analysis was given at the bottom, for each table and graph.

4.3 Correlates of Anxiety

The data about the various correlates of anxiety was tabulated in the intensity level shown by all the male and female students of the university.

Finally, the minimal and mild intensity was combined as low level and the moderate and severe intensity was combined as high level, for all of the students of the university.

The tables and graphs for each anxiety correlate are analyzed sequentially with description below.

Table 1. Anxiety Prevalence and Academic Grades of Department of Anthropology

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	7.69	30.76	46.14	15.38	0	7.69	46.14	46.14	0.45
Female	0	66.66	0	33.33	0	0	33.33	66.66	-0.09

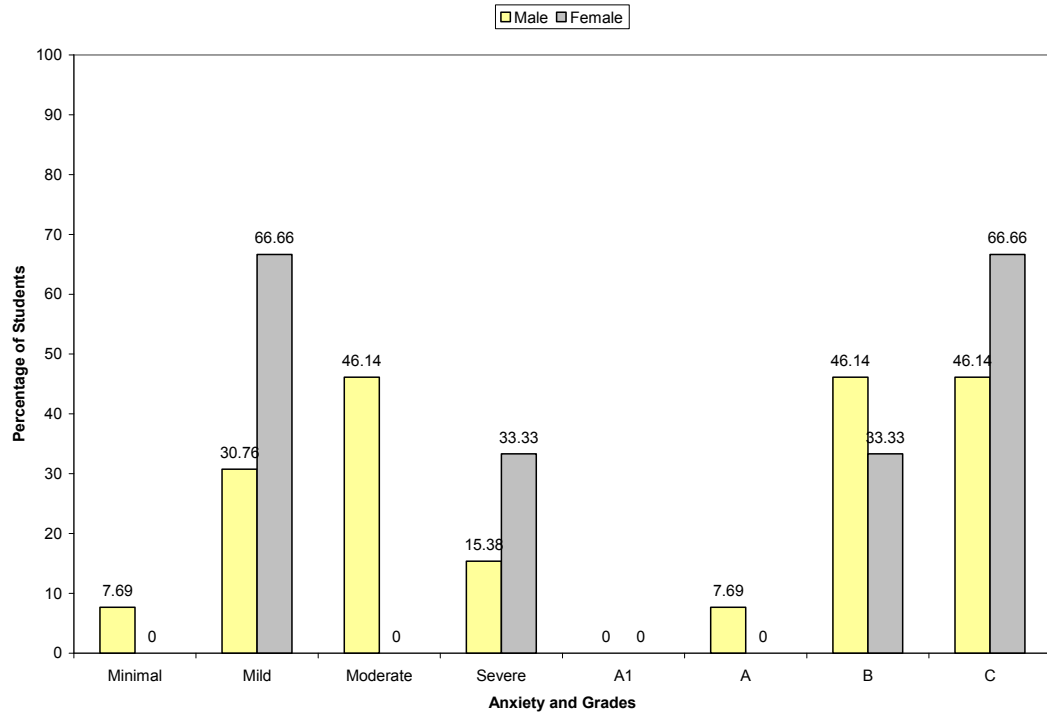


Fig 1. Anxiety Prevalence and Academic Achievements of Department of Anthropology

The Table 1 and Fig 1 shows that at the Department of Anthropology, the severity of anxiety prevails in female student where there are 33.33 percent cases in females and 15.38 percent cases of male students. However there is no moderate anxiety case in females while 46.14 cases in males have a moderate anxiety. There is no A1 grade recorded for both male and female students. The academic performance of males is better than those of females in terms of their grades in A, B and C levels.

An overall positive correlation of 0.45 was found between anxiety and academic grades of male students while a weak negative correlation of -0.09 was found for female students.

Table 2. Anxiety Prevalence and Academic Grades of Department of Archaeology

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	0	40	60	0	0	20	0	80	-0.49
Female	0	100	0	0	0	33.3	33.3	33.3	0.33

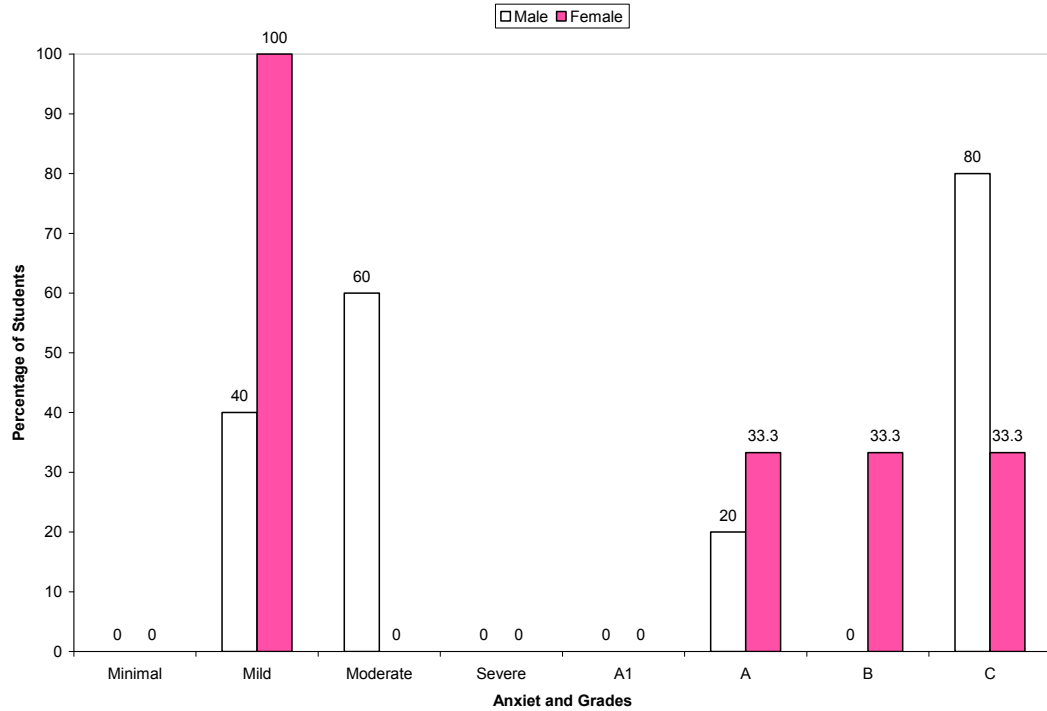


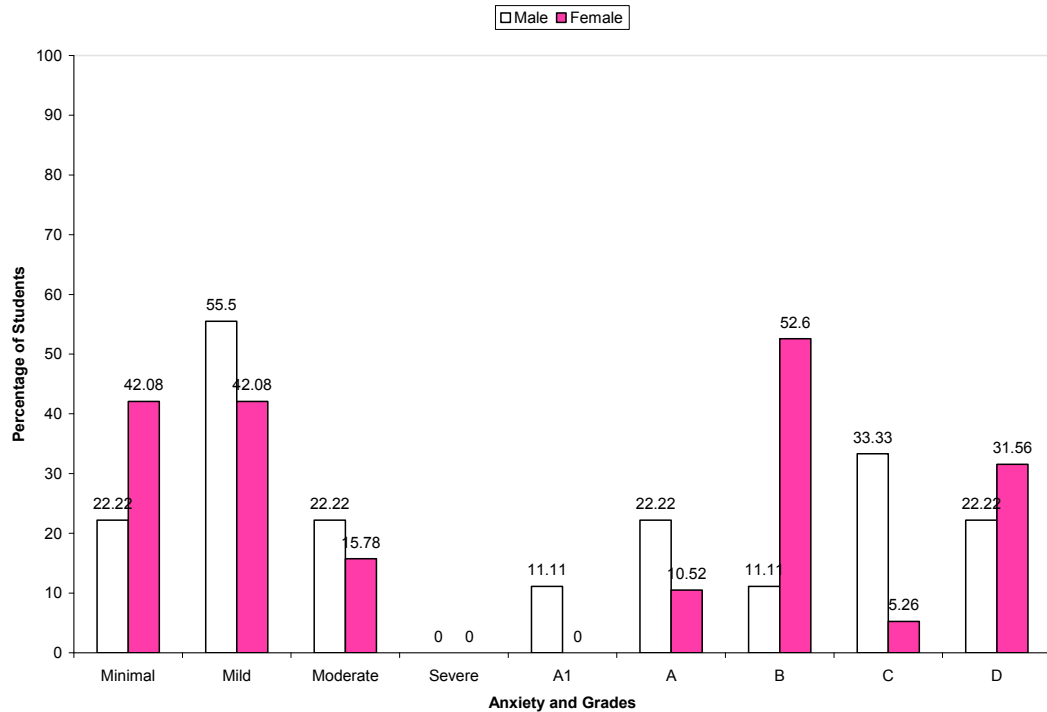
Fig 2. Anxiety Prevalence and Academic Achievements of Department of Archaeology

The Table 2 and Fig 2 above show that in the department of Archaeology, there is no severe level of anxiety among both male and female students. All of the female students have a mild level of anxiety while in males, 40 percent are of mild and 60 percent are of moderate anxiety. The academic grades of females range equally in A, B and C, while those of males are of 20 percent in grade A and 80 percent in grade C.

A significant correlation coefficient of -0.49 was found for male students while for female students it was found to be 0.33, between anxiety and academic grades.

Table 3. Anxiety prevalence and academic Grades of Department of English

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	22.22	55.5	22.22	0	11.11	22.22	11.11	33.33	22.22	-0.29
Female	42.08	42.08	15.78	0	0	10.52	52.6	5.26	31.56	-0.29

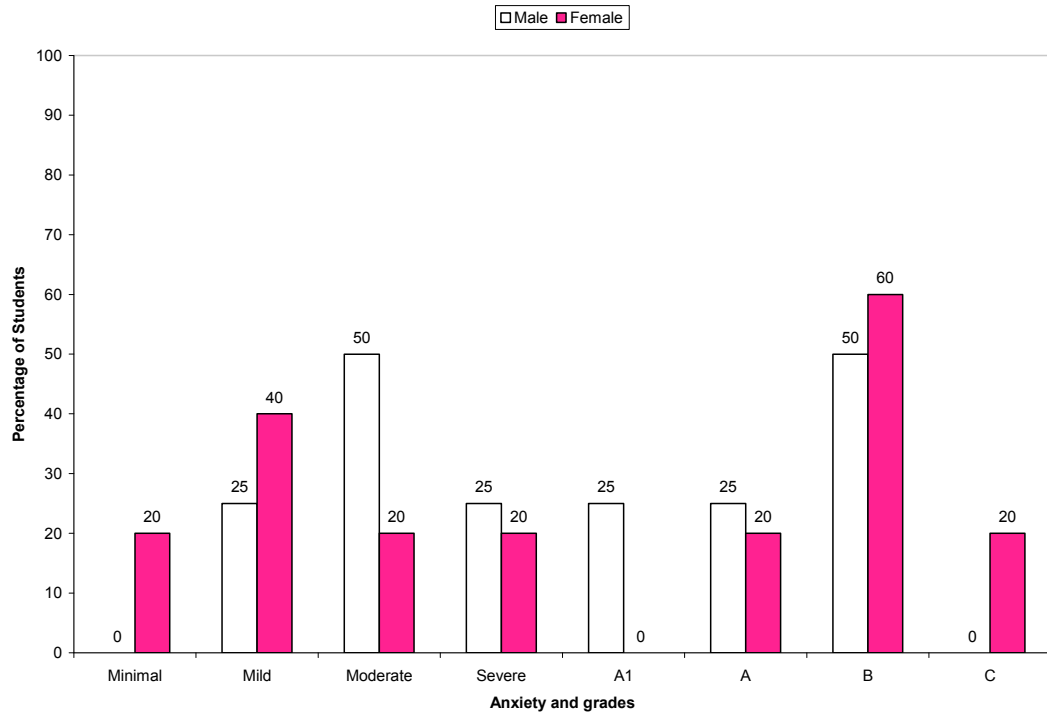
**Fig 3. Anxiety Prevalence and academic Grades of Department of English**

The data shown above in Table 3 and Fig 3 indicates that for the department of English, there is no case of severe anxiety among the students; however, 22.2 percent of males and 15.78 percent of females had a moderate anxiety. The academic grades of male range from A1 to D, with 33.3 percent in grade C while among the females, 52 percent are in grade C and 31.5 percent in grade D.

A similar negative correlation was found for both male and female students of the department of English with r value equal to -0.29.

Table 4. Anxiety prevalence and academic Grades of Department of History

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	0	25	50	25	25	25	50	0	0.5
Female	20	40	20	20	0	20	60	20	-0.13

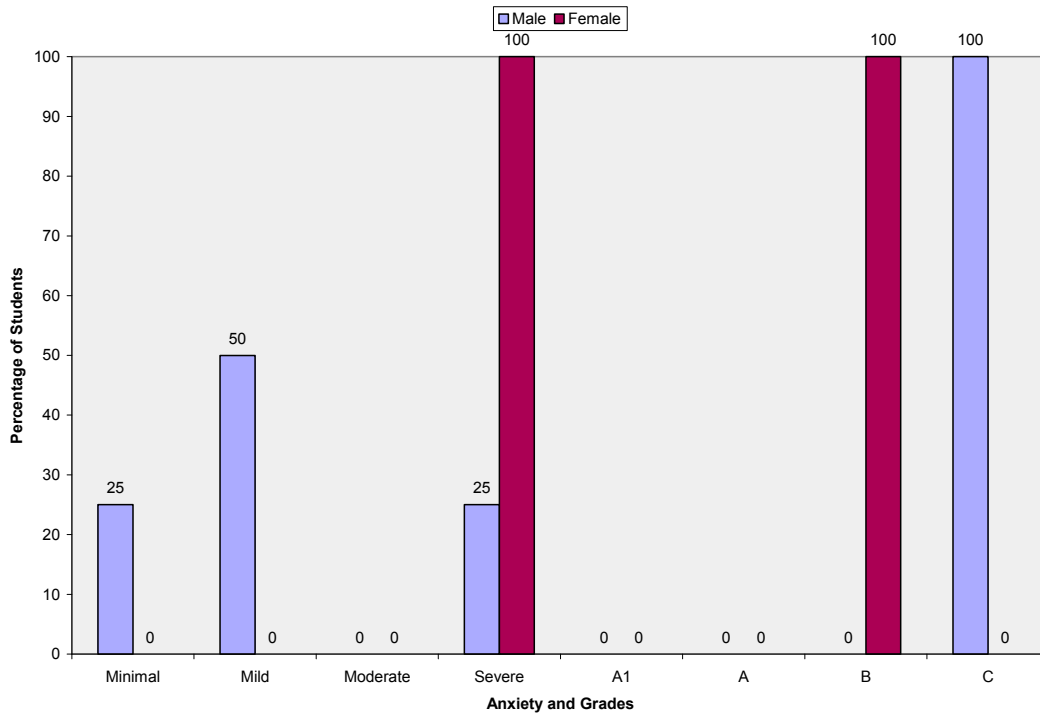
**Fig 4. Anxiety prevalence and academic Grades of Department of History**

The data shown in table 4 and Fig 4 for the department of History indicates that 25 percent of males have severe anxiety while 20 percent of females are of this category. With moderate anxiety, there are 50 percent males and 20 percent females. The males precede in academic grades with 25 percent A1, 25 percent A and 50 percent B. Among the females, the majority of cases, i.e. 60 percent fall under grade B and in A and B grades, there are 20 percent each.

A strong positive correlation between anxiety and academic grades of male students with $r=0.5$ was found while for females, a weak negative correlation with $r=-0.13$ was found.

Table 5. Anxiety prevalence and academic Grades of Department of Philosophy

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	25	50	0	25	0	0	0	100	0
Female	0	0	0	100	0	0	100	0	-0.33

**Fig 5. Anxiety prevalence and academic Grades of Department of Philosophy**

The Table 5 and Fig 5 given above shows that in the department of Philosophy, all of the females have severe anxiety while among the males, there are 25 percent severe, 50 percent mild and 25 percent minimal cases of anxiety. All of the male students are with grade C while all of the female are with grade B.

No relationship between anxiety and academic grades of male students was found, however, for female students, there was found an inverse relationship with correlation coefficient of -0.33.

Table 6. Anxiety prevalence and academic Grades of Department of Arabic

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	50	50	0	0	0	100	0	0	0.57
Female	0	33.3	0	66.6	33.3	66.6	0	0	-0.09

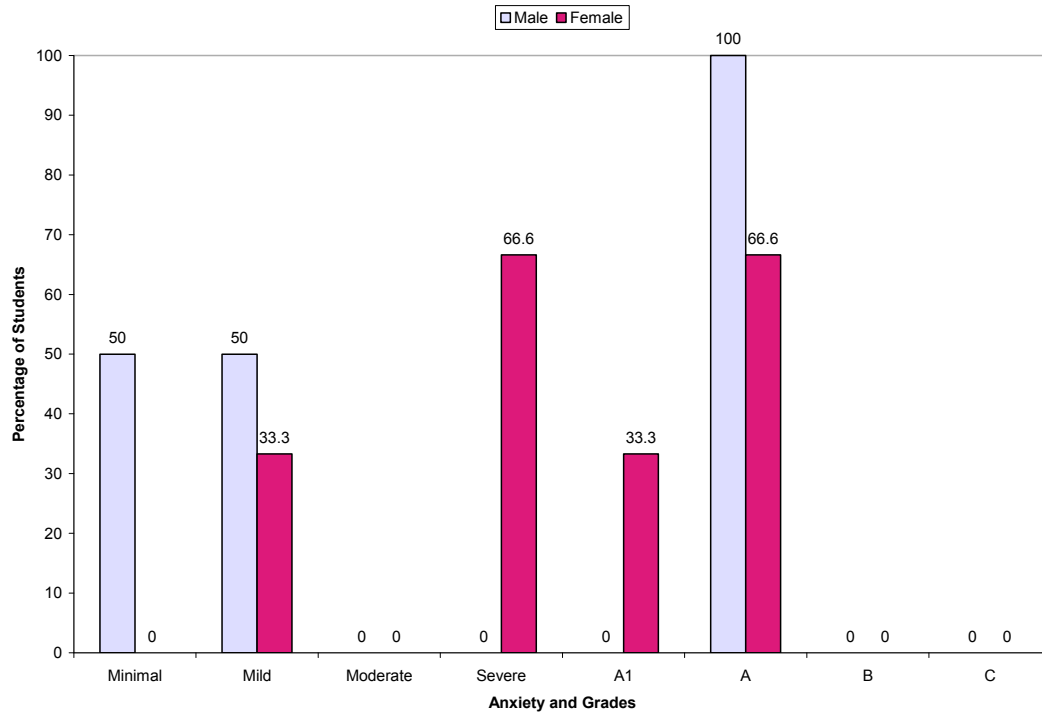
**Fig 6. Anxiety prevalence and academic Grades of Department of Arabic**

Table 6 and Fig 6 showing the students of the department of Arabic reveal that the anxiety of male students ranges in minimal and mild intensity with 50 percent cases each. Among the females, 33.3 percent are with moderate anxiety and 66.6 percent are with severe anxiety. All of the male students of Arabic fall under the academic grade A while the grades of female students are 33.3 percent in A and 66.6 percent in B.

There was found a stronger positive correlation between anxiety and academic grades of male students with $r=0.57$, however, for female students, a very negative correlation with $r=-0.09$ was recorded.

Table 7. Anxiety prevalence and academic Grades of Department of Islamiyat

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	33.33	66.66	0	0	0	66.66	0	33.33	0.63
Female	79.92	0	19.98	0	19.98	39.96	39.96	0	-0.04

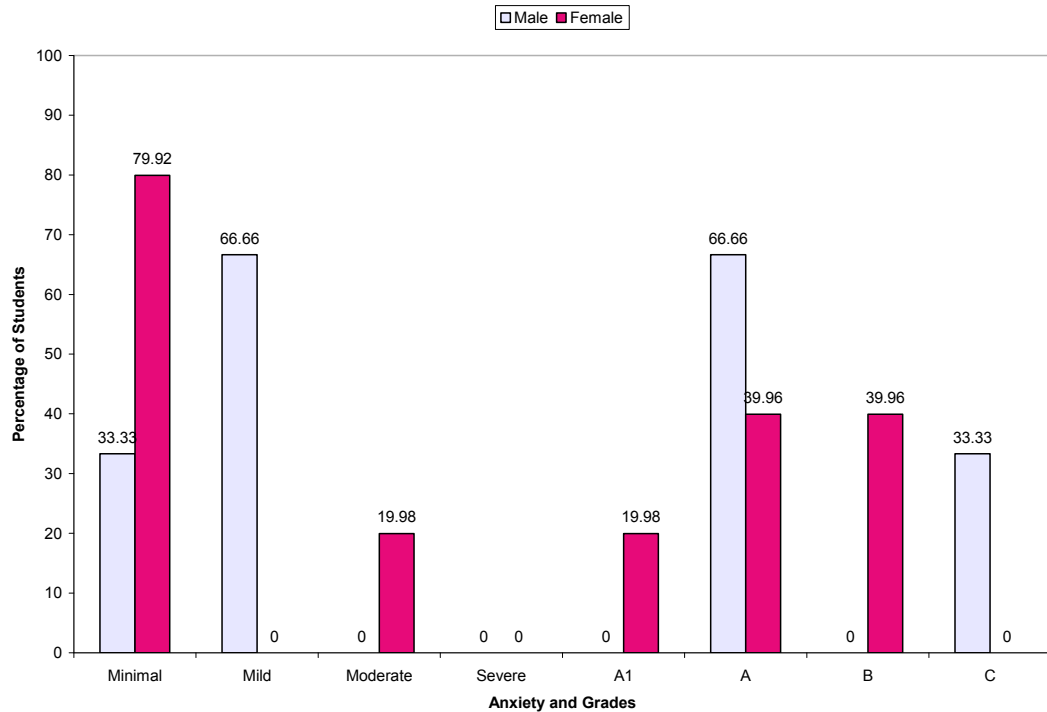
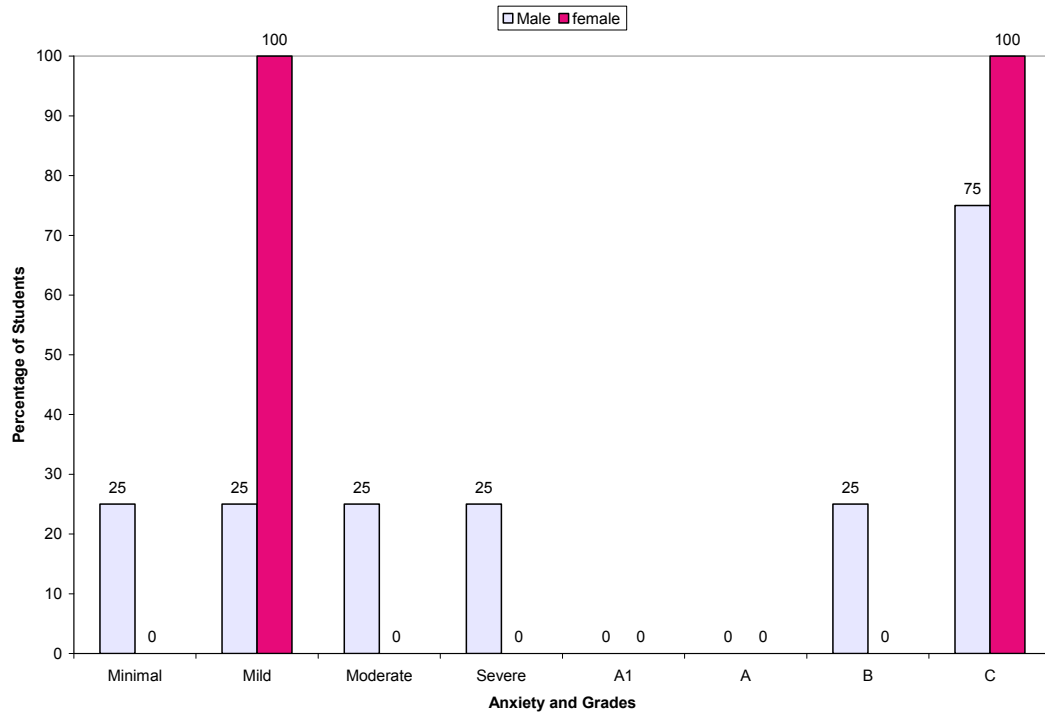
**Fig 7. Anxiety prevalence and academic Grades of Department of Islamiyat**

Table 7 and Fig 7 above for the department of Islamiyat show that among the male students there are 33.3 percent cases with minimal anxiety and 66.6 percent cases with mild anxiety. Among the females, there are about 20 percent cases with moderate anxiety and 80 percent cases with minimal anxiety. The academic grades of males were 66.6 percent in grade A and 33.3 percent in grade C. Among the females, there are 20 percent students in grade A1, about 40 percent in grade A and same in grade B.

Among the male students, anxiety prevalence and academic grades were found to be positively correlated, with calculated value of $r=0.63$, however, among females, a weak negative correlation of $r=-0.04$ was recorded.

Table 8. Anxiety prevalence and academic Grades of Department of Pashto

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	25	25	25	25	0	0	25	75	0
Female	0	100	0	0	0	0	0	100	-0.33

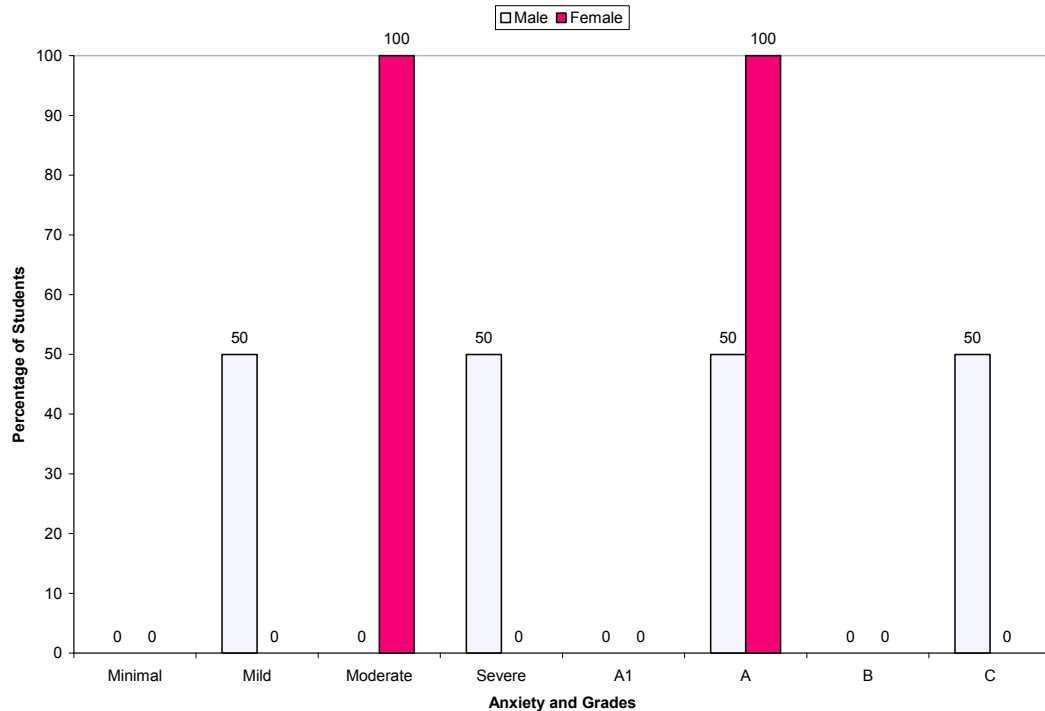
**Fig 8. Anxiety prevalence and academic Grades of Department of Pashto**

It is clear from the Table 8 and Fig 8 for the department of Pashto that anxiety among the male students is equally distributed in minimal, mild, moderate and severe levels with 25 percent each. However among the female students, there is only mild anxiety. The academic grades are distributed differently with 25 percent B and 75 percent C grades among males while all of the female students have academic grade C.

Among the male students, there was found no relationship between anxiety and academic grades, while among females, it was found that anxiety and academic grades are negatively correlated with r value equal to zero and -0.33, respectively.

Table 9. Anxiety prevalence and academic Grades of Department of Persian

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	0	50	0	50	0	50	0	50	1
Female	0	0	100	0	0	100	0	0	-0.33

**Fig 9. Anxiety prevalence and academic Grades of Department of Persian**

Among the respondent shown for the department of Persian, shown in Table 9 and Fig 9, the anxiety of male students is 50 percent with severe cases and 50 percent with moderate cases. Among the females, all have a moderate anxiety. The male students have 50 percent grade A and 50 percent grade C while all of the females have grade A.

Among the male students, there was found a perfect positive correlation between anxiety and academic grades, with $r=1$. However, among female students, there was recorded a negative correlation between anxiety and academic grades, with $r=-0.33$

Table 10. Anxiety prevalence and academic Grades of Department of Urdu

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	60	30	0	10	0	0	40	60	-0.79
Female	57	29	14	0	7	0	36	57	-0.82

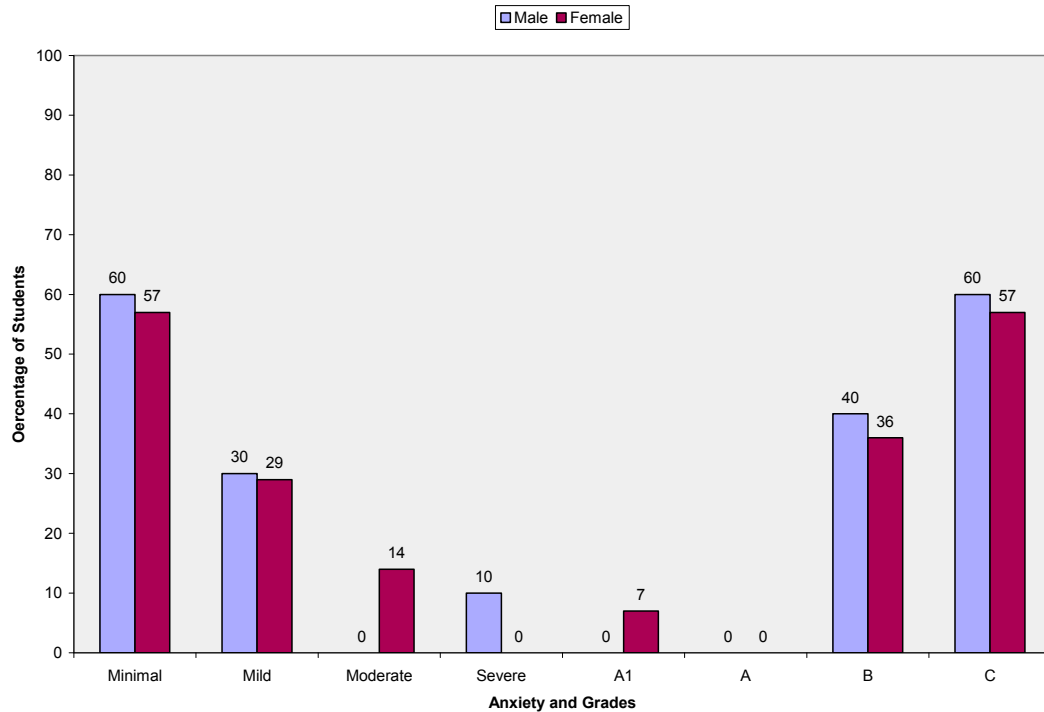
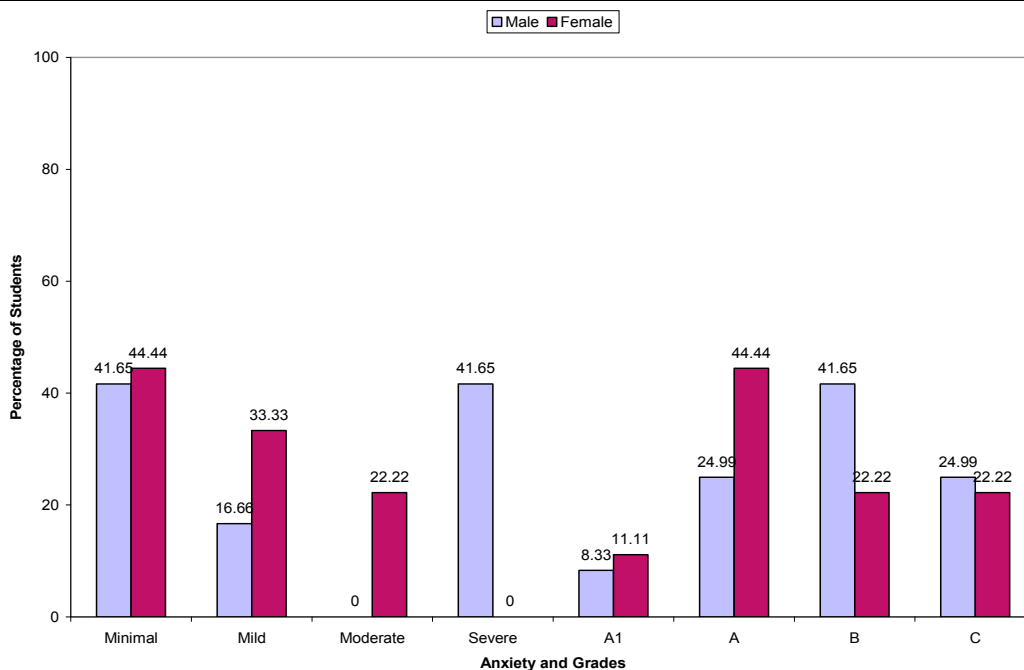
**Fig 10. Anxiety Prevalence and Academic Grades of Department of Urdu**

Table 10 and Fig 10 shown above indicates that for the department of Urdu, 10 percent of males have severe anxiety, 30 percent have mild and 60 percent have minimal anxiety. Among the female respondents, there is no case with severe anxiety, 14 percent moderate, 29 percent mild and 57 percent minimal anxiety. The academic grades of male respondents are 40 percent grade B and 60 percent grade C. Among females, 7 percent are with grade A1, 36 percent with grade B and 57 percent with grade C.

For both male and female students of the department of Urdu, there was found a high negative relationship between anxiety and academic grades, with correlation coefficient values of -0.79 and -0.82, respectively.

Table 11. Anxiety Prevalence and Academic Grades of Department of Botany

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	41.65	16.66	0	41.65	8.33	25	41.65	25	-0.83
Female	44.44	33.33	22.22	0	11.11	44.44	22.22	22.22	-0.03

**Fig 11. Anxiety Prevalence and Academic Grades of Department of Botany**

Shown in the Table 11 and Fig 11, the respondents for the department of Botany, among the male students, there are 41.6 percent cases with severe anxiety, 16.6 percent with mild and 42.6 percent with minimal anxieties. For female students, there is no case of severe anxiety, 22.2 percent moderate, 33.3 percent mild and 44.4 percent minimal anxiety. 8.3 percent males and 11.1 percent females are with A1 grades, 25 percent males and 44.4 percent females are with grade A, 41.6 percent males and 22.2 percent females are with grade B and 25 percent males and 22.2 percent females are with grade C.

There was found inverse relationship between anxiety and academic grades of both male and female students, however, the intensity of this relation was found stronger among the males with $r=-0.83$, than females, with $r=-0.03$.

Table 12. Anxiety Prevalence and Academic Grades of Department of Environmental Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	80	20	0	0	0	80	20	0	-0.20
Female	33.32	33.32	16.66	16.66	0	16.66	49.98	33.32	-0.89

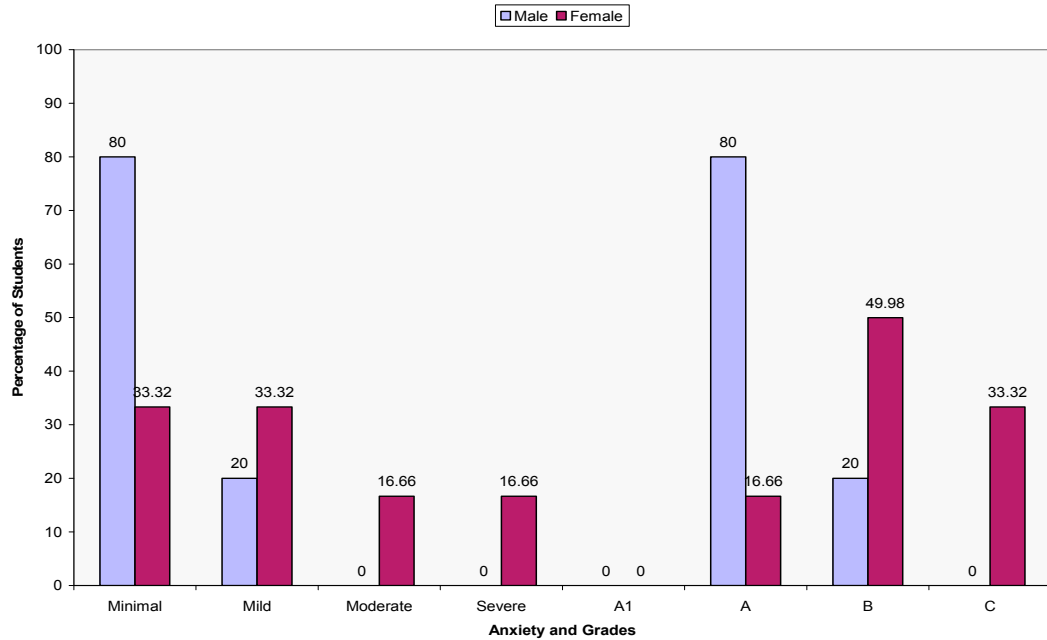


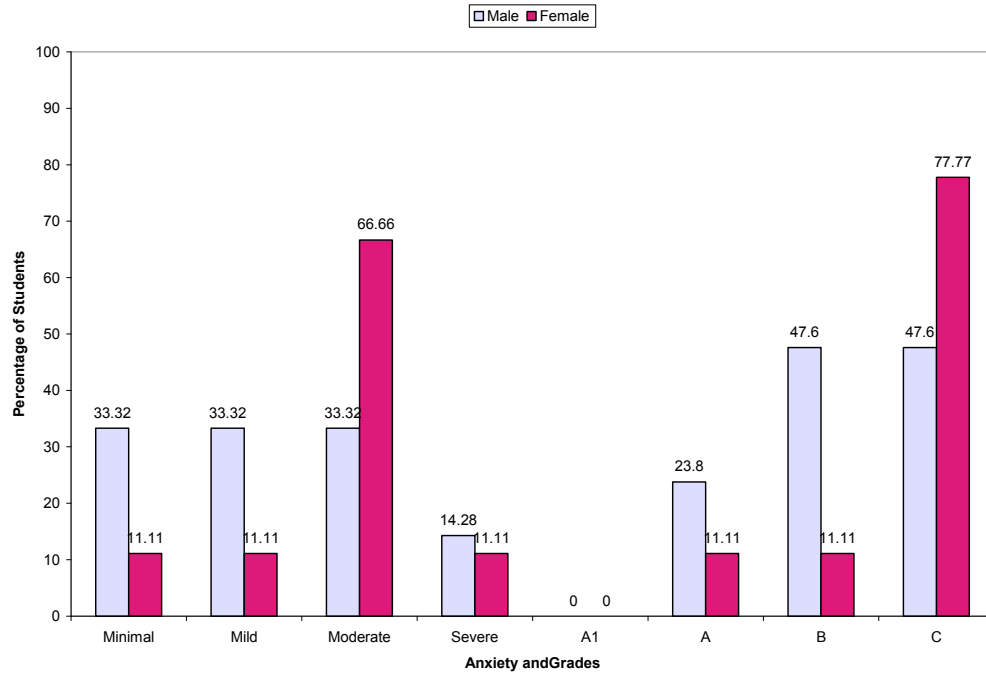
Fig 12. Anxiety Prevalence and Academic Grades of Department of Environmental Sciences

It is shown in the Table 12 and Fig 12 for the department of Environmental Sciences that there is no severe and moderate anxiety for males, while 80 percent are with minimal and 20 percent are with mild anxieties. Among the females, the severe and moderate anxieties are equally found with 16.6 percent cases each. Similarly, there are equal cases of mild and moderate anxieties for females, i.e. 33.32 percent each. Among the male respondents, there are 80 percent A grades and 20 percent B, while among the females, there are 16.6 percent A grades, 50 percent B and 33.3 percent C grades.

An inverse relation between anxiety and academic grades of both male and female students was recorded with correlation coefficient values of -0.20 and -0.89, respectively.

Table 13. Anxiety Prevalence and Academic Grades of Institute of Chemical Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	33.32	33.32	33.32	14.28	0	23.8	47.6	47.6	-0.52
Female	11.11	11.11	66.66	11.11	0	11.11	11.11	77.77	-0.26

**Fig 13. Anxiety Prevalence and Academic Grades of Institute of Chemical Sciences**

As shown in the Table 13 and Fig 13 for Institute of Chemical Sciences, among the male respondents, there are 14.28 percent cases of severe anxiety, and equal distribution of moderate, mild and minimal anxieties, i.e. 33.32 percent each. Among the female respondents, there are 11.1 percent cases with severe anxiety, 66.6 percent cases with moderate anxiety and an equal distribution of mild and moderate anxieties, i.e. 11.1 percent each. Among the male respondents, 23.8 percent are with grade A, and 47.6 percent grade B and C each. Among the females, 11.1 percent are with grades A and B each and 77.7 percent are with grades C.

A negative correlation between anxiety and academic grades of students in both cases was found with correlation coefficient values of -0.52 (stronger) and -0.256 (weaker), respectively.

Table 14. Anxiety Prevalence and Academic Grades of Department of Geography

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	46.62	46.62	6.66	0	0	26.64	26.64	39.96	-0.71
Female	75	12.5	12.5	0	0	25	75	0	-0.34

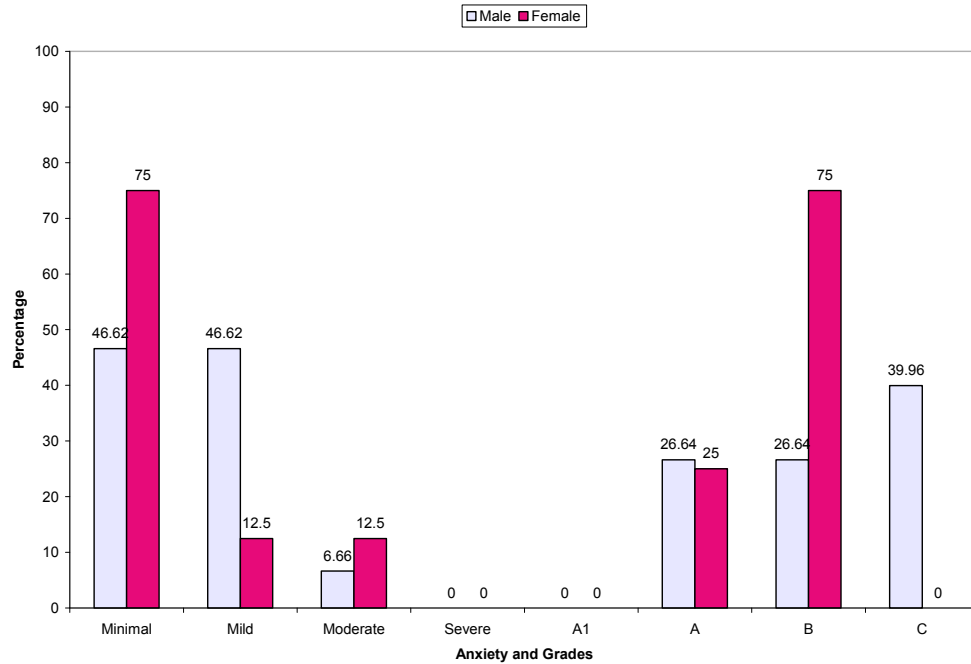


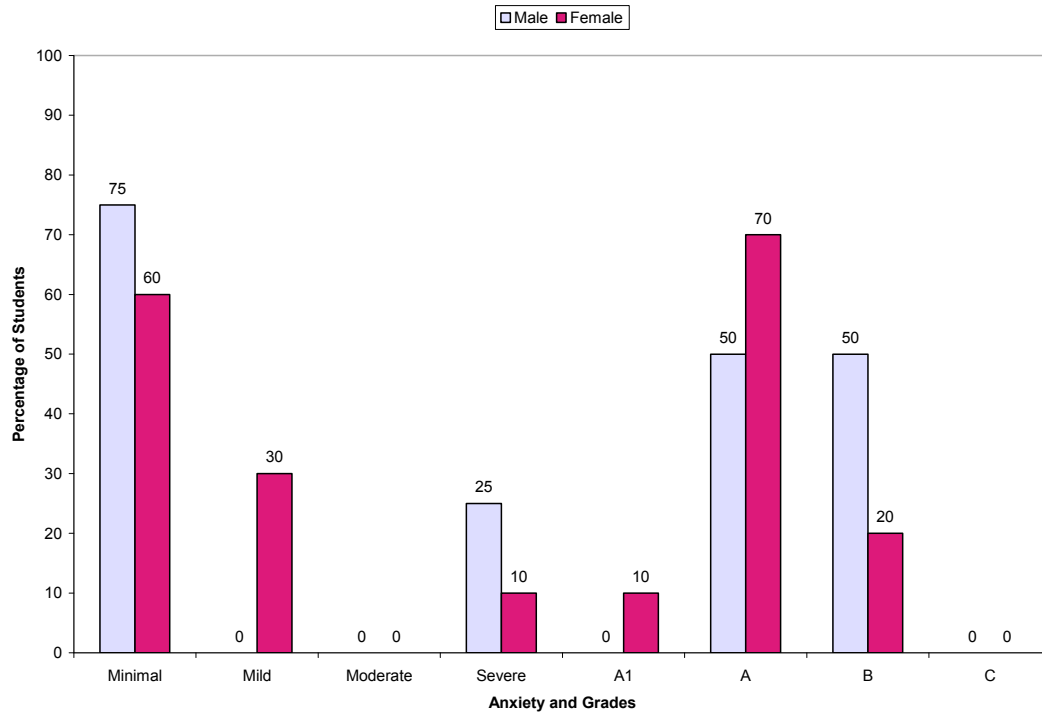
Fig 14. Anxiety Prevalence and Academic Grades of Department of Geography

The Table 14 and Fig 14 indicate that for the department of Geography, there is no severe case of anxiety. There are 6.6 percent and 12.5 percent cases with moderate anxiety among male and female respondents respectively. Among the males, the mild and minimal levels of anxiety are equally distributed with 46.6 percent each. Among the females, there are 75 percent cases with minimal and 12.5 percent cases with mild anxieties. The academic grades A and B among males are with equal percentage of 26.6 while 40 percent of males are with grade C. Among the females, there are 25 percent A grades and 75 percent B.

A very strong inverse relation between anxiety and academic grades of male students with $r=-0.71$ was recorded, however, a low intensity of this relation was found among female students, with $r=-0.35$.

Table 15. Anxiety Prevalence and Academic Grades of Department of Zoology

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	75	0	0	25	0	50	50	0	-0.81
Female	60	30	0	10	10	70	20	0	0.08

**Fig 15. Anxiety Prevalence and Academic Grades of Department of Zoology**

The Table 15 and Fig 15 for the department of Zoology indicates that the severe anxiety is found among male respondents with 25 percent prevalence while among the female respondents there is 10 percent severe anxiety. The remaining 75 percent males have a minimal anxiety, while among the females, 30 percent are with moderate and 60 percent are with minimal anxiety. The academic grades of males are equal in A and B categories with 50 percent each while among the females, 10 percent are with grade A1, 70 percent are with grade A and 20 percent are with grade B.

The anxiety of male students has a very strong inverse relation with their academic grades, while there is a very low positive relation between anxiety and academic grades of female students, with r values -0.81 and 0.08, respectively.

Table 16. Anxiety Prevalence and Academic Grades of Institute of Management Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	10	20	20	50	20	20	20	40	0.96
Female	0	0	100	0	0	100	0	0	-0.33

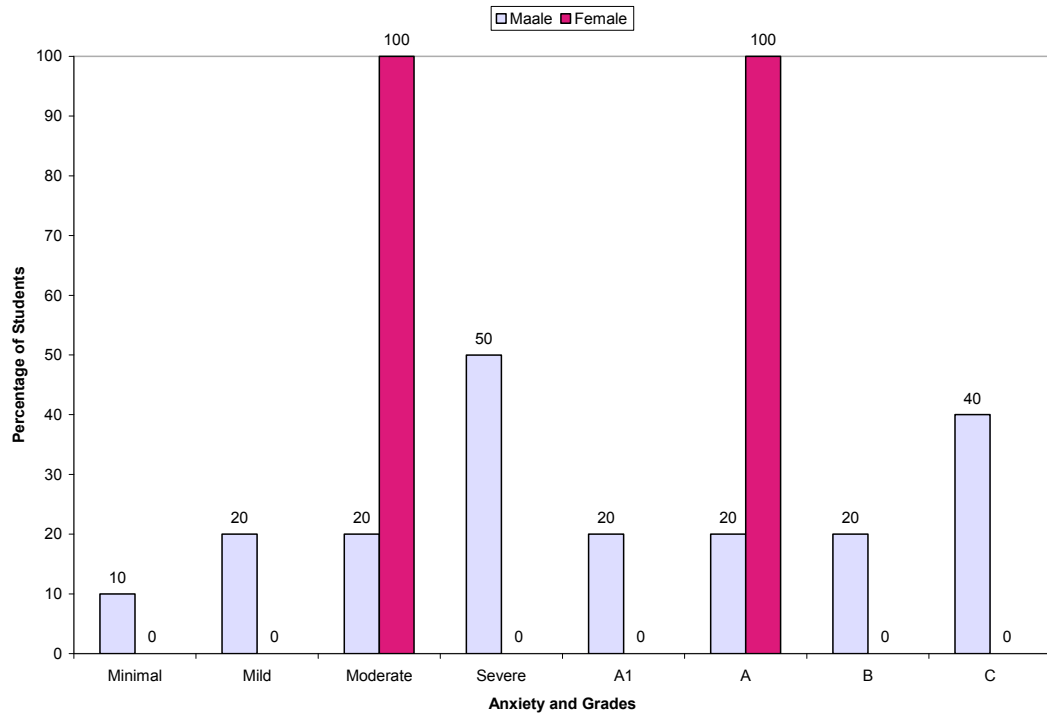


Fig 16. Anxiety Prevalence and Academic Grades of Institute of Management Sciences

The Table 16 and Fig 16 showing respondents for the Institute of Management Sciences indicates that all of the female students have a moderate level of anxiety, while among the male students, 50 percent have severe anxiety, 20 percent have moderate, 20 percent have mild and 10 percent have minimal anxiety. The academic grades of all of the female students are A and those of male students are A1, A, B and C with percentages 20, 20, 20 and 40 respectively.

A nearly perfect positive correlation between anxiety and academic grades of male students was recorded, however, among the female students, this relationship was found significantly inverse, with $r=0.96$ and $r=-0.33$, respectively.

Table 17. Anxiety Prevalence and Academic Grades of Department of Journalism and Mass Communication

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	40	40	15	5	0	20	30	25	25	-0.71
Female	16.66	49.98	16.66	16.66	0	16.66	66.64	16.66	0	-0.19

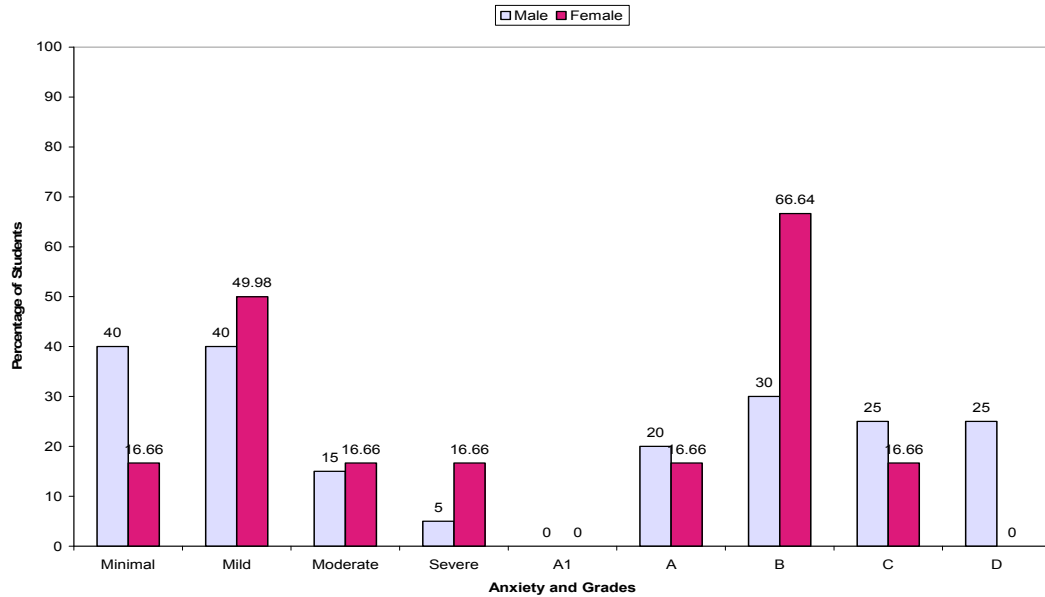


Fig 17. Anxiety Prevalence and Academic Grades of Department of Journalism and Mass Communication

Table 17 and Fig 17 for the respondents of Journalism and Mass Communication reveals that among the males, the minimal and mild anxieties are with an equal percentage of 40 each while 15 percent are with moderate and 5 percent are with severe anxiety. Among the female respondents, the severe, moderate and minimal anxieties are with an equal percentage of 16.6 each while 50 percent have mild anxiety. The academic grades of male respondents are 20 percent A and 30 percent B, while students with C and D grades are with an equal percentage of 25 each. Among the females, A and C grades are 16.6 percent each while 66.6 percent have B grades.

Among both the male and female students, there was found an inverse relation between anxiety and academic grades, where male students were found with more intensity, with r values -0.71 and -0.19, respectively.

Table 18. Anxiety Prevalence and Academic Grades of Department of Library and Information Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	4.76	42.84	38.08	14.28	4.76	14.28	47.6	33.32	0.40
Female	0	50	0	50	0	50	50	0	0

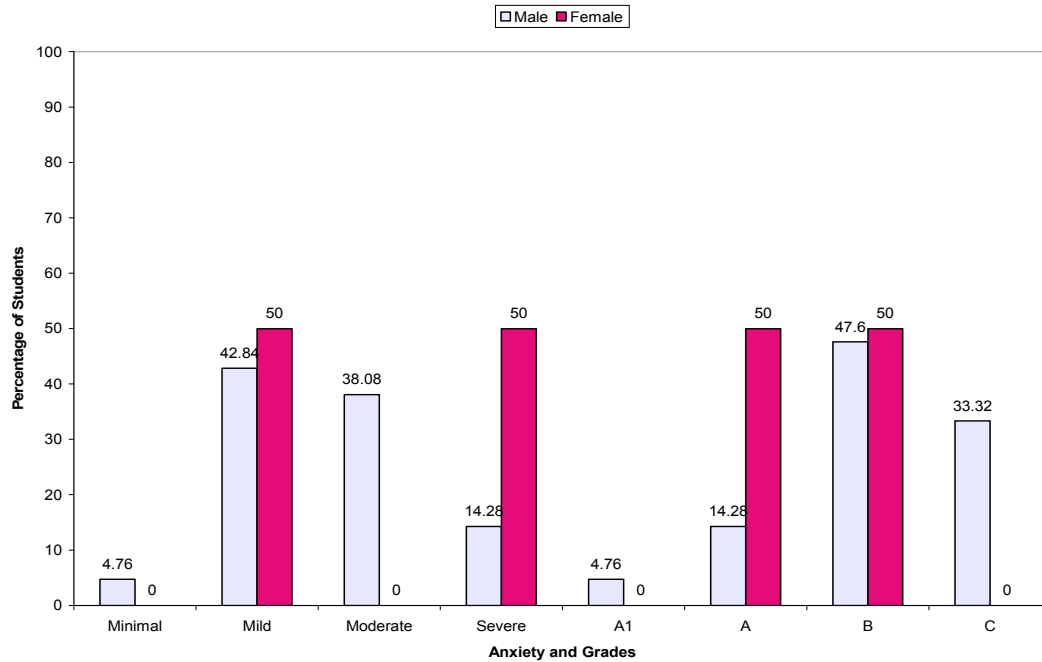


Fig 18. Anxiety Prevalence and Academic Grades of Department of Library and Information Sciences

The data shown in Table 18 and Fig 18 for the Department of Library and Information Sciences indicates that among the female respondents, the severe and mild anxieties are prevailing with an equal percentage of 50 each. Among the male students 14.2 percent are with severe, 38 percent are with moderate, 42.8 are with mild and 4.7 percent are with minimal anxiety. The academic grades of females are A and B with a percentage of 50 each, while those of males are A1, A, B and C with 4.7, 14.2, 47.6 and 33.3 percent respectively.

A positive correlation with $r=0.4$ between anxiety and academic grades of male students was recorded, however, among the female students, there was found no relationship between anxiety and academic grades.

Table 19. Anxiety Prevalence and Academic Grades of Quaid-e-Azam College of Commerce

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	30.3	33.33	18.18	18.18	9.09	42.42	21.21	24.24	0.27
Female	0	100	0	0	100	0	0	0	-0.33

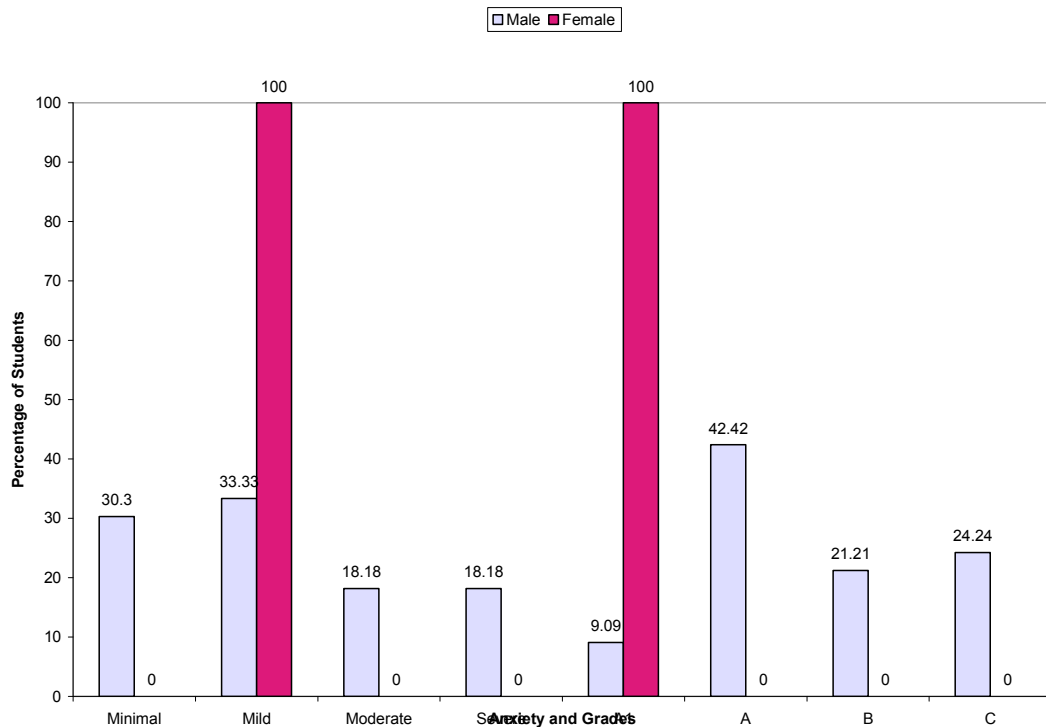


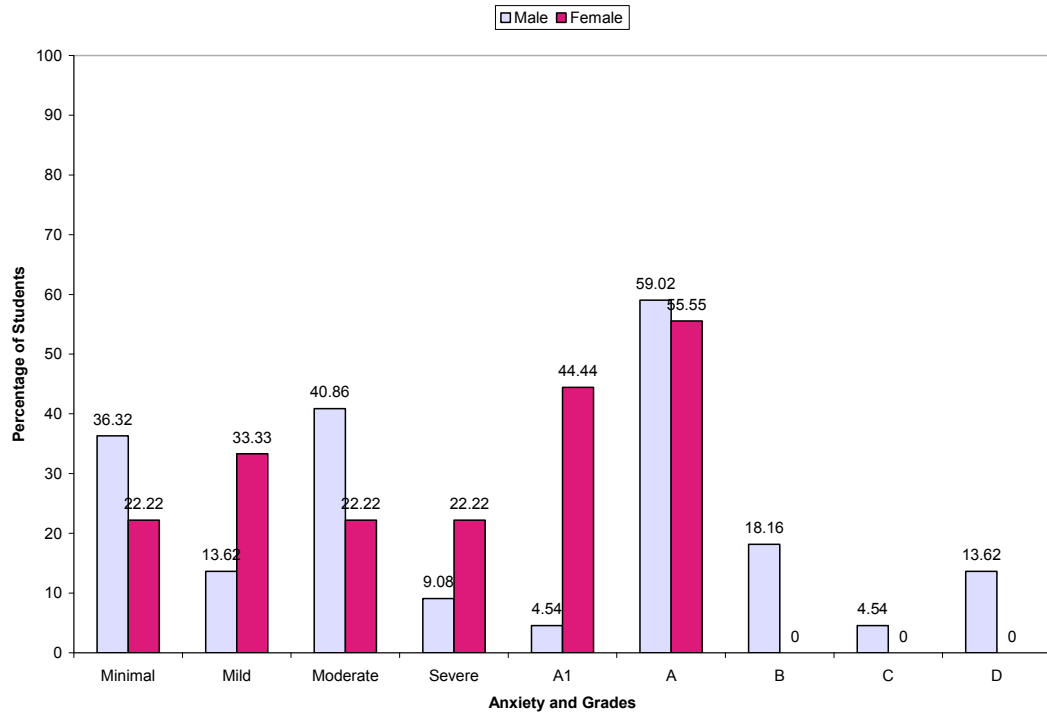
Fig 19. Anxiety Prevalence and Academic Grades of Quaid-e-Azam College of Commerce

The data indicated for the respondents of Quaid-e-Azam College of Commerce in Table 19 and Fig 19 shows that the female students are all with a mild anxiety and A1 grades, while among the male students there are 18 percent severe, 18 percent Moderate, 33.3 percent mild and 30 percent minimal anxieties. Their academic grades are 9 percent A1, 42 percent A, 21 percent B and 24 percent C.

A weak positive relationship between anxiety and academic grades of male students was recorded while among females, there was found a negative relationship between anxiety and academic grades. The r values are 0.27 and -0.33, respectively.

Table 20. Anxiety Prevalence and Academic Grades of Department of Economics

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	36.32	13.62	40.86	9.08	4.54	59.02	18.16	4.54	13.62	-0.32
Female	22.22	33.33	22.22	22.22	44.44	55.55	0	0	0	0.69

**Fig 20. Anxiety Prevalence and Academic Grades of Department of Economics**

The Table 20 and Fig 20 for the respondents of The Department of Economics show that among the male students 9 percent are with severe anxiety, 40.8 percent are with moderate, 13.6 percent are with mild and 36 percent are with minimal anxieties. Their academic grades are 4.5 percent A1, 59 percent A, 18 percent B, 4.5 percent C and 13.6 percent D. Among the female students the severe, moderate and minimal anxieties are 22.2 percent each and 33.3 percent are with mild anxiety. Their academic grades are 44.4 percent A1 and 55.5 percent A.

Among the male students, there was found an inverse relationship between anxiety and academic grades, however, among the female students, this relationship was found to be positive, with $r=-0.32$ and $r=0.69$, respectively.

Table 21. Anxiety Prevalence and Academic Grades of Institute of Education and Research

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	30	20	10	40	0	0	80	20	-0.61
Female	9.3	36.3	36.3	18.1	0	27.27	72.72	0	0.81

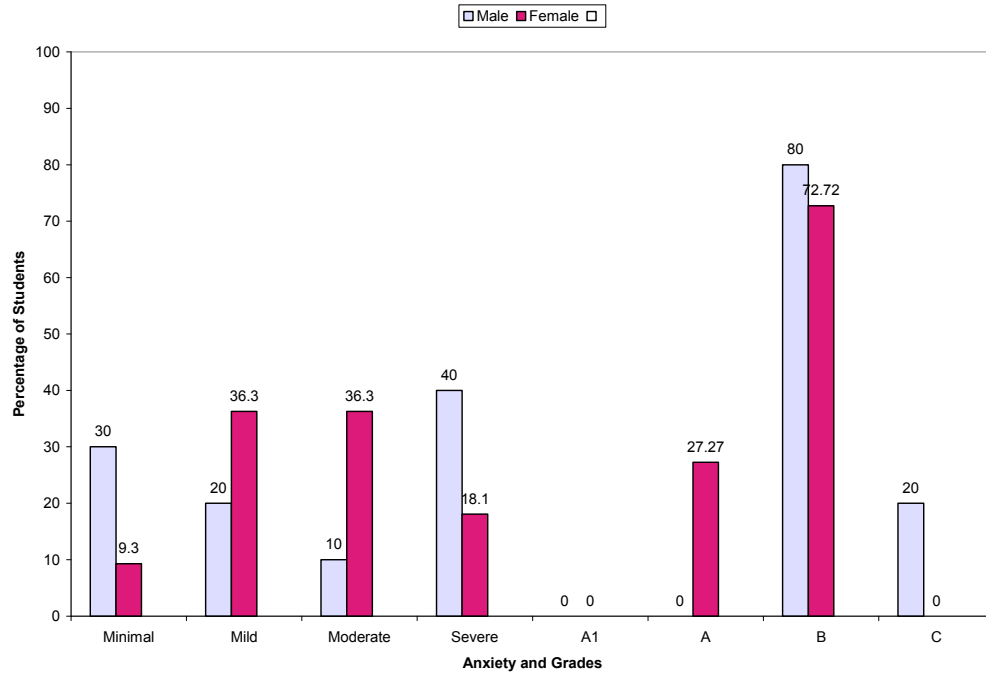


Fig 21. Anxiety Prevalence and Academic Grades of Institute of Education and Research

Table 21 and Fig 21 for the respondents of Institute of Education and Research M.Ed students indicate that the anxiety of male students in severe range is 40 percent while among females it is 18 percent. 10 percent males and 36 percent females are with moderate anxiety, 20 percent males and 36 percent females are with mild anxiety and 30 percent males and 9 percent females are with minimal anxiety. The academic grades of males are distributed as A, B and C with percentages 80 and 20 respectively. Similarly, 27 percent females are with grade A and 72.7 percent are with grade B.

It was found that the anxiety of male students was negatively correlated with their academic grades, however, among the female students, this relation was found positive with r value equal to -0.61 and 0.81, respectively.

Table 22. Anxiety Prevalence and Academic Grades of Department of Social Work

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	50	12.5	0	37.5	0	0	12.5	75	12.5	0.25
Female	0	0	25	75	0	0	25	50	25	0.98

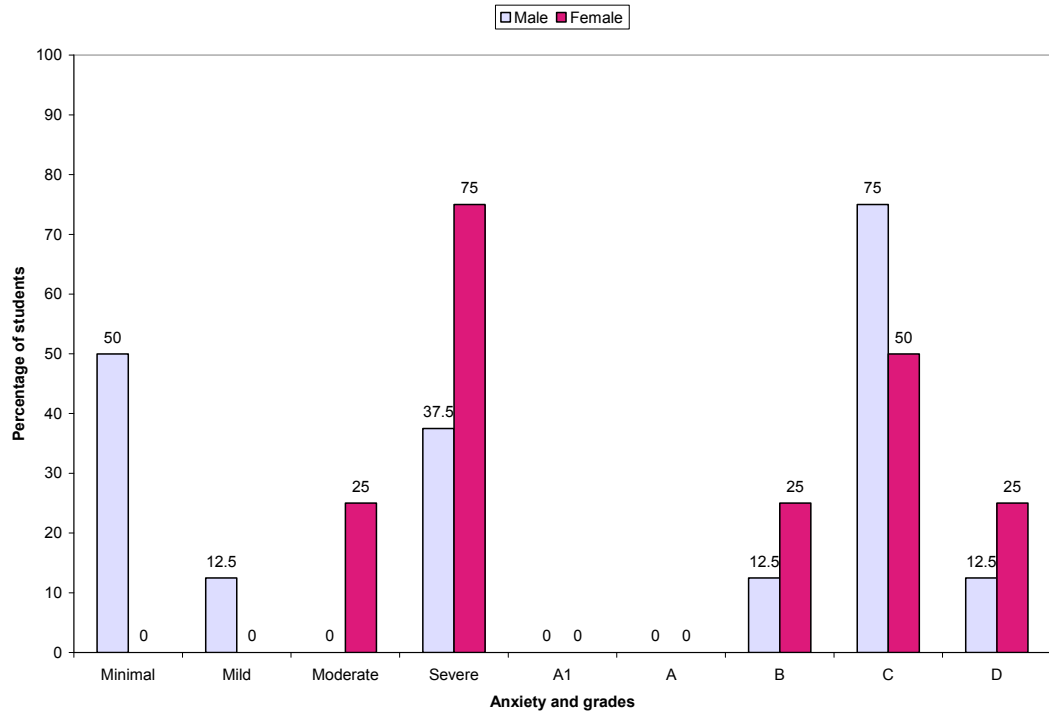


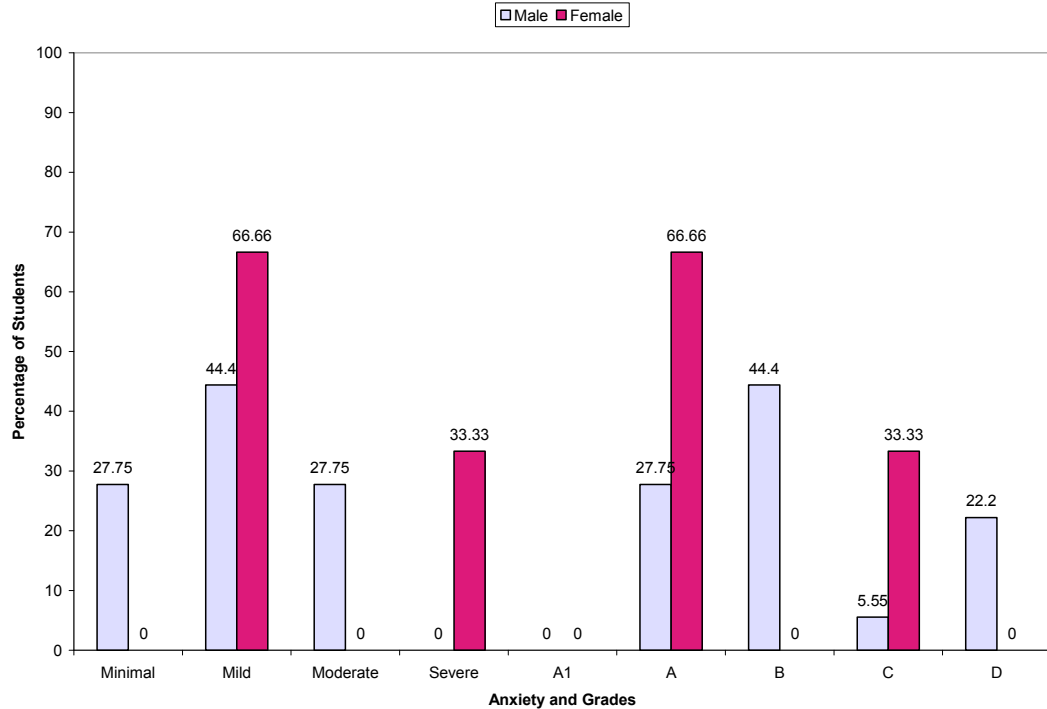
Fig 22. Anxiety Prevalence and Academic Grades of Department of Social Work

The Table 22 and Fig 22 indicating data for the respondents of the Department of Social Work reveal that among the male students, 50 percent have minimal, 12.5 percent have mild and 37.5 percent have severe anxiety. Among the females, 75 percent are with severe anxiety and 25 percent are with moderate anxiety. The academic grades of male students are 75 percent C, and 12.5 percent B and D each. Among the females, 50 percent are having grades C and 25 percent are with grade B and D each.

For both the male and female students, there was found a positive relationship between anxiety and academic grades, where the intensity of this correlation was found stronger among females.

Table 23. Anxiety Prevalence and Academic Grades of Department of Sociology

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	27.75	44.4	27.75	0	0	27.75	44.4	5.55	22.2	0.46
Female	0	66.66	0	33.33	0	66.66	0	33.33	0	1

**Fig 23. Anxiety Prevalence and Academic Grades of Department of Sociology**

The Table 23 and Fig 23 shown above reveal the anxiety levels of male students of the Department of Sociology with 44.4 percent mild and 27.7 percent moderate and minimal each. The female respondents of this department are with 33.3 percent severe and 66.6 percent mild anxiety. The academic grades of male students prevail with 27.7 percent A, 44.4 percent B, 55.5 percent C and 22.2 percent D. The grades of females are 66.6 percent A and 33.3 percent C.

For both the male and female students, there was found a positive relationship between anxiety and academic grades, where the intensity of this correlation was found stronger among females.

Table 24. Anxiety Prevalence and Academic Grades of Department of Gender Studies

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	0	16.66	16.66	66.64	0	0	0	100	0.96
Female	50	0	0	50	0	0	0	100	0.57

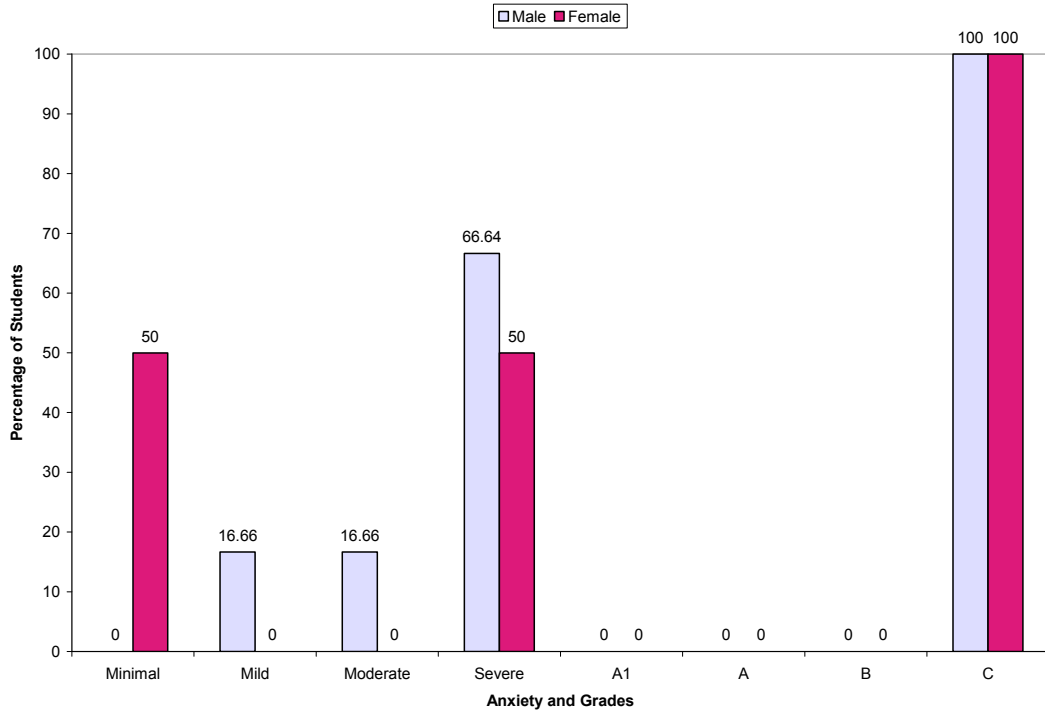


Fig 24. Anxiety Prevalence and Academic Grades of Department of Gender Studies

The respondents of the department of Gender Studies shown in Table 24 and Fig 24 indicate that all of the male and female students are with academic grade C. the anxieties of females are 50 percent severe and 50 percent minimal. Among the males, 66.6 percent are with severe anxiety and the moderate and mild anxieties are distributed equally with a percentage of 16.6 each.

For both the male and female students, there was found a positive relationship between anxiety and academic grades, where the intensity of this correlation was found stronger among males.

Table 25. Anxiety Prevalence and Academic Grades of Department of International Relations

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	58.8	35.28	5.88	0	0	5.88	35.28	17.64	35.28	-0.82
Female	18.18	63.63	9.09	9.09	45.45	18.18	27.27	0	9.09	-0.02

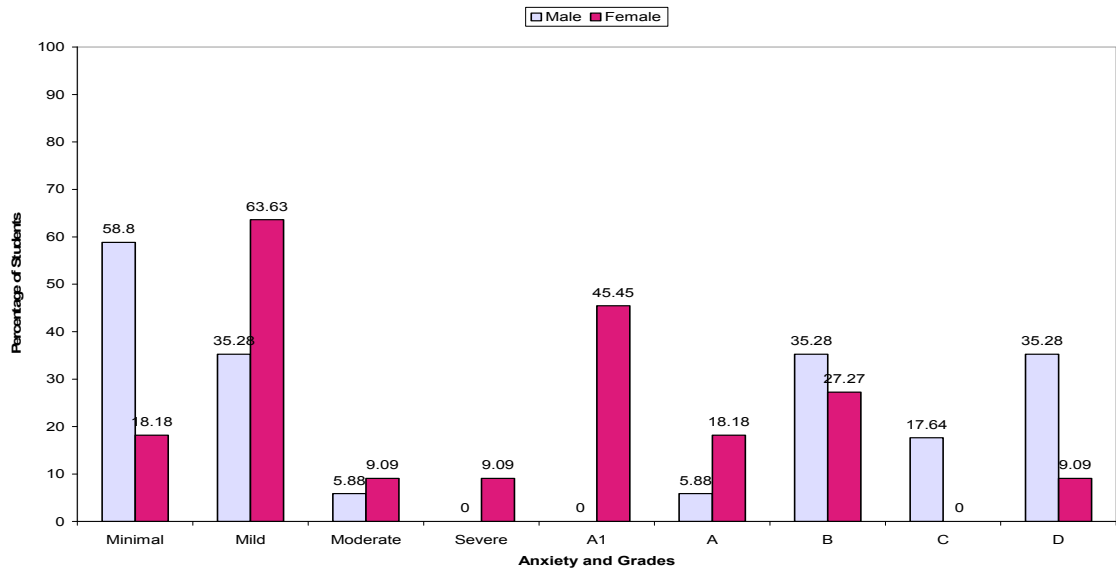


Fig 25. Anxiety Prevalence and Academic Grades of Department of International Relations

As shown in Table 25 and Fig 25, among the male respondents from the Department of International Relations, 5.8 percent are with moderate anxiety, 35.2 percent are with mild and 58.8 percent are with minimal anxiety. Among the female respondents, the severe and moderate anxieties are equally found with percentages of 9 each, while 63.6 percent are with mild and 18 percent are with minimal anxieties. The academic grades of male students are 5.8 percent A, 35.2 percent B, 17.6 percent C and 35.2 percent D. among the females, 45.4 percent are with A1 grades, 18 percent are with A grades, 27.2 percent are with B grades and 9 percent are with D grades.

For both the male and female students, there was found an inverse relationship between anxiety and academic grades, where the intensity of this correlation was found stronger among males.

Table 26. Anxiety Prevalence and Academic Grades of Department of Political Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	23.04	42.24	26.88	7.68	3.84	23.04	50	19.2	3.84	0.18
Female	37.5	25	37.5	0	0	0	12.5	12.5	75	-0.40

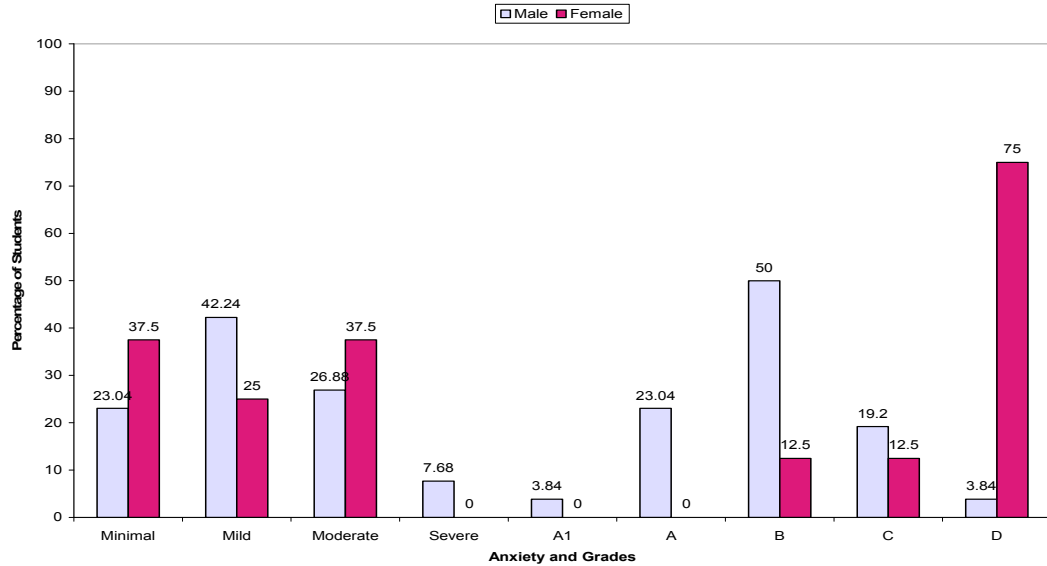


Fig 26. Anxiety Prevalence and Academic Grades of Department of Political Sciences

Comparative analysis of male and female respondents of the Department of Political Sciences shown in Table 26 with Fig 26 indicates that among the males, 7.6 percent are having severe anxiety, 26.8 percent are with moderate, 42 percent are with mild and 23 percent are with minimal anxieties. Among the females, there is no case of severe anxiety; however, the moderate and minimal anxieties are 37.5 percent each and 25 percent cases are with mild anxiety. The academic grades of males are A1, A, B, C and D with percentages 3.8, 23, 50, 19 and 3.8, respectively. The majority of females are with grade D, i.e. 75 percent while the B and C grades are equally distributed among them with a percentage of 12.5, each.

The male students were found with a very weak positive relationship between anxiety and academic grades, while the female students were found with a significant negative correlation. The r values are being 0.18 and -0.4, respectively.

Table 27. Anxiety Prevalence and Academic Grades of Department of Psychology

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	0	50	25	25	25	25	50	0	0
Female	40.86	31.78	13.62	13.62	9.08	27.24	18.16	45.4	-0.61

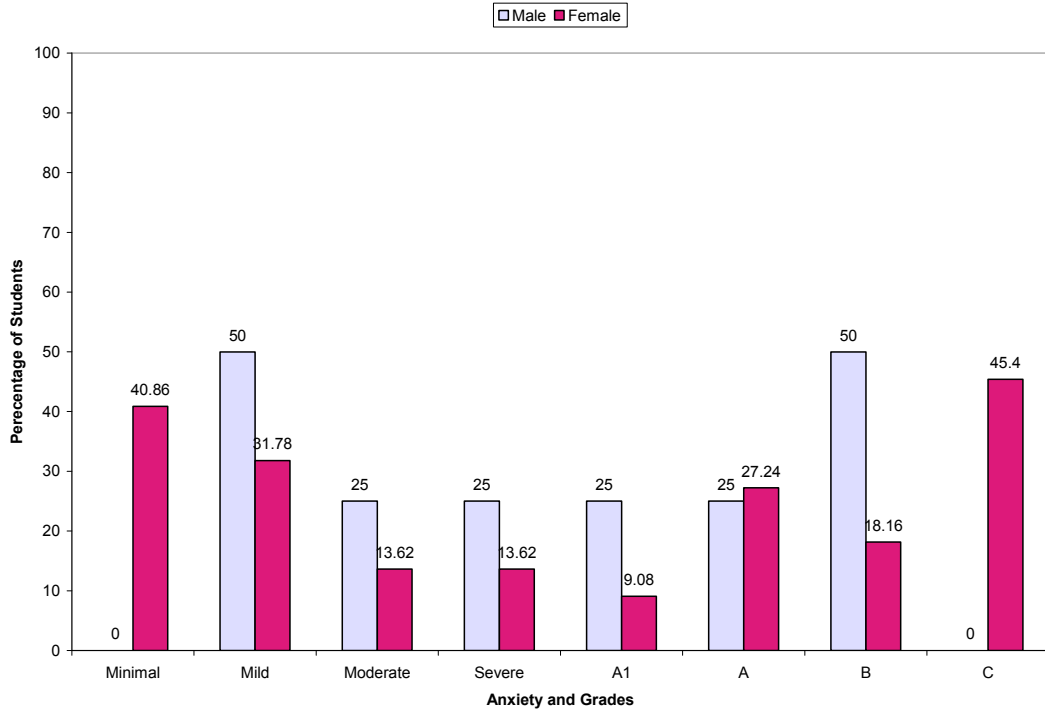


Fig 27. Anxiety Prevalence and Academic Grades of Department of Psychology

The Table 27 and Fig 27 for the department of Psychology shows that among the male respondents, 50 percent are with mild anxiety, 25 percent with moderate and 25 percent with severe anxiety. Among the females, the severe and moderate anxieties prevail with 13.6 percent each, while mild anxiety is 31.7 percent and minimal anxiety is 40.8 percent. Grades of male respondents are A1, A and B with percentages of 25, 25 and 50 respectively. Females are with grades A1, A, B and C with percentages of 9, 27, 18 and 45.4.

There was found no relationship between anxiety and academic grades of male students with $r=0$, however females were found with a significant negative correlation with $r=-0.61$.

Table 28. Anxiety Prevalence and Academic Grades of Department of Computer Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	34.72	21.7	17.36	26.04	13.02	43.4	30.38	13.02	-0.70
Female	42.84	14.28	42.84	0	42.84	57.12	0	0	0.08

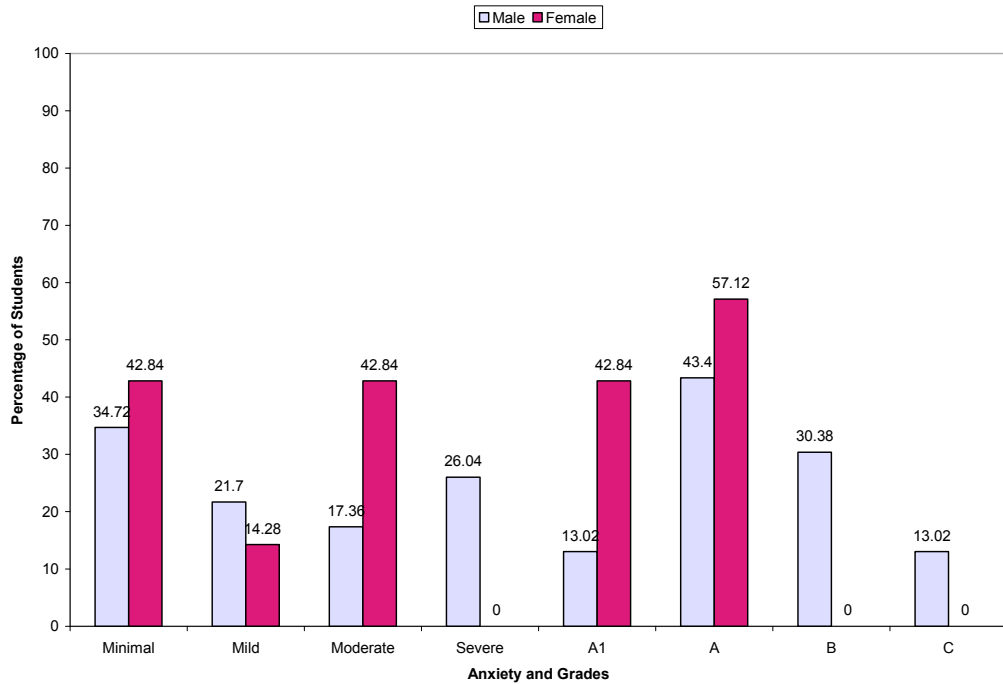


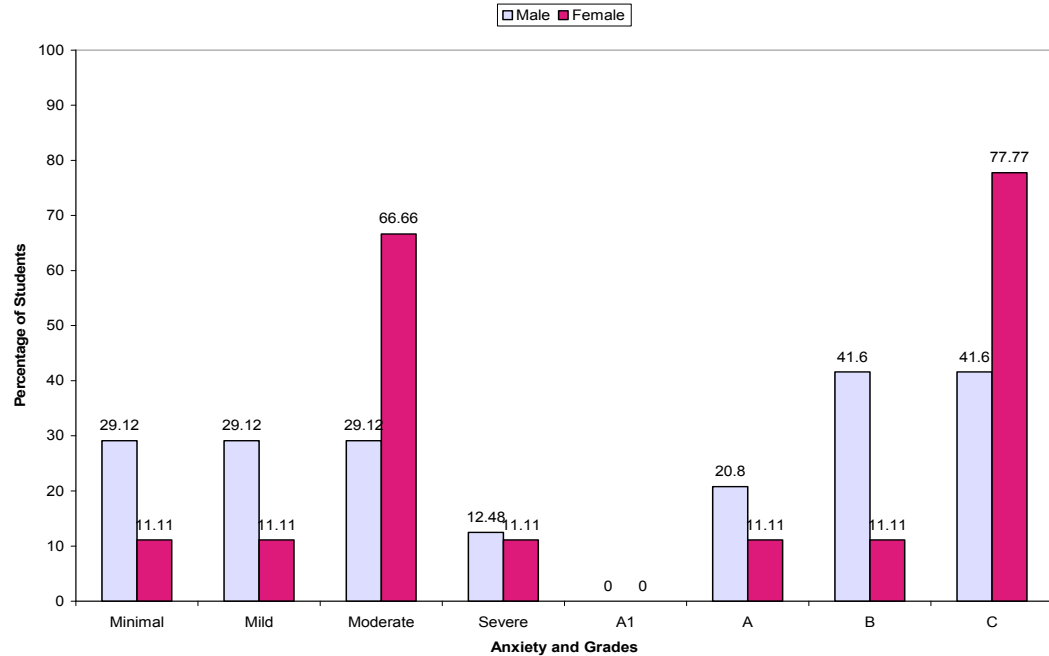
Fig 28. Anxiety Prevalence and Academic Grades of Department of Computer Sciences

Table 28 and Fig 28 give the prevalence of anxiety and academic grades of the Department of Computer Sciences, where the male respondents are with 26 percent severe, 17 percent moderate, 21.7 percent mild and 34.7 percent minimal anxieties. Females are with minimal and moderate anxieties of 42.8 percent each, while 14 percent are with mild anxiety. The academic grades of males are 13 percent A1, 43 percent A, 30 percent B and 13 percent C, while those of females are 42.8 percent A1 and 57 percent A.

A very strong negative correlation between anxiety and academic grades of male students was recorded. However, among females, it was found to be slightly positive.

Table 29. Anxiety Prevalence and Academic Grades of Department of Physics

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	29.12	29.12	29.12	12.48	0	20.8	41.6	41.6	-0.52
Female	11.11	11.11	66.66	11.11	0	11.11	11.11	77.77	-0.26

**Fig 29. Anxiety Prevalence and Academic Grades of Department of Physics**

The values indicate for the Department of Physics in Table 29 and Fig 29 show that the male respondents are with equal anxieties of minimal, mild and moderate level each with percentage of 29, while 12.4 percent males are with severe anxiety. The moderate anxiety among females prevails with a percentage of 66.6, while the severe, mild and moderate anxieties of females are 11 percent each. Among the males 41.6 percent are with grades B and same with grades C while 20.8 percent are with grades A. similarly, females have grades A and B equally with a percentage of 11 each and 77.7 percent of them are with grade C.

For both the male and female students, there was found an inverse relationship between anxiety and academic grades, where the intensity of this correlation was found stronger among males.

Table 30. Anxiety Prevalence and Academic Grades of Department of Electronics

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	33.32	23.8	19.04	23.8	0	9.52	42.84	47.6	-0.75
Female	50	0	50	0	25	0	50	25	0.70

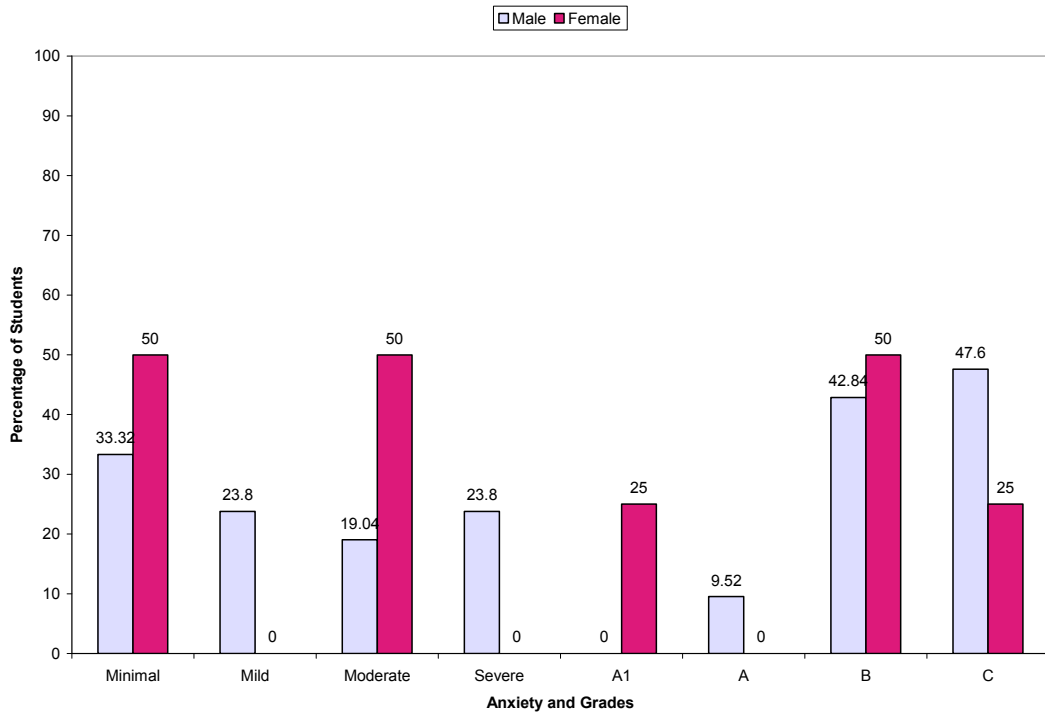


Fig 30. Anxiety Prevalence and Academic Grades of Department of Electronics

Shown in table 30 and Fig 30, among the respondents of the Department of Electronics, 50 percent females are having minimal anxiety while 50 percent are having moderate. Among the males, the severe, moderate, mild and minimal anxieties are prevailing with percentages of 23.8, 19, 23.8 and 33.3, respectively. 50 percent of females are with academic grades B and 25 percent are with grades A1 and C equally. The males are having 9.5 percent A grades, 42.8 percent B and 47.6 percent C grades.

Strong correlation between anxiety and academic grades of students was found, however, for male students, it was found to be negative and for female students, it was found to be positive. The r values were -0.75 and 0.70, respectively.

Table 31. Anxiety Prevalence and Academic Grades of Department of Mathematics

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	38.85	22.2	0	38.85	0	22.2	27.75	50	-0.05
Female	66.64	25	0	8.33	0	16.66	16.66	66.64	-0.59

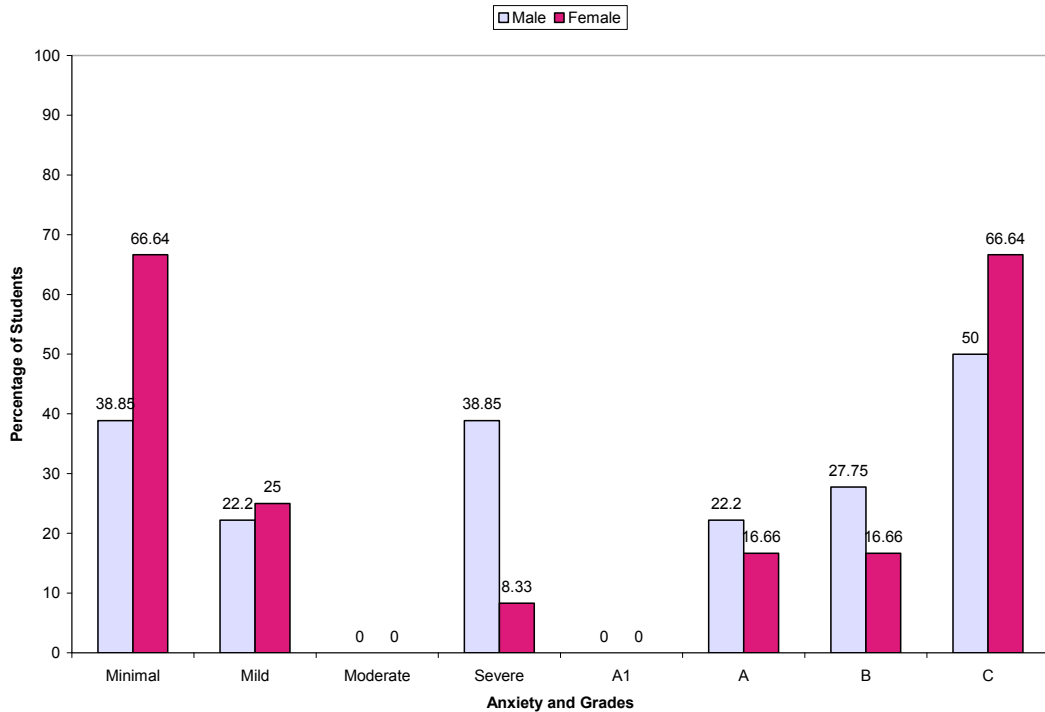


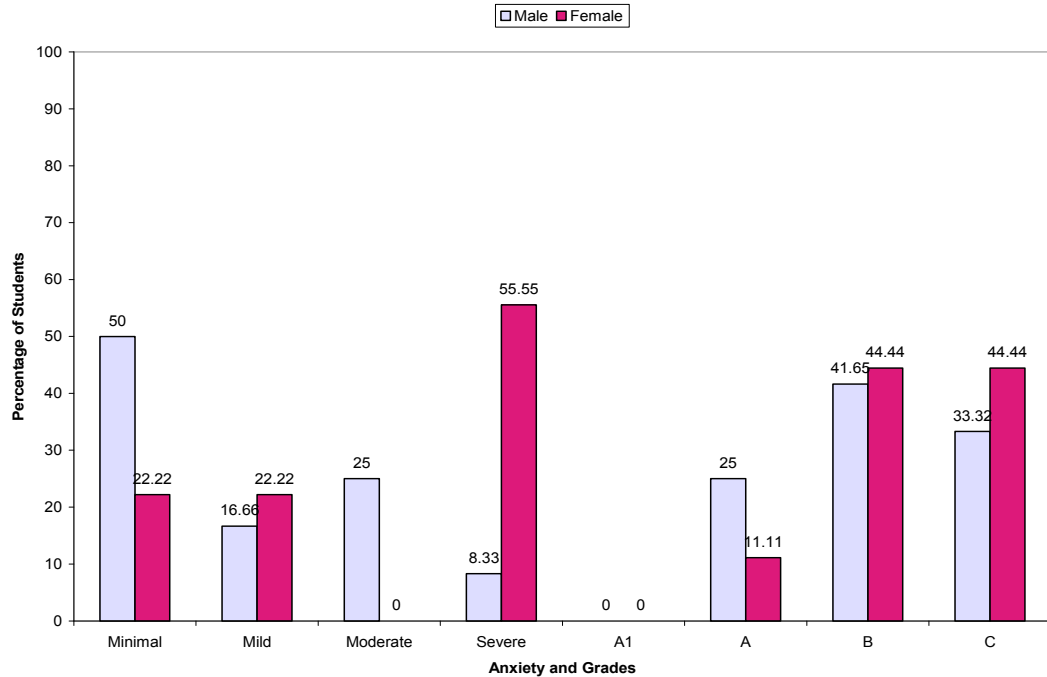
Fig 31. Anxiety Prevalence and Academic Grades of Department of Mathematics

Table 31 and Fig 31 represent the data for the Department of Mathematics in which among the male respondents the severe and minimal anxieties are equally distributed with percentages of 38.8 each, while 22.2 percent are having mild anxieties. Females are with 66.6 percent minimal, 25 percent mild and 8.3 percent severe anxieties. The academic grades of males are 22.2 percent A, 27.7 percent B and 50 percent C. Similarly among the females 16.6 percent are with grades A and B equally and 66.6 percent are with grades C.

For both the male and female students, there was found an inverse relationship between anxiety and academic grades, where the intensity of this correlation was found stronger among females.

Table 32. Anxiety Prevalence and Academic Grades of Department of Statistics

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)				Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	
Male	50	16.66	25	8.33	0	25	41.65	33.32	-0.78
Female	22.22	22.22	0	55.55	0	11.11	44.44	44.44	0.13

**Fig 32. Anxiety Prevalence and Academic Grades of Department of Statistics**

The respondents from the Department of Statistics shown in table 32 and Fig 32 with anxiety prevalence among male students in severe ranges of 8 percent, moderate anxiety of 25 percent, mild anxiety of 16.6 percent and minimal anxiety of 50 percent. Among the females, 22.2 percent are with minimal anxiety and same with mild anxiety. However, here the severe anxiety is more than males, i.e. among 55.5 percent female students. The academic grades of males shown are 25 percent A, 41.6 percent B and 33.3 percent C. among females, 11 percent are with grade A and 44.4 percent are with grades B and C equally.

Strong negative and weak positive correlation between anxiety and academic grades of male and female students, respectively, was recorded. The r values calculated were -0.78 and 0.13, for males and females, respectively.

Table 33. Anxiety Prevalence and Academic Grades of Faculty of Arts and Humanities

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	11	40.26	35.67	13.07	7.22	15	21.45	51.88	4.44	-0.29
Female	12.41	49.74	7.15	30.66	0	12.77	55.85	25.05	6.31	-0.38

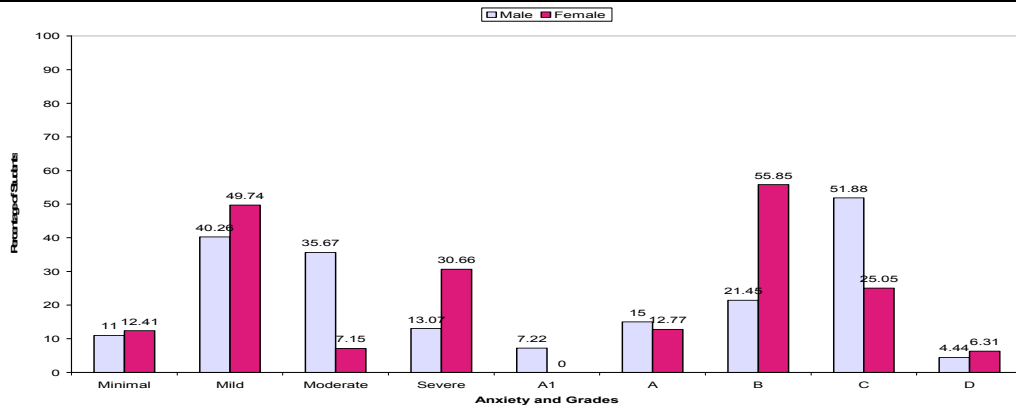


Fig 33. Anxiety Prevalence and Academic Grades of Faculty of Arts and Humanities

Concluded in table 33 and Fig 33, data shown for the Faculty of Arts and Humanities indicates that anxiety in its severe case prevails among the female students with a percentage of 30.6. In contrast, the severe anxiety among males prevails with a percentage of 13. Males are prevailing with moderate anxiety of 35.6 percent and among the females only 7 percent are with moderate anxiety. The mild anxiety is found in 40 percent males and 49.7 percent females while 11 percent males and 12.4 percent females are with minimal anxieties. Males precede the females in A1 academic grades where no female is found in this grade while 7 percent males are with A1 grades. Most of the females are with grade B with a percentage of 55.8 while among the males, 21 percent are with grade B. similarly 6.3 percent females are with grade D while 4.4 percent males are having this grade. The percentage of males in grade A is 15 while that of females is 12.7.

A negative correlation between anxiety and academic grades of both male and female students was recorded with r values -0.29 and -0.38, respectively.

Table 34. Anxiety Prevalence and Academic Grades of Faculty of Islamic and Oriental Studies

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	33.66	44.332	5	17	0	43.33	19.66	37	0	0.14
Female	27.38	32.46	26.79	13.32	12.05	41.31	15.19	31.4	0	-0.004

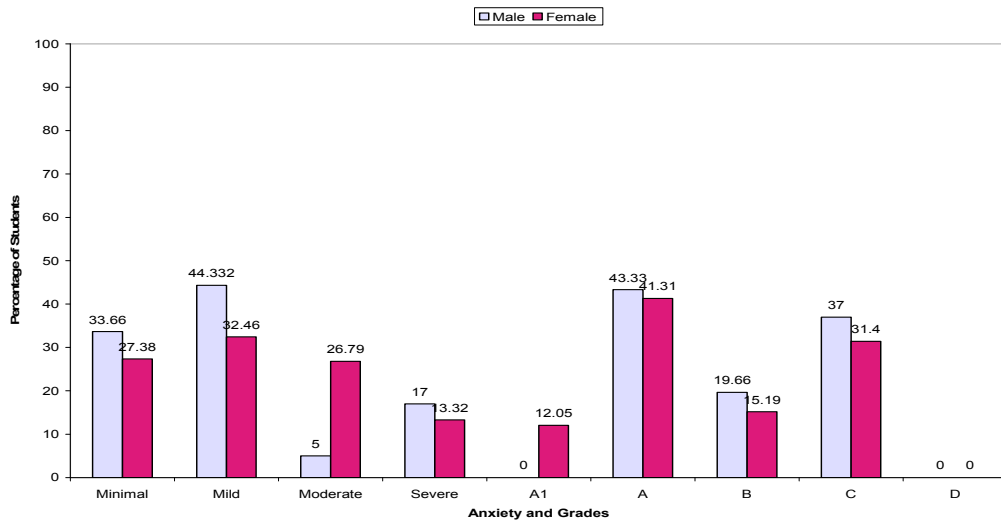


Fig 34. Anxiety Prevalence and Academic Grades of Faculty of Islamic and Oriental Studies

The cumulative Table 34 and Fig 34 for the faculty of Islam and Oriental Studies shows prevailing severity of anxiety among the male students with a percentage of 17 while among females, it is 13 percent. The moderate anxiety prevails in females with 26.7 percent as compared to the males with 5 percent. Similarly the mild and minimal anxieties prevail in males with 44 percent and 33.6 percent respectively, while among the females, the percentages are 32.4 and 27.3, respectively. Majority of males are having grade A, with percentage of 43.3, while the B and C grades are found with percentages of 19.6 and 37, respectively. There is no A1 or D grade found among males. Among the females, the A1 grades are 12 percent, A grades are 41 percent, B are 15 percent and C are 31.4 percent.

For male students, a weak positive ($r=0.14$) and for female students, a very weak negative ($r=0.004$) correlation between anxiety and academic grades were recorded.

Table 35. Anxiety Prevalence and Academic Grades of Faculty of Life & Environmental Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	55.31	23.32	8	16.18	1.66	41.08	37.17	22.51	0	-0.83
Female	44.77	24.05	23.6	7.55	4.22	33.44	35.66	26.66	0	-0.70

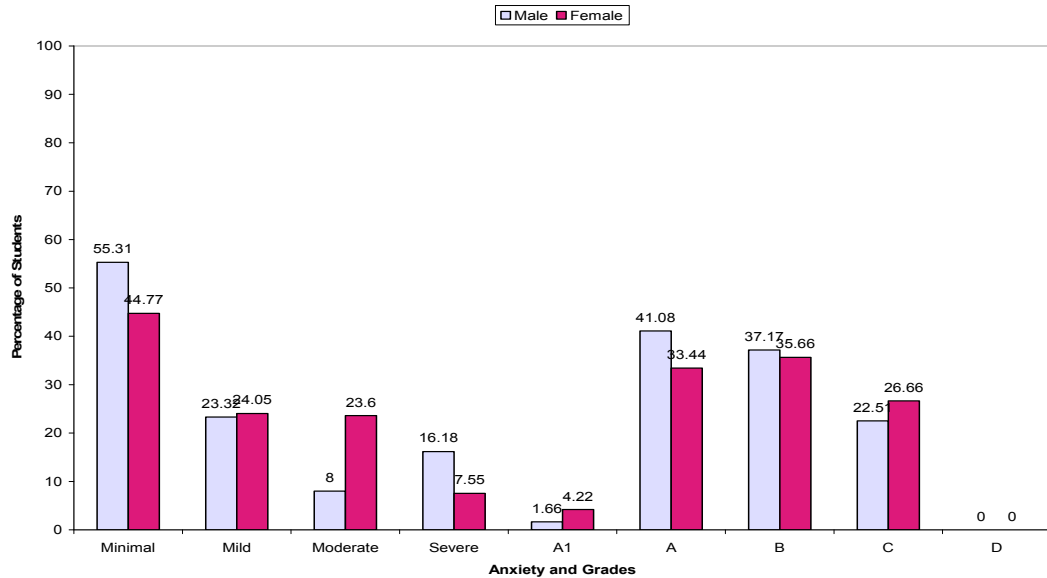


Fig 35. Anxiety Prevalence and Academic Grades of Faculty of Life & Environmental Sciences

The comparative analysis of male and female respondents for the Faculty of Life and Environmental Sciences in Table 35 and Fig 35 indicates that the males prevail in severe anxiety as compared to females with percentages of 16 and 4.2, respectively. Females precede the males in moderate anxiety and their percentages are 23.6 and 8 respectively. The mild anxieties of males and females are with percentages 23 and 24 respectively, and minimal anxieties of males and females are with percentages 55 and 44.7, respectively. The academic grades of females in A1 range are 4.2 percent while those of males are 1.6 percent. Similarly 41 percent boys are with grade A, 37 percent are with grade B and 22.5 percent are with grade C. Girls in grade A are 33.4 percent, in B are 35.6 percent and in C are 26.6 percent.

For both male and female students, very strong inverse relationship between anxiety and academic grades was found, with r values of -0.83 and -0.70, respectively.

Table 36. Anxiety Prevalence and Academic Grades of Faculty of Management Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	21.26	34.04	22.81	21.86	8.46	24.17	29.7	30.64	0	0.14
Female	4.16	50	29.16	16.66	25	41.66	29.16	4.16	0	0.66

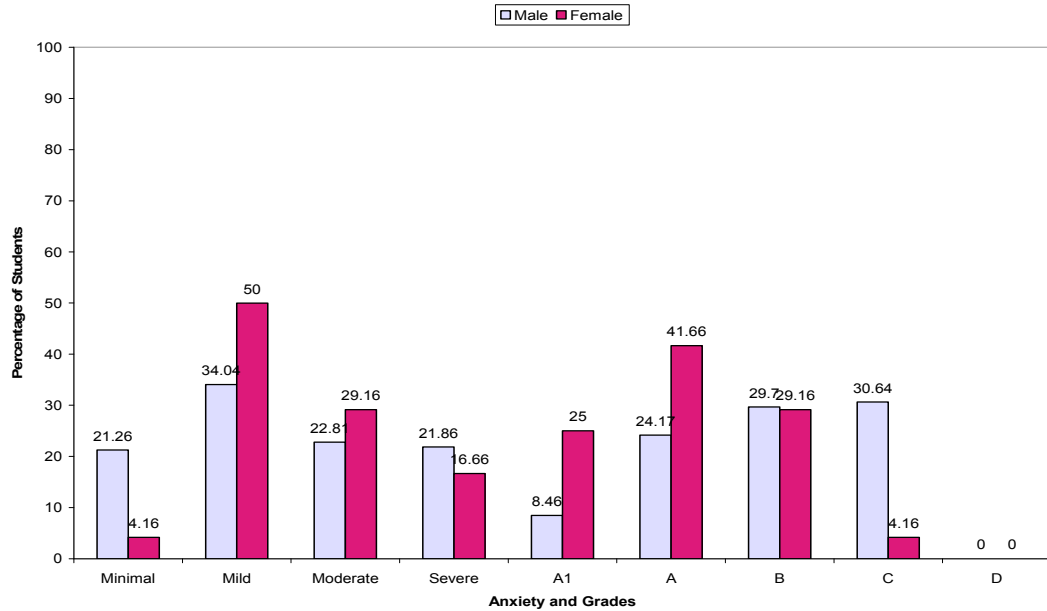


Fig 36. Anxiety Prevalence and Academic Grades of Faculty of Management Sciences

The Table 36 and Fig 36 showing comparative data for the male and female students of the Faculty of Management Sciences indicate that males have more severe anxiety than females with their percentages 21.8 and 16.6 respectively. The females precede in moderate anxiety than males with their percentages 29 and 22.8 percent. Similarly, 50 percent females and 34 percent males are having mild anxiety. The minimal anxiety is found in 21 percent males and 4 percent females. The academic grades of females in A1 range are 25 percent and those of males are 8.4 percent. Boys in A, B and C grades are 24, 29 and 30.6 percent, respectively. The academic grades of females are A, B and C with percentages 41.6, 29 and 4, respectively.

Both male and female students were found with positive correlation between anxiety and academic grades. The r values recorded were 0.14 and 0.66.

Table 37. Anxiety Prevalence and Academic Grades of Faculty of Social Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	28.23	29.33	19.12	23.23	4.17	17.58	36.28	30.23	14.68	-0.86
Female	22.24	32.07	18	27.65	12.3	24.34	18.16	30.15	14.78	0.64

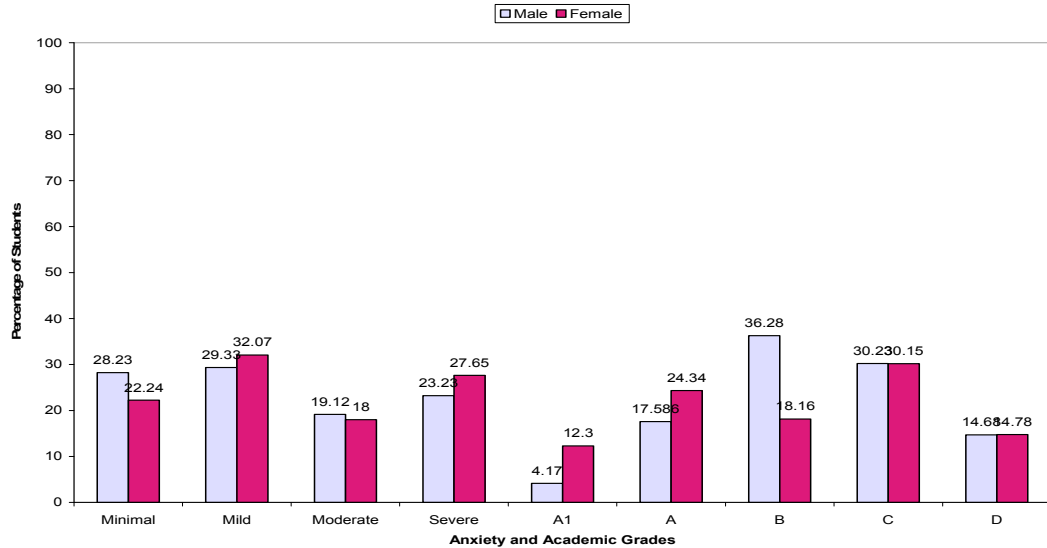
**Fig 37. Anxiety Prevalence and Academic Grades of Faculty of Social Sciences**

Table 37 and Fig 37 indicating data of the faculty of Social Sciences show that 23 percent male students and 27.6 percent female students are with severe anxiety, 19 percent males and 18 percent females are with moderate anxiety. 29.3 percent males and 32 percent females are with mild anxiety and 28 percent males and 22 percent females are with minimal anxiety. An average of 36 percent males are with grade B, 4 percent are with A1 grade, 17.5 percent are with A grade, 30 percent are with C grade and 14.6 percent are with D grade. Among the females, 12 percent are with A1 grade, 24 percent are with A grade, 18 percent are with B grade, 30 percent are with C grade and 14.7 percent are with D grade.

The male students were found with a very strong inverse relation between anxiety and academic grades, while the female students were found with a bit lower positive correlation of anxiety and academic grades. For males, the correlation coefficient value was -0.86 and for females, this value was 0.64.

Table 38. Anxiety Prevalence and Academic Grades of Faculty of Numerical Sciences

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	37.19	22.69	25	22	2.6	24.18	36.84	37.09	0	-0.89
Female	38.56	14.52	31.9	15	13.56	19.2	24.44	42.77	38.56	-0.59

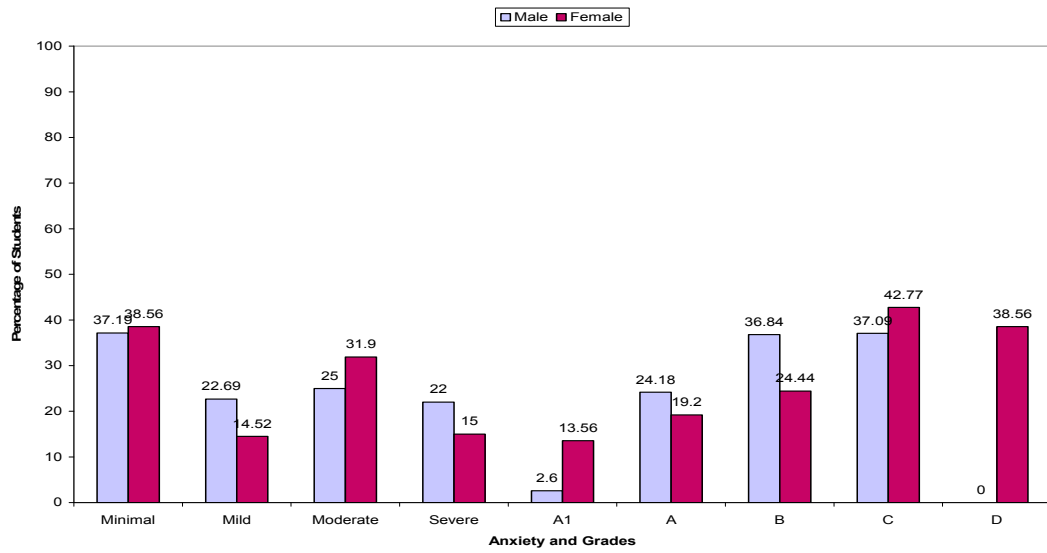


Fig 38. Anxiety Prevalence and Academic Grades of Faculty of Numerical Sciences

Summarizing the Anxiety and academic grades of the students of the Faculty of Numerical Sciences in Table 38 and Fig 38, it is obvious that 22 percent of male respondents and 15 percent of female respondents are with severe anxiety. Similarly in the level of moderate anxiety, there are 25 percent males and 32 percent females. 22.6 percent males and 14.5 percent females are found with mild anxiety and an average of 37 percent males and 38.5 percent females are with minimal anxiety. Males in academic grade A1 are 2.6 percent and females are 13.5 percent. The B and C grade male students are 37 percent each and the females with A, B, C and D grades are 19 percent, 24.4 percent, 27.7 percent and 38.5 percent, respectively.

For both male and female students, an inverse relationship between anxiety and academic grades was found, with r values of -0.89 (very strong) and -0.59 (significantly strong), respectively.

Table 39. Anxiety Prevalence and Academic Grades of Male and Female Students of University of Peshawar

Students (Percent)	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Male	31.07	32.28	18.11	18.86	4	27.51	29.04	33.52	3.18	-0.62
Female	25.34	34.24	25.52	18.9	11.16	29.22	30.16	29.9	3.51	0.03

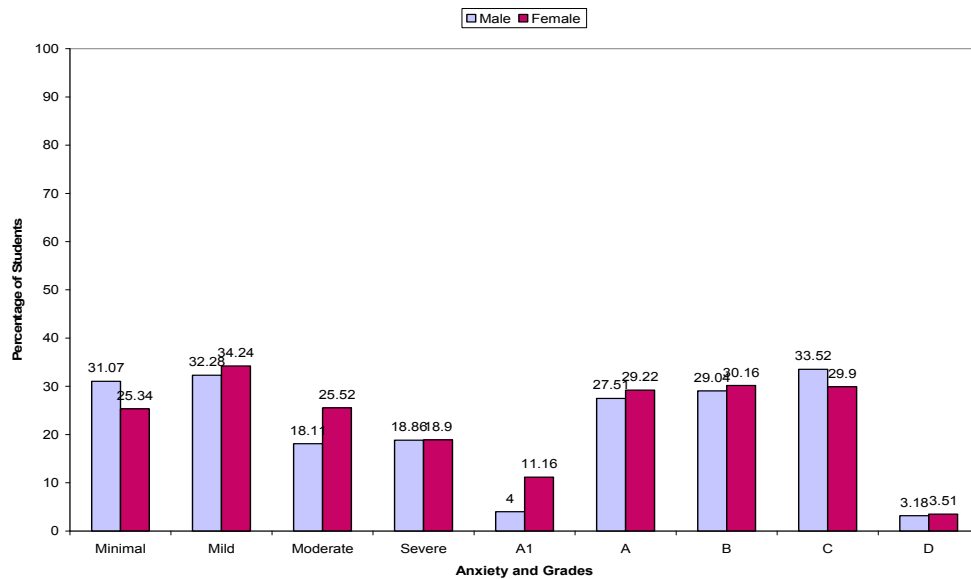


Fig 39. Anxiety Prevalence and Academic Grades of Male and Female Students of University of Peshawar

Showing an overall sum of the average respondent percentage of the male and female students of all of the faculties of the University of Peshawar in Table 39 and Fig 39, it is revealed that the severe anxiety of male and female students is nearly the same, with percentages of 18.8 and 18.9 respectively. Females in Moderate anxiety level are more than males with percentages of 25.5 and 18.1, respectively. The mild level of anxiety is found in 32.2 percent males and 34.2 percent females, while minimal anxiety is found in an overall average percentage of 31 and 25.3 for males and females, respectively.

The male university students were found with a significantly stronger inverse relation between anxiety and academic grades, having $r=-0.62$, however, the female students were found with an extremely weaker positive correlation between anxiety and academic grades, having $r=0.03$.

Table 40. Anxiety Prevalence and Academic Grades of All Students of University of Peshawar

University of Peshawar	Anxiety Prevalence (%)				Academic Grades (%)					Correlation Coefficient (r)
	Minimal	Mild	Moderate	Severe	A1	A	B	C	D	
Students (Percent)	28.2	33.2	21.8	18.8	7.5	28.3	29.6	31.7	3.3	-0.38

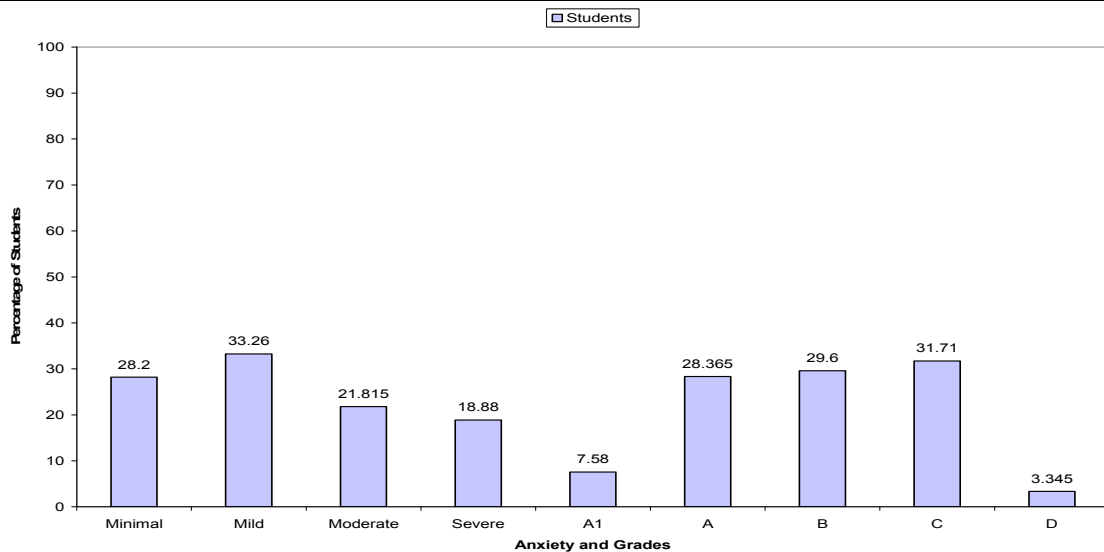


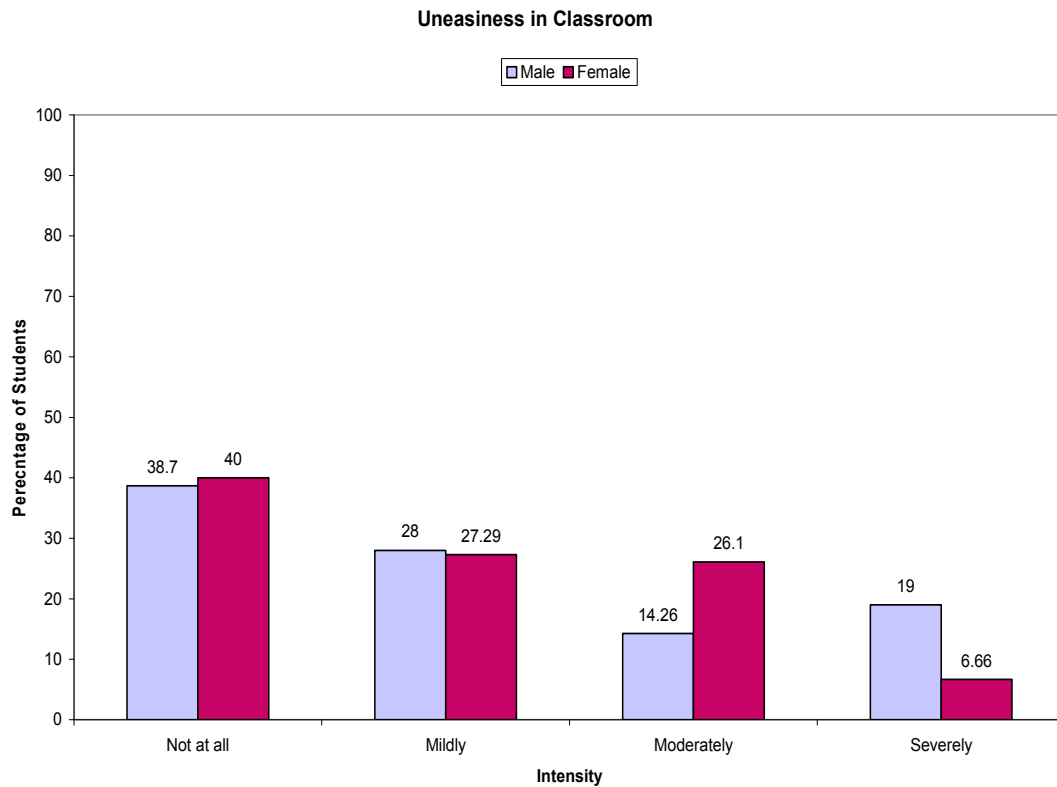
Fig 40. Anxiety Prevalence and Academic Grades of All Students of University of Peshawar

Summing up the overall averages of all the students of the University of Peshawar regarding their anxiety prevalence and academic grades in Table 40 and Fig 40, it is seen that there is an average percentage 18.8 of students with severe anxiety while 21 percent of students are with moderate anxiety. The students with mild and minimal anxiety are 33.2 and 28.2 percent respectively. The academic grades of 7.58 percent students are A1 while the A grades are found among 28.3 percent of students. Students with B grades are 29.6 percent while those with C grades are 31.7 percent. There is a minimum ratio of D grade found in an average percentage of 3.3 percent of all the students of the University of Peshawar.

An overall inverse correlation between anxiety prevalence and academic influence was recorded for all the students of the University of Peshawar. The value of correlation coefficient found was -0.38.

Table 41. Responses of Students for Uneasiness in Classroom

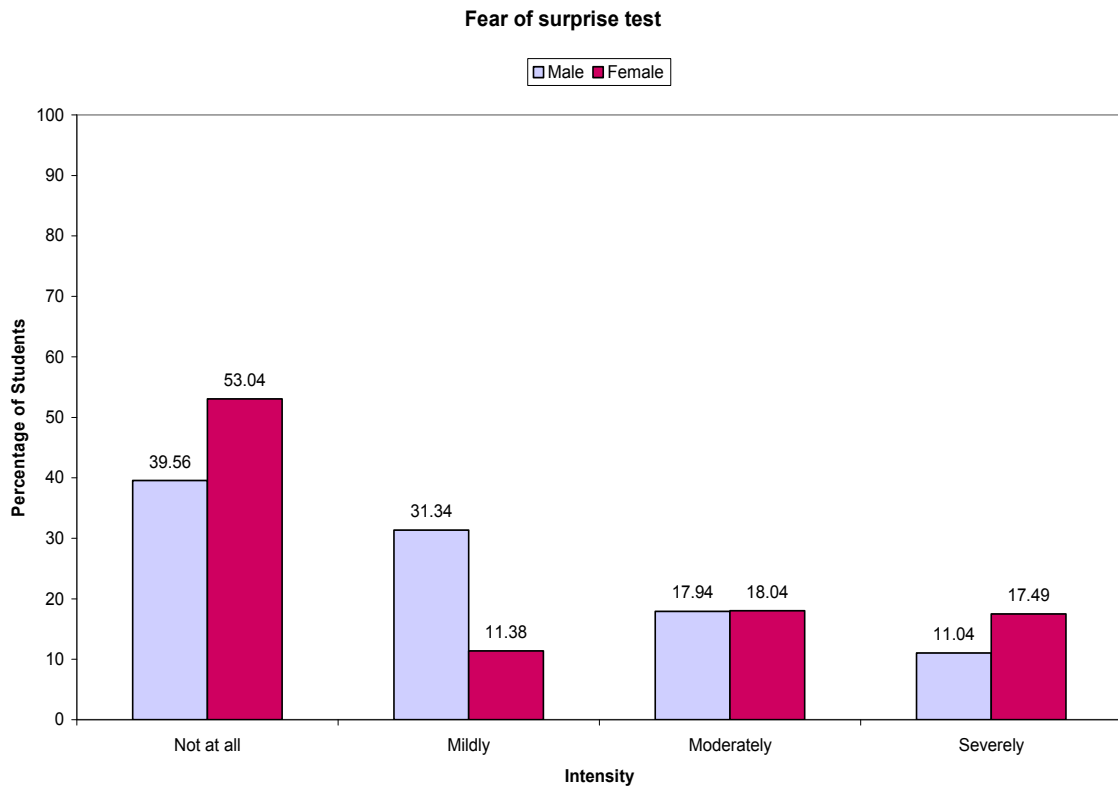
Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	38.7	28	14.26	19
Female	40	27.29	26.1	6.66

**Fig 41. Responses of Students for Uneasiness in Classroom**

The Table 41 and Fig 41 indicates that among the respondents of the University students, 19 percent males and 6.6 percent females feel severe uneasiness in classroom. A moderate level of uneasiness is found among 26 percent females and 14 percent males. The remaining males and females are either with mild or no feelings of uneasiness.

Table 42. Responses of Students for Fear of Surprise test

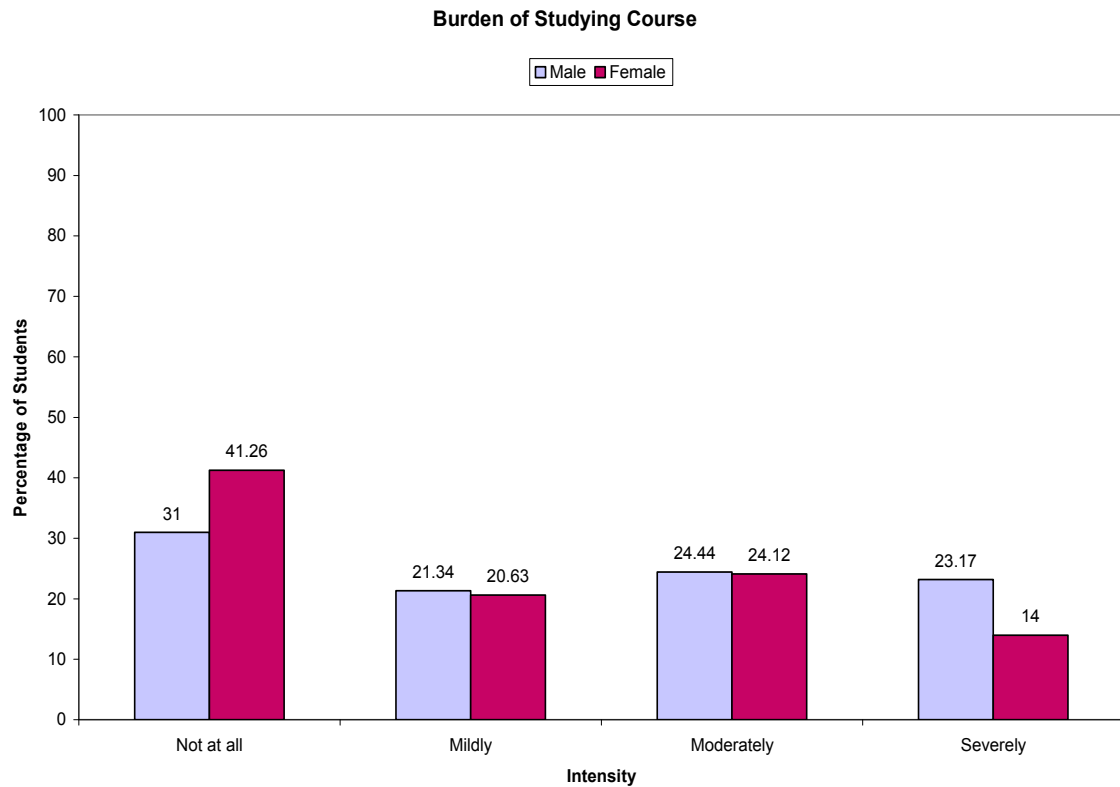
Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	39.56	31.34	17.94	11.04
Female	53.04	11.38	18.04	17.49

**Fig 42. Responses of Students for Fear of Surprise test**

As shown in the Table 42, plotted in the fig 42, it is revealed that 17.4 percent female respondents of the university have severe fear of surprise test while 11 percent male students are with this intensity. An equal percentage of students is found with moderate test anxiety, i.e. 18 percent males and females each. There is found a mild fear of surprise test among 31.4 percent male students and 11.3 percent female students. The remaining 39.5 percent males and 53 percent females have no fear of surprise test.

Table 43. Responses of Students for Burden of Studying Course

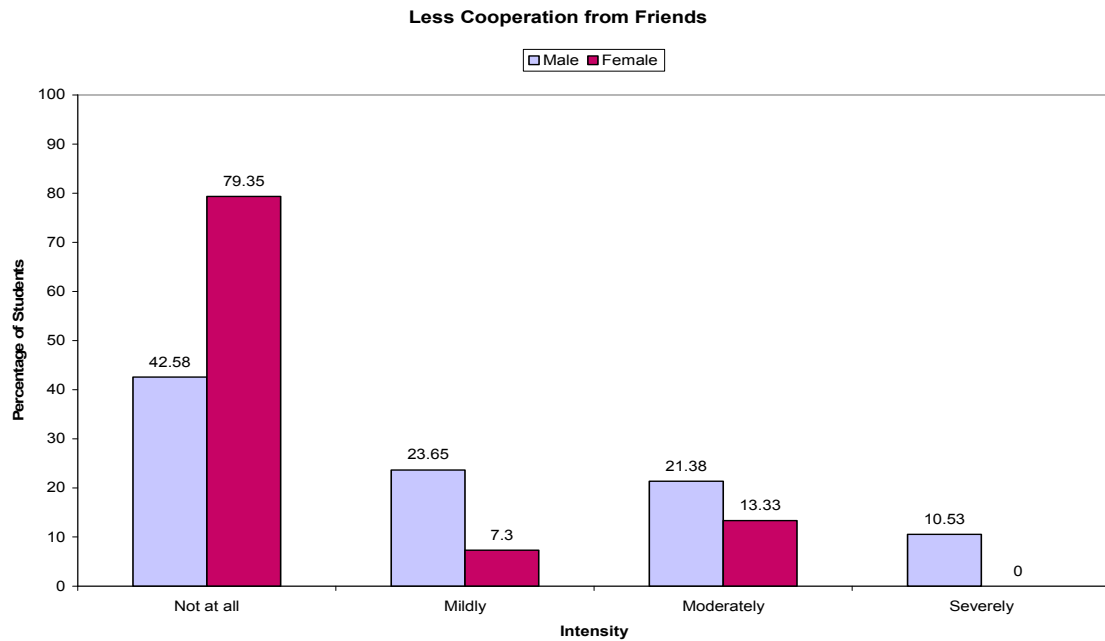
Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	31	21.34	24.44	23.17
Female	41.26	20.63	24.12	14

**Fig 43. Responses of Students for Burden of Studying Course**

Shown in the table and fig 43, for the correlate of anxiety, 23 percent of male students and 14 percent of female students have severe burden of studying course. An equal percentage of 24, both from male and female students have a moderate intensity of this correlate, while 21 percent of males and 20.6 percent of females have a mild intensity. Among the males, there are 31 percent and among the females, there are 41 percent students who have no burden of studying their courses.

Table 44. Responses of Students for Less cooperation from friends

Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	42.58	23.65	21.38	10.53
Female	79.35	7.3	13.33	0

**Fig 44. Responses of Students for Less cooperation from friends**

Responding for the social factors causing anxiety, when the university students were asked for less cooperation from their friend, the data collected was presented in table 44, with plot in fig 44, which reveals that there is no female with severe need of cooperation from friends while 10.5 percent of male students have this need with severe intensity. Similarly, 21.3 percent males and 13.3 percent females opted for a moderate need of cooperation and a mild level of such need was found for 23.6 percent of males and 7.3 percent of females. Among the females a majority of students are satisfied of the cooperation from friend, i.e.73 percent and among the males, 42.5 percent of students are of this category.

Table 45. Responses of Students for Disliking the Teachers

Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	45	12.67	25.67	15
Female	76.01	10.63	8.88	4.44

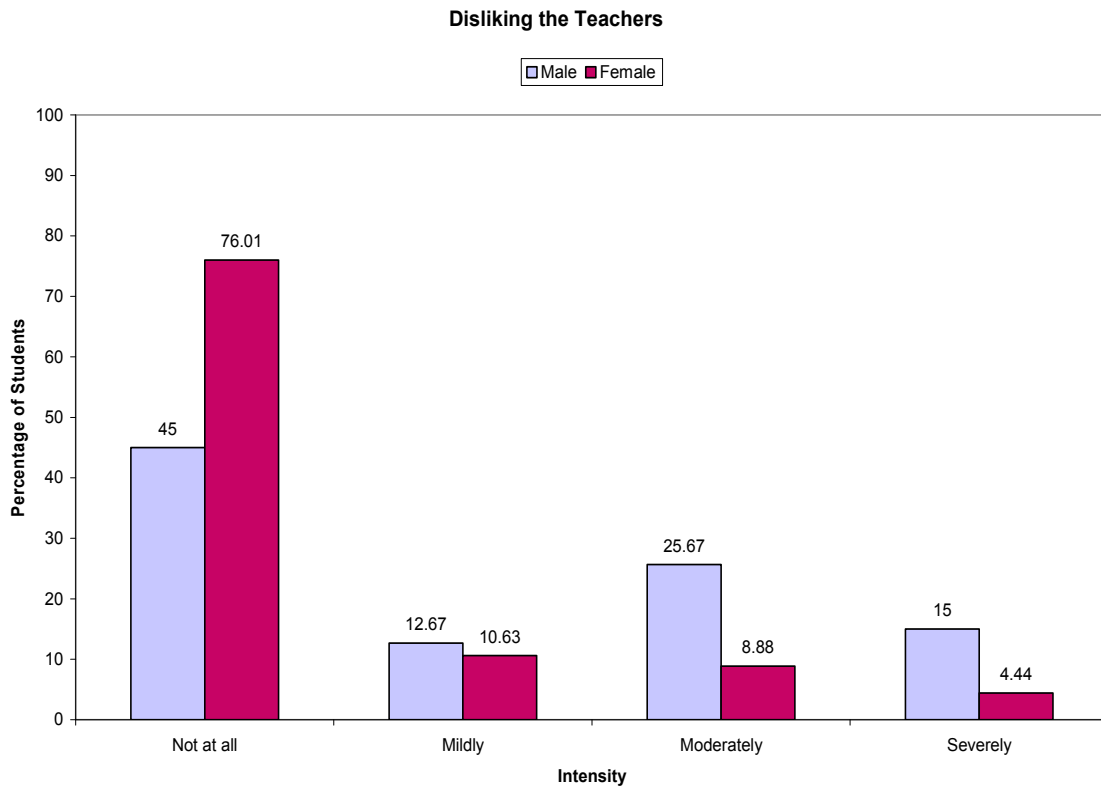
**Fig 45. Responses of Students for Disliking the Teachers**

Table 45 and Fig 45 represent the responses of male and female students for disliking their teachers, which show that 76 percent of females and 45 percent of male students like their teachers. 12.6 percent of males and 10.6 percent of females have a feeling of mild dislike for their teachers. Similarly, 25.6 percent of males and 8.8 percent of females have a moderate dislike for their teachers. A percentage of 15 and 4.4 among the males and females, respectively, were found having a severe feeling of dislike for their teachers.

Table 46. Responses of Students for Worried about the future

Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	30.39	14.49	24.63	28.15
Female	13.88	24.6	25.07	36.42

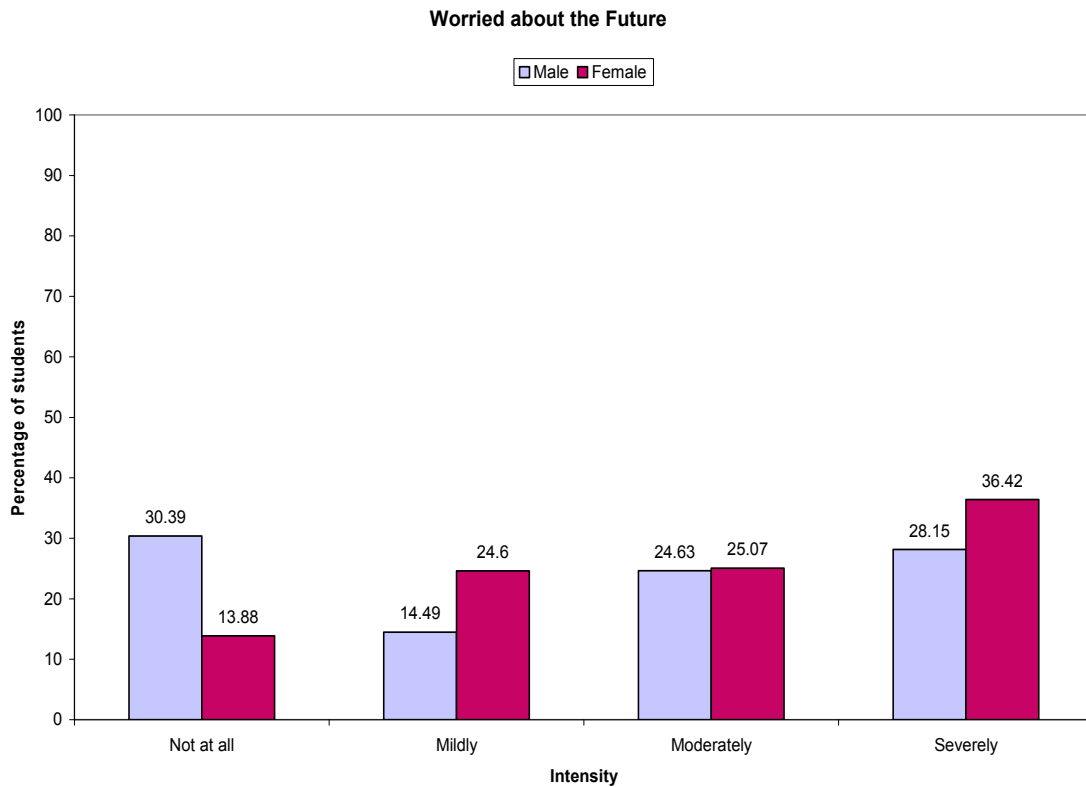
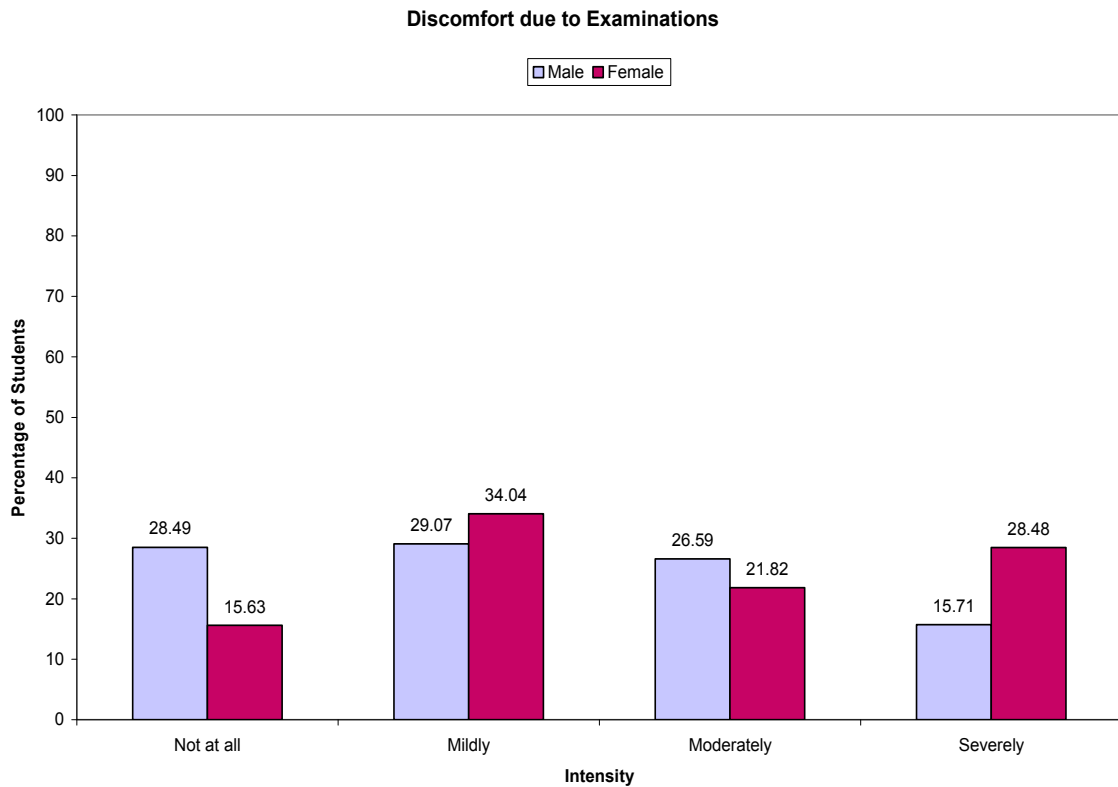
**Fig 46. Responses of Students for Worried about the future**

Table 46 and Fig 46 show that regarding the worry about the future, when students were asked, it was found that among the males, 28 percent of students have a severe worry while among the females, a percentage of 36.4 is found with this intensity. A nearly equal percentage of 25 was found for both the sexes having a moderate level of worry about the future, while at mild level of worry, there are found 14.4 percent males and 26.4 percent females. Students with no worry about the future were found with a percentage of 30.3 among males and 13.8 among females.

Table 47. Responses of Students for Discomfort due to examinations

Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	28.49	29.07	26.59	15.71
Female	15.63	34.04	21.82	28.48

**Fig 47. Responses of Students for Discomfort due to examinations**

Indicated in table 47, with Fig 47, it is obvious that 15.7 percent of male students and 28.4 percent of female students have a severe discomfort due to examination, while 26.5 percent of males and 21.8 percent of females have this discomfort with a moderate intensity. A mild level of discomfort due to examinations was found among 29 percent males and 34 percent females; however, 28.4 percent students among the males and 15.6 percent students among the females have no discomfort due to their examinations.

Table 48. Responses of Students for Fear of failure

Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	42.62	23.44	16.81	17.03
Female	25.71	25.7	16.18	36.82

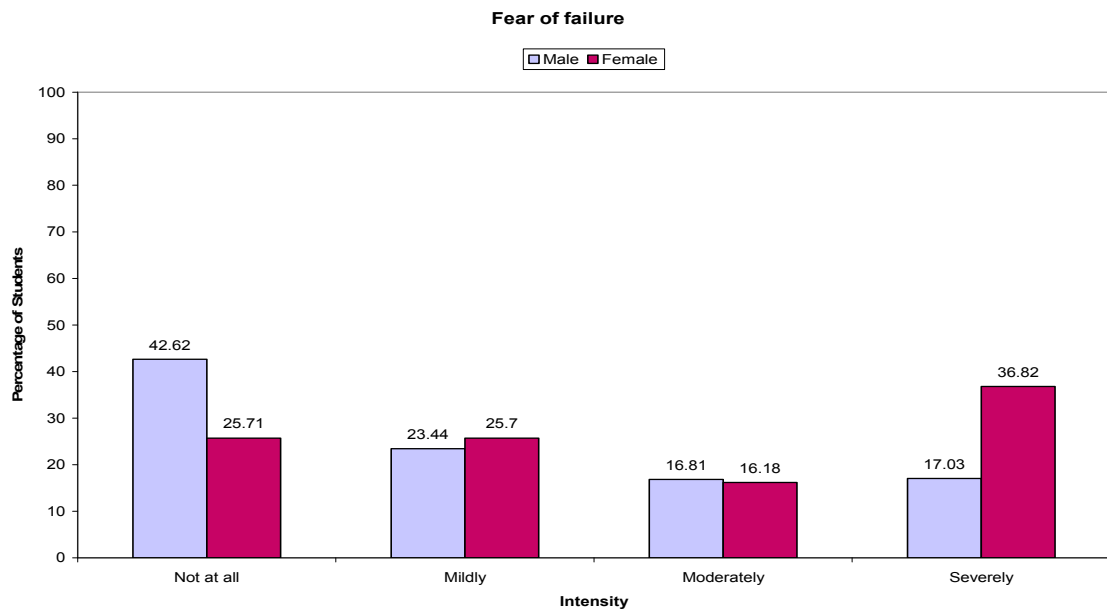
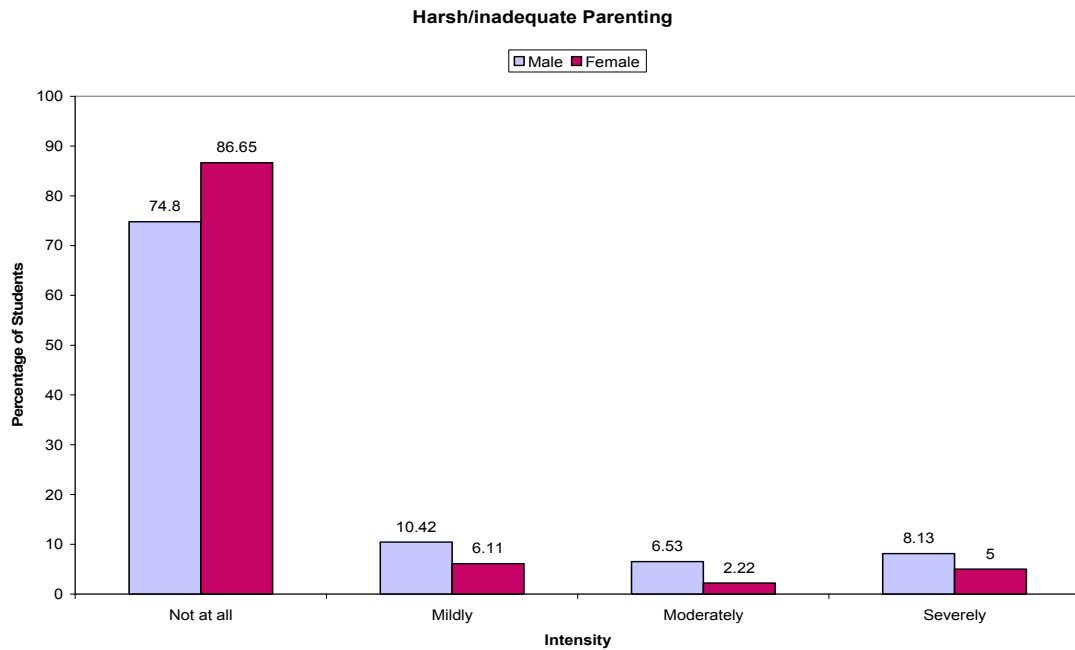
**Fig 48. Responses of Students for Fear of failure**

Table 48 with its Fig 48 summarizes the data collected from university students with their responses for the fear of failure, as anxiety correlate, which indicates that most of the female students have a severe intensity of this fear, representing a percentage of 36.8. Similarly, 17 percent of male students are of this category. An equal percentage of males and females with a moderate fear of failure is found with a percentage of 16, each.

Among the male students, 23.4 percent are with a moderate fear of failure while among the female students; there are 25.7 percent respondents with a mild fear of failure. 42.6 percent of males and 25.7 percent of females were found with more boldness and no fear of failure.

Table 49. Responses of Students for Harsh/inadequate parenting

Students (Percent)	Not at all	Mildly	Moderately	Severely
Male	74.8	10.42	6.53	8.13
Female	86.65	6.11	2.22	5

**Fig 49. Responses of Students for Harsh/inadequate parenting**

Data collected from students with harsh or inadequate parenting, when tabulated and plotted as given in Table 49 and Fig 49, it was revealed that a majority of students from both the strata are satisfied from their parental cooperation and behaviour. Only 8 percent of males and 5 percent of females were found with severe harsh parenting. A further little percentage of 6.5 among males and 2 among females was found with a moderate inadequacy from parents. 10.4 percent of males and 6 percent of females were found with a mild inadequate parenting while a vast majority of 74 percent of males and 86.6 percent of females were found with no harsh or inadequate behaviour from parents.

Table 50. Overall Responses of Students for Uneasiness in classroom

Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	39.3	27.6	20.1	12.8

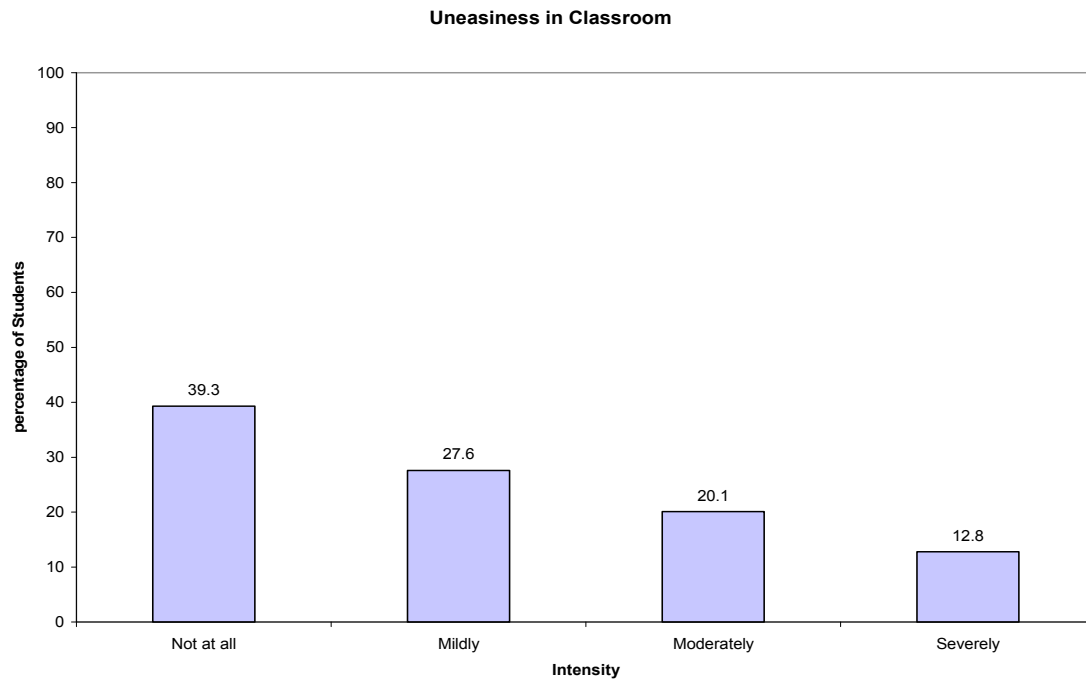
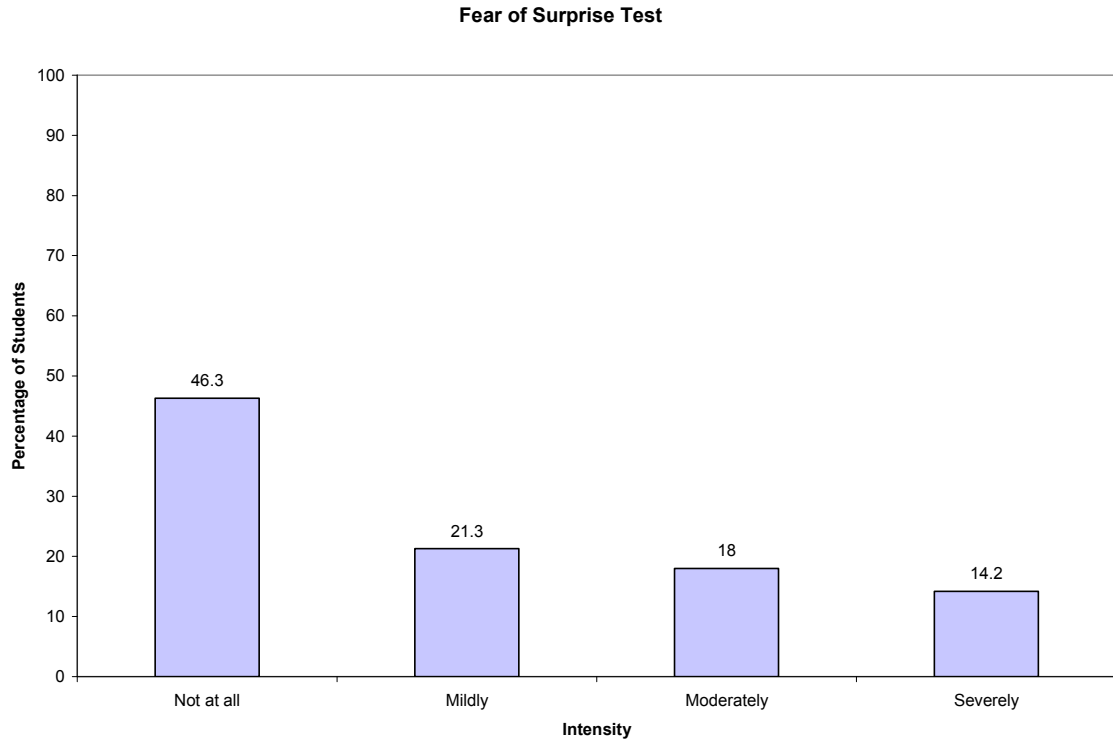
**Fig 50. Overall Responses of Students for Uneasiness in classroom**

Table 50, with Fig 50 indicates that 39.3 percent of all of the university students feel relaxed in their classrooms, 27.6 percent are found with a mild uneasiness while 20 percent of students are with a moderate level of uneasiness in classroom. A percentage of 12.8 of the university students is found with severe unrest and uneasiness in classroom.

Table 51. Overall Responses of Students for Fear of surprise test

Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	46.3	21.3	18	14.2

**Fig 51. Overall Responses of Students for Fear of surprise test**

Data collected from students for their fear of surprise test was when summarized, it is observed from Table 51 and Fig 51, that on average, 14.2 percent of university students have a severe fear of surprise taste. 18 percent of students are with a moderate intensity of fear and 21.3 percent of students are with a mild fear of surprise test. A majority of students on average percentage of 46.3 were found with no such fear.

Table 52. Overall Responses of Students for Burden of studying course

Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	36.1	21	24.2	18.5

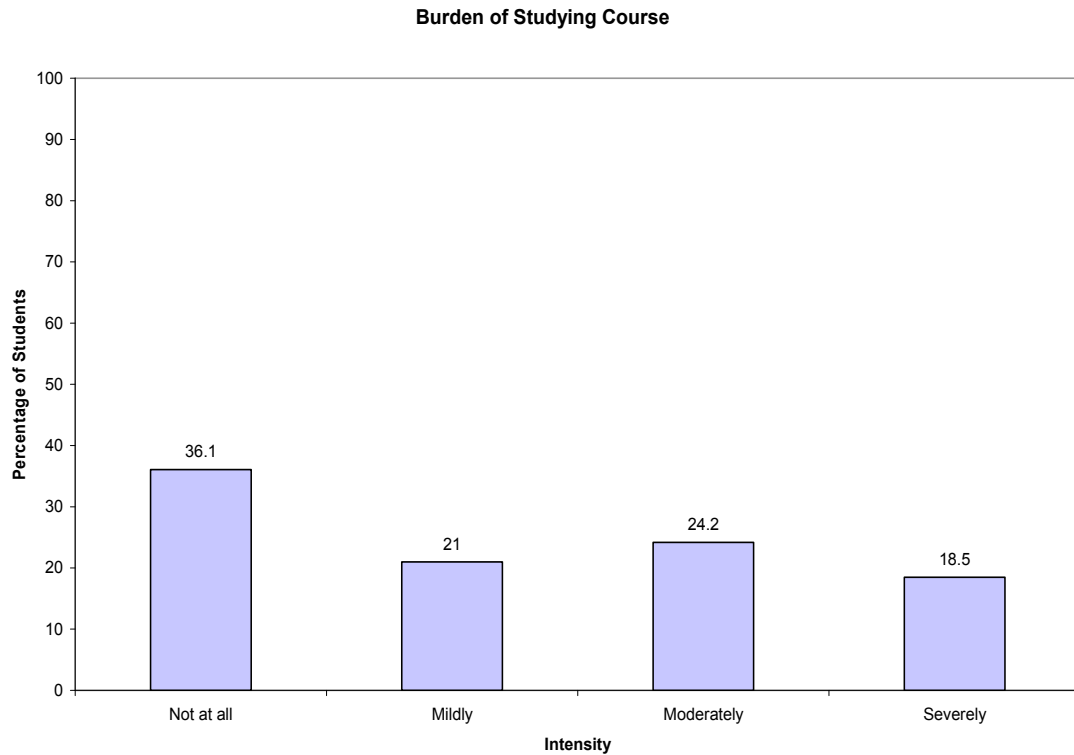
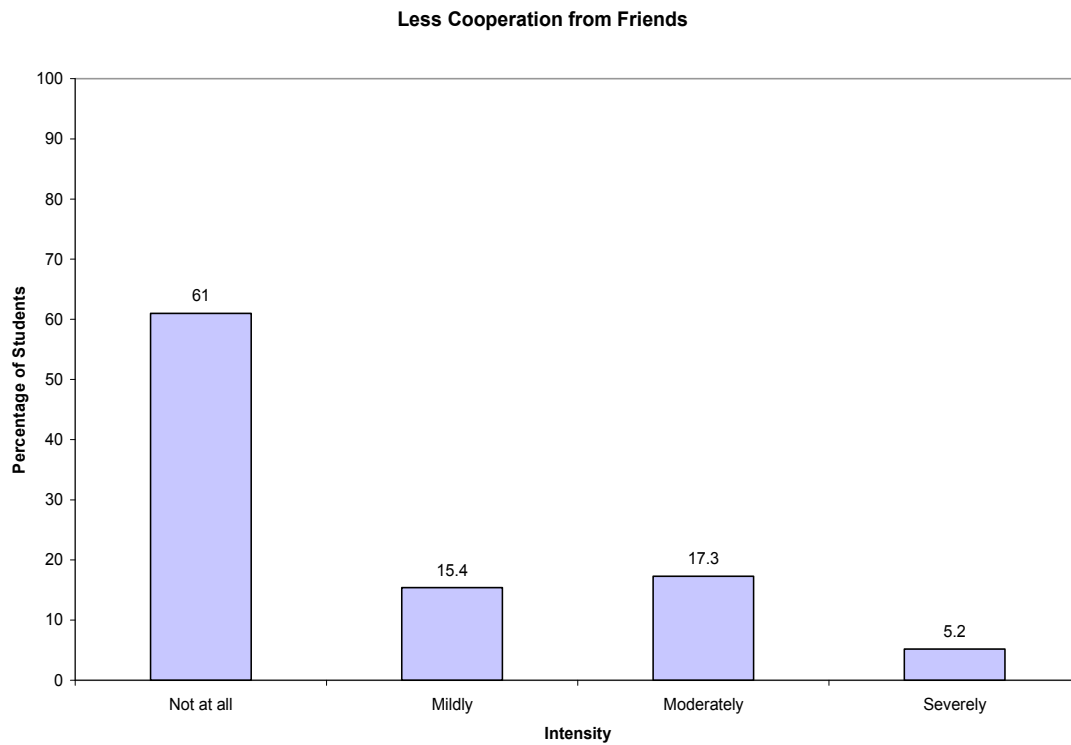
**Fig 52. Overall Responses of Students for Burden of studying course**

Table 52 and Fig 52 indicate the responses of students for considering their course studies as a burden or it is difficult to cover the courses. A percentage of 18.5 were found with severe intensity of burden of studying the courses while 24.2 percent of students are found with a moderate intensity. A percentage of 21 among the university students was found with mild intensity of burden of studying their courses while 36 percent of students are found with no such burden.

Table 53. Overall Responses of Students for Less cooperation from friends

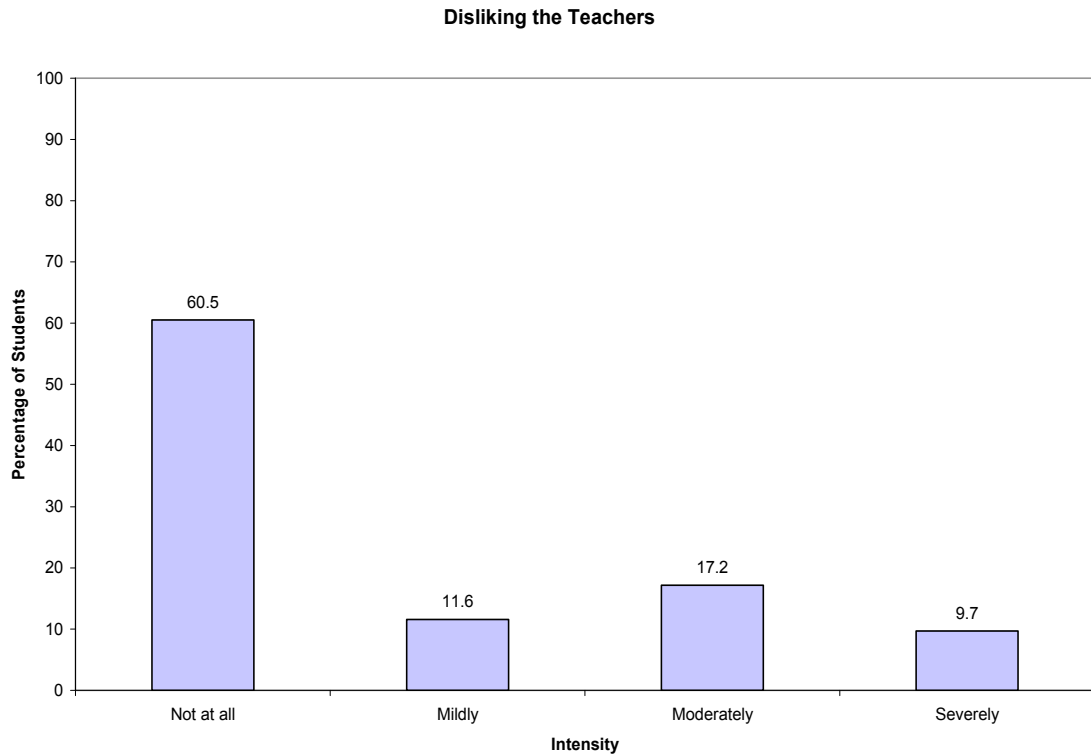
Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	61	15.4	17.3	5.2

**Fig 53. Overall Responses of Students for Less cooperation from friends**

The overall responses of students recorded in table 53 and Fig 53, for less cooperation from friends, indicate that 5 percent of students need severely the cooperation from friends while 17.3 percent of students are of moderate need. 15.4 percent of students have a mild need of cooperation from friends while 61 percent of students are satisfied from the cooperation of their friends.

Table 54. Overall Responses of Students for Disliking the Teachers

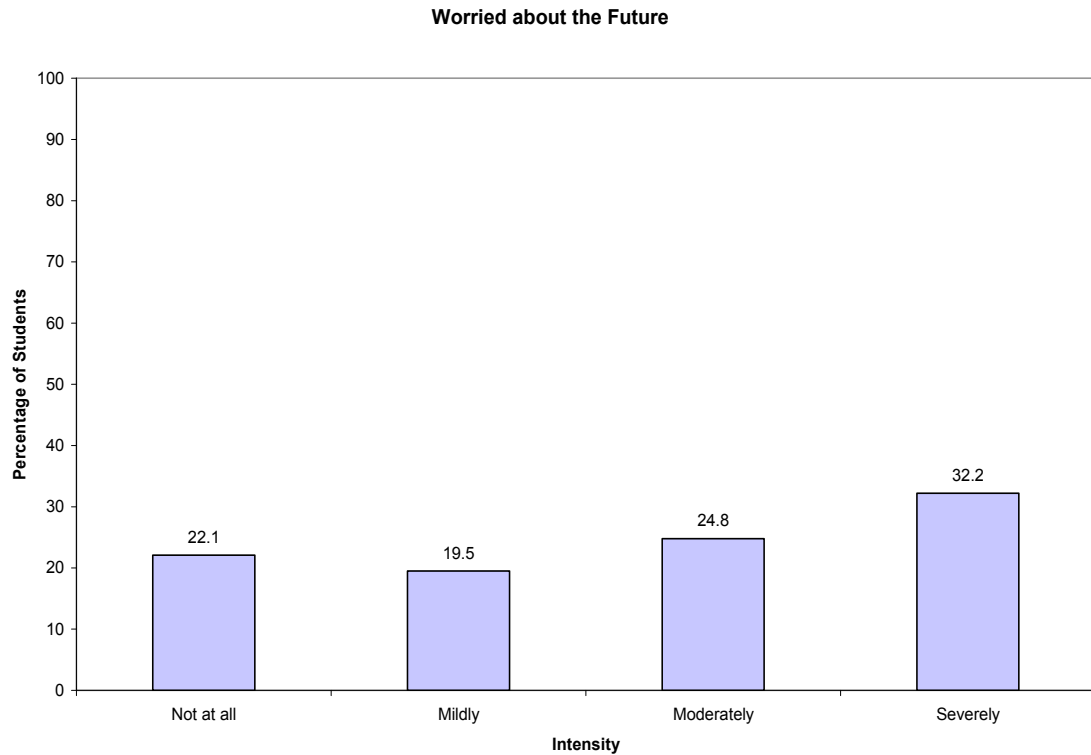
Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	60.5	11.6	17.2	9.7

**Fig 54. Overall Responses of Students for disliking the teachers**

Referring to table 54 and Fig 54, the data collected from the students of the University of Peshawar regarding the intensity of disliking the teachers, it is revealed that 9.7 percent students are of severe intensity, 17.2 percent are of moderate intensity and 11.6 percent are of mild intensity. A huge percentage of 60.5 students do not have any such dislike for their teachers.

Table 55. Overall Responses of Students for Worried about the future

Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	22.1	19.5	24.8	32.2

**Fig 55. Overall Responses of Students for Worried about the future**

Regarding the data received from student showing their worry about future, as shown in the fig 55 and table 55, it is found that majority of students with 32.2 percentage have a severe intensity in this regard, while 24.8 percent of students are of moderate intensity. A percentage of 19.5 is found with a mild intensity for fear about the future while 22.1 percent of students have no such fear.

Table 56. Overall Responses of Students for Discomfort due to examinations

Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	22	31.5	24.2	22

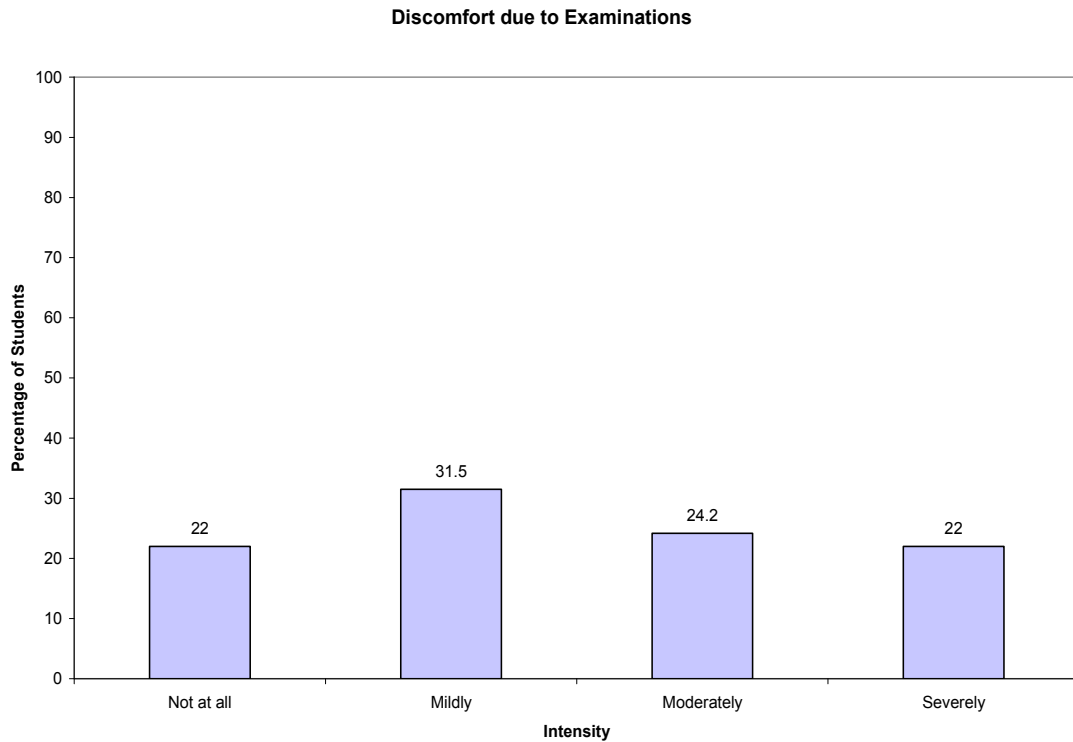
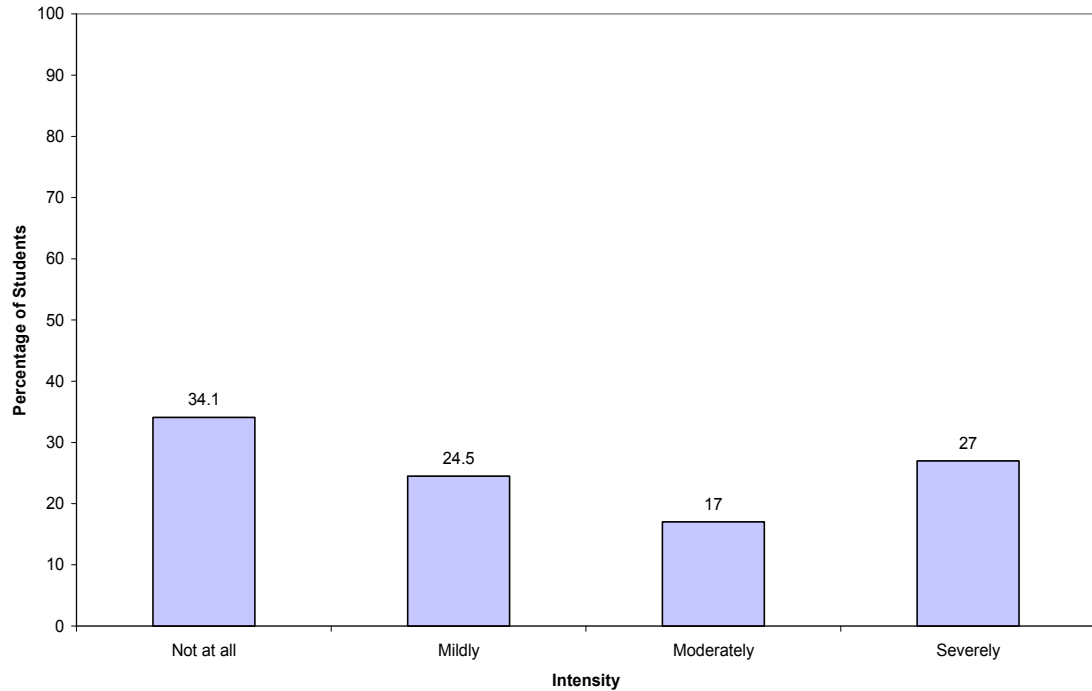
**Fig 56. Overall Responses of Students for Discomfort due to examinations**

Table 56 and Fig 56 show the data about the discomfort of students due to examinations, which reveals that 22 percent of students have no discomfort while the same percentage of students is found with a severe discomfort. Similarly, the students with mild and moderate intensity of discomfort due to examinations are with percentages of 31.5 and 24.2, respectively.

Table 57. Overall Responses of Students for Fear of failure

Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	34.1	24.5	17	27

Fair of Failure**Fig 57. Overall Responses of Students for Fear of failure**

When an average of the percentages of respondents among the university students regarding their fear of failure was summarized, as shown in the table 57 and fig 57, it is observed that 27 percent of students have a severe fear of failure, while 17 percent of students are with a moderate fear of failure. A percentage of 24.5 among the university students is found with a moderate fear of failure while 34 percent of them have no fear of failure, at all.

Table 58. Overall Responses of Students for Harsh/inadequate parenting

Intensity	Not at all	Mildly	Moderately	Severely
Students (%)	80.7	8.2	4.3	6.5

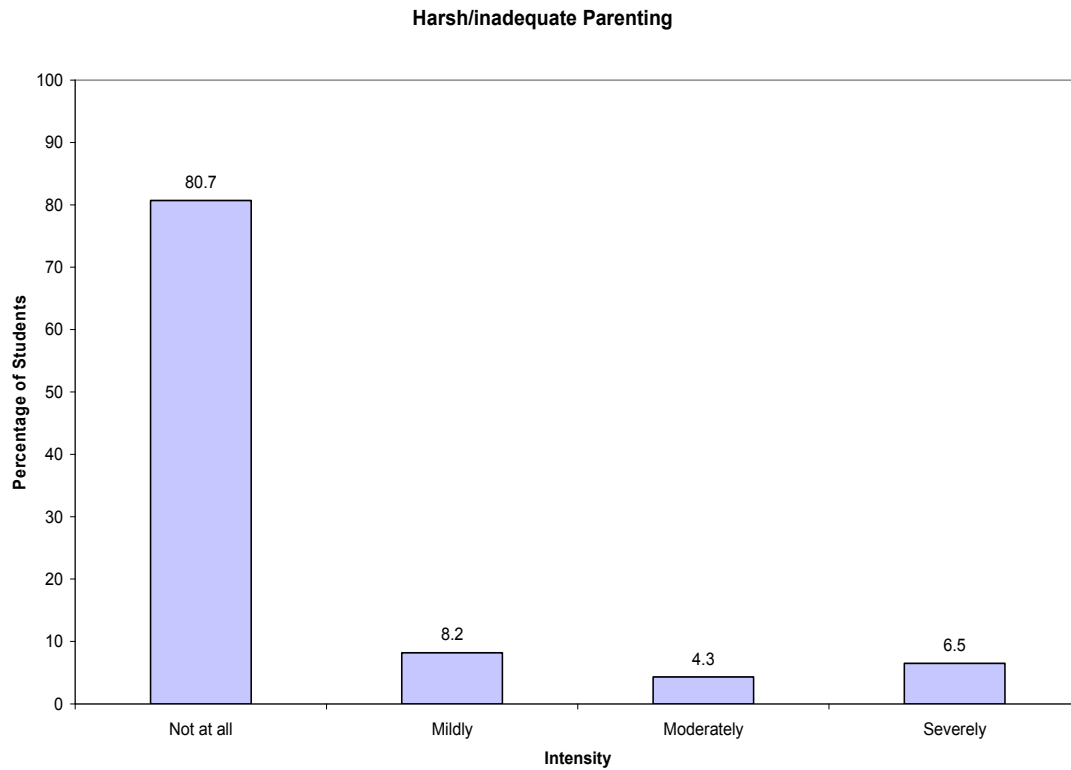
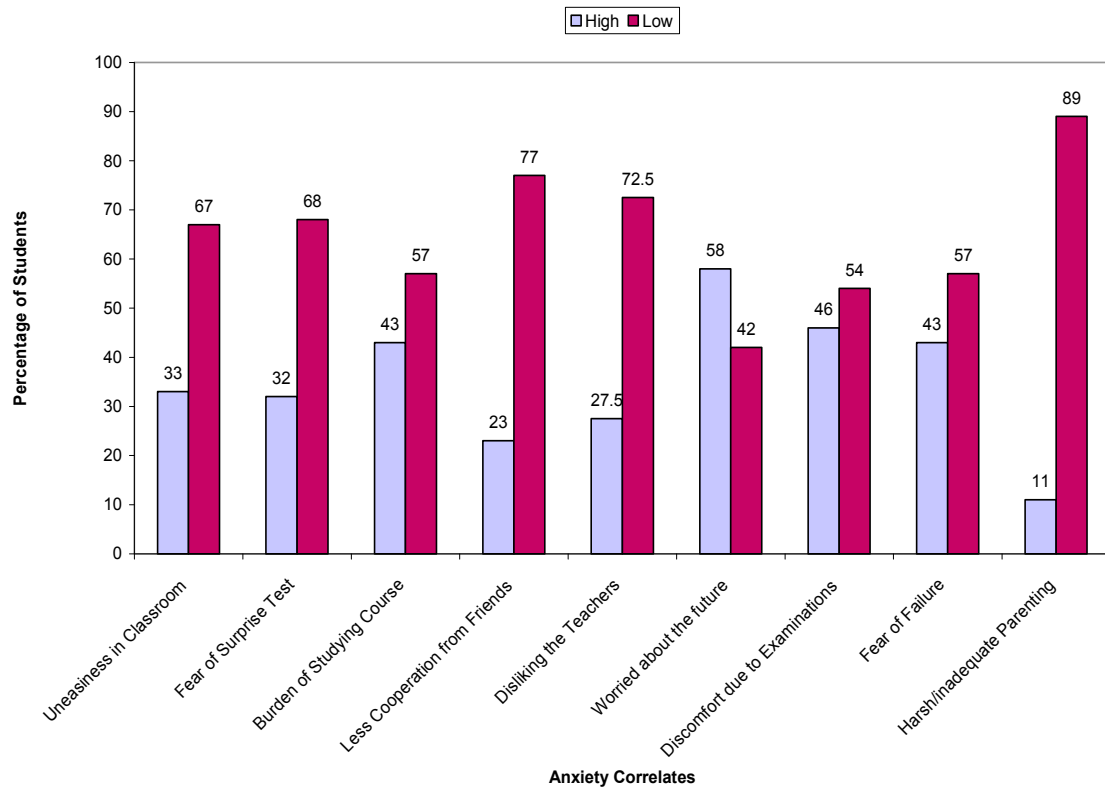
**Fig 58. Overall Responses of Students for Harsh/inadequate parenting**

Table 58 and Fig given above summarizes the data about the inadequacy of students from their parents which show that a vast majority of students is satisfied of their parents with a percentage of 80.7. A small percentage of 4.3, of all of the male and female students have a moderate intensity regarding their parental harsh or inadequate behaviour, while 8.2 percent of students are found with a mild intensity. The severe feelings of parental inadequacy are observed among 6.5 percent of the university students.

Table 59. Responses of Students for Correlates of Anxiety

Anxiety Correlates	Responses (%)	
	High	Low
Uneasiness in Classroom	33	67
Fear of Surprise Test	32	68
Burden of Studying Course	43	57
Less Cooperation from Friends	23	77
Disliking the Teachers	27.5	72.5
Worried about the future	58	42
Discomfort due to Examinations	46	54
Fear of Failure	43	57
Harsh/inadequate Parenting	11	89

**Fig 59. Responses of Students for Correlates of Anxiety**

The Table 59 and Fig 59 show the overall responses of students of the University of Peshawar, regarding the correlates of anxiety. It is obvious from the data that the social correlates of anxiety including the lack of cooperation from friends, disliking the teachers and parental inadequacy has nothing wrong with the students, where a minimum percentage of 11 is revealed by the students with high parental inadequacy. Similarly, 23 percent of students show high need of cooperation from friends and 27.5 percent of the university students have a high dislike for their teachers.

The academic correlates of anxiety revealed by the students seem significant; where uneasiness in classroom with a high intensity is shown by 33 percent of all the students and 32 percent of students have high fear of surprise tests. Burden of studying courses with high intensity is revealed by 43 percent of the university students and a high discomfort due to examinations is shown by 46 percent of all the students. The students with high intensity of fear of failure are with a percentage of 43.

A much greater percentage of 58 of all the university students have a high level of worry about their future, which is the only correlate, with highest intensity.

CHAPTER 5

FINDINGS, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS

This chapter is organized for the findings from the data analysis, discussing the results, deriving conclusion and presenting suggestions and recommendations.

5.1 FINDINGS

The analysis of data revealed a variety of perspectives regarding the anxiety, academic grades and the anxiety correlates. The details are given as follows.

- Among all the departments, the highest percentage of 80 was shown in the minimal level of anxiety by the male students of the department of Environmental Sciences.
- A percentage of 100 in the mild level of anxiety was shown by the female students of the department of Archaeology, Pashto and Quaid-e-Azam College of Commerce.
- The highest percentage of 100 was found among the female students of the department of Persian and Institute of Management Sciences at the Moderate level of anxiety.
- The male students of the department of Philosophy showed the highest percentage of 100 at the severe level of anxiety.
- Among all the faculties, total of 19 percent of male students and 19 percent of female students were found with severe anxiety.
- Similarly, among all the faculties, it was revealed from the analysis of data that an average percentage of 18 among the male students and 25.5 among the female students with moderate level of anxiety.
- The analyzed data from students showed a percentage of 32.2 among the males and 34.2 among the females with a mild level of anxiety, among the faculties.

- It was observed from the university students' data of all faculties that 31 percent of males and 25.3 percent of females were with minimal or no anxiety.
- On average, the severe anxiety was found among 18 percent, the moderate anxiety was found among 21 percent, the mild anxiety was found among 33 percent and the minimal anxiety was found among 28 percent students of the university.
- Among all the departments, the highest percentage of 100 was shown by the female students of the Quaid-e-Azam College of Commerce at the A1 grade.
- The A grade students among all the departments with highest percentage of 100 was shown by the female students of Institute of Management Sciences, the male students of the Department of Arabic and the female students of the Department of Persian.
- The highest percentage of 100 among all the students of all the departments with B grade was shown by the female students of the Department of Philosophy.
- The C grade students with highest percentage of 100 among all the departments of the university were the male students of the Department of Philosophy, the female students of the department of Pashto and the female students of the department of Gender studies.
- The male students of the department of Political Sciences with D grade were found with highest percentage of 75 among all the departments of the university.
- Comparing the academic scores of university students among all the faculties, it was found for male students that 4 percent of them were having A1 grades i.e. scores in last academic examinations above 80 percent. For female students, a percentage of 11.1 was found at this category. It may be stated that female students led the males in highest academic grades.

- Analyzing data regarding the scores of students between 70 and 80 percent, it was found that among all the faculties, 27.5 percent of males and 29.2 percent of females were of this category. Here again the girls preceded the boys with a little difference of 1.7 percent.
- For the academic score between 60 and 70 percent, and analysis of data for all the faculties revealed a nearly same percentage of 29 and 30 for male and female students respectively, to be of this category, at university level.
- The C grade students with percent score above 50 and below 60 at university level among all faculties were found with a percentage of 33.5 among males and 30 among females, which shows the prevalence in C grade among the male students.
- 3.1 percent among male students and 3.5 percent among female students among the faculties of university were found with percent score below 50. Although, it seems to be a little average of students of overall university, but, still the female students are prevailing in D grades with 0.4 percent difference.
- On average, among the overall university, students with A1 grade were 7 percent, students with A grade were 28 percent, students with B grades were 29 percent, students with C grade students were 32 percent and students with D grade students were 3 percent.
- Among all the faculties of the university, the highest negative correlation between anxiety and academic grades was shown by the male students of the faculty of numerical sciences with $r=-0.89$, which represents a high correlation.
- The male students of the faculty of Social sciences were found with second highest negative correlation between anxiety and academic grades, with correlation value $r=-0.86$, a bit weaker than the first one.

- The male students of the faculty of life and environmental sciences were found with third highest negative correlation between anxiety and academic grades, with $r=-0.83$, a bit further weaker.
- The female students of the faculties of life and environmental sciences and numerical sciences were found with correlation coefficient values of -0.7 and -0.59 falling under 4th and 5th category, respectively.
- The students of the faculty of arts and humanities were found on next position, of which, the female students were with $r=-0.38$ and male students with $r=-0.29$, respectively.
- The weakest negative correlation between anxiety and academic grades was found among the female students of the faculty of Islam and oriental studies, with $r=-0.004$, showing a negligible influence of anxiety on academic grades.
- The male students of the faculty of management sciences were found with a weaker positive correlation between anxiety and academic grades, having $r=0.14$.
- Similarly, the male students of the faculty of Islam and oriental studies showed $r=0.4$, with a bit stronger positive correlation between anxiety and academic grades.
- The female students of the faculty of Social Sciences revealed correlation coefficient value of 0.64 , which shows a stronger positive relation between anxiety and academic grades.
- The strongest positive correlation between anxiety and academic grades with $r=0.66$, was shown by the female students of the faculty of Management sciences.
- Among all the female university students, the males were found with $r=-0.62$ and females were found with $r=0.03$, which represents an stronger inverse

relation between anxiety and academic grades for male students and a weaker positive relation between anxiety and academic grades for female students.

- On average, all the university students were found with a negative correlation between anxiety and academic grades, with correlation coefficient value of -0.38.
- All the male and female students of the university were analyzed for a total of 9 correlates of anxiety, including those related with classroom environment, Social dealings with friends, parents and teachers, future careers and the academic factors, including surprise tests, examinations and courses.
- Among the male students 19 percent and among the female students 6.6 percent were found with severe unrest in classroom. A moderate uneasiness in classroom was revealed by 14.2 percent of males and 26 percent of females, among the university students. The remaining students were found with a mild or no uneasiness, due to their classroom environment.
- Regarding the fear of surprise test, it was found that female students prevail in severity of fear with a percentage of 17 while 11 percent of the male students were found with severe fear of the surprise test. Nearly same percentage of 18, both from male and female students were found with moderate fear of surprise test, while the remaining students were found with a mild or no fear of surprise test,
- Majority of male students were found with a severe intensity of burden of studying course representing a percentage of 23 while among female students, 14 percent were found with severity. The moderate burden of studying course was found among 24 percent of male and 24 percent of female students. The remaining students were found with a mild or minimal intensity.
- The severe lack of cooperation was found only in male students with a percentage of 10.5 while there was no female student with such intensity. The

moderate level of intensity was found among 21 percent of male and 13 percent of female students. The overall majority of students were found satisfied with the cooperation from their friends.

- A severe dislike for teachers prevailed among the male students of the university, with 15 percent of respondents. In contrast, 4.4 percent of female students were found with this intensity. Similarly, the moderate intensity of disliking the teachers was also prevailed among the male students of the university, with 25.6 percent while 9 percent of female students were found with this intensity. The remaining students were found with a mild or minimal level of disliking their teachers.
- It was found that the female students prevailed in severe and moderate intensity of worry about their future, with percentages of 36 and 25 respectively. Among the male students, 28 percent were found with severe intensity and 24 percent were found with the moderate one. The remaining students were found with mild or minimal intensity of worry about the future.
- It was revealed that a severe discomfort due to examinations prevailed among the female students with a percentage of 28.5 while among the male students, 15.7 percent were found with this intensity. The moderate discomfort was revealed by 26 percent of male and 22 percent of female students, while the remaining students were found with a mild or minimal severity.
- For the correlate of anxiety regarding fear of failure among the university students, the females prevailed with 36 percent over males with 17 percent. The moderate intensity of fear of failure was found among an equal number of both male and female students, i.e. 16 percent each.
- The parental inadequacy was not found among the majority of students. Only 8 percent of male and 5 percent of female students were found with severe intensity, 6.5 percent of males and 2 percent of females were found with

moderate intensity, 10 percent of males and 6 percent of females were found with mild intensity and a vast majority of students was found with satisfactory parental behaviour, as 75 percent of males and 86 percent of females responded with no harsh or inadequate parenting.

5.2 DISCUSSIONS

Considering the severe and moderate levels of anxiety under the high level and the mild and minimal levels of anxiety as the low level, nearly 40 percent of the university students were found with high anxiety and 60 percent were with low anxiety.

Rab et al (2008), found 43 percent of students with high anxiety prevalence, where they conducted study over female medical students of Pakistan. The present study gives nearly the same results of anxiety prevalence with a little difference in percentage of students.

In contrast, the study gives a significant difference of percentage of students with high anxiety prevalence as compared to the results obtained by Eisenberg et al (2007), who found 13 percent of graduate students with high anxiety, through web based survey.

Similarly, considering the A1, A and B academic grades as the high grades, and considering the academic grades C and D as the low grades, 65 percent of the university students were found with high grades and the remaining 35 percent of the university students were found with low grades.

It may be resulted from the given findings that high anxiety hinders the academic performance up to a large extent. A low level of anxiety encourages the high academic grades, where fewer of students, who cope with the high anxiety effectively, may succeed. The overall correlation coefficient between anxiety prevalence and academic achievements of the university students found was -0.38 which is significant for behavioral sciences. These results come in accordance with

the findings of Quinn and Jimmy (1983), who found a similar inverse relation between anxiety and academic performance of students among university students. Mark et al (2005) and Norman and Yosef (2010), also reported such findings with same inverse relation between anxiety and academic grades of students.

The given research finds a lower percentage of only 5 among the university students, who may follow a valuable defense mechanism, regarding their high anxieties. In this context, Maria et al (2006), suggested that students may follow defenses of various types to reduce their higher anxiety.

It was found that among the male university students, there was a stronger inverse relation between anxiety and academic performance ($r=-0.62$). The findings come in contrast with those of Blessing (2012), who reported that anxiety do have an inverse relation with academic performance, but males were not more prone to high levels of anxiety during test situations.

The causal factors of anxiety among the university students may vary, based on situation they face, but mostly, every students is worried about his/her future up to an extreme level. Andrews and Wilding (2004), found the same environmental factors as the significant correlates of anxiety among British students. It may therefore be established that similar causes of anxiety exist among students belonging to different cultures. Same results were found by Mumford (1998), when the cross-cultural study was conducted on British and Pakistani students.

Similarly, getting high score in the examination seems to be the dream of every student at university, but in contrast, the fear of failure and the discomfort experienced by a student may lead to uncontrolled increase in anxiety. Norman and Yosef (2010), found that task-centeredness regarding success in academics and anxiety prevalence are closely interdependent and the present study support this finding.

The classroom environment, the physical facilities provided or the class durations are also unfavourable for students of the university, which creates an unrest or uneasiness. The same uneasiness in classroom may also add to the increased anxiety and hence decreased academic performance, in turn. The lack of motivation in classroom was reported as the key anxiety correlate by Khan (1996), which was found to be the significant cause of hindered study habits among students.

Hatcher and Prus (1991), also found that the natural and environmental variables are important correlates of anxiety among students, giving them the name of academic situational constraints.

Majority of the university students are not in favour of the course contents, the bulk of subjects to be studied and prepared for examinations in a limited time which may also boost their anxiety to high levels. Misra et al (2000), found that normally, students who fail to manage their time properly show higher anxiety. Similarly, the academic demands and examination work load was found to be important anxiety correlates among students, by Shaikh et al (2004).

The fear of surprise test among the university students, or students mostly having unrest due to un-informed classroom activities also contribute to the increased anxiety level. Thus results are similar to the findings of Mark et al (2005), where test anxiety is concluded as the major cause of anxiety among students, leading towards lower academic performance. Culler and Holahan (1980), argued in this regard that increased anxiety influence the study habits of students, badly. Similarly, Cassidy (2010), also reported that academic anxiety is caused by a number of factors including tests and examinations. Guskey (1988) found that success in first tests ensures good results in subsequent test, while Lowman (1984), suggested that a periodic chain of testing and examinations avoid severe anxiety among students.

The university teachers were found to be doing well, providing an acceptable environment, or teaching effectively, as there remained negligible problems with

students to develop a dislike for them. Rapee and Heimberg (1997), reported that social phobia is related to the information processing and evaluating abilities of an individual. Thus it is obvious from the findings that the university students have improved processing and evaluating abilities, keeping their social phobia minimal. Mealey and Host (1992), argued that adopting appropriate teaching strategies enable students to overcome their difficulties and reduce their anxiety.

The University of Peshawar is providing a cooperative and friendly environment to the students, where there appeared no or little need of improvement for such behaviour by classmates and friends, as majority of students were found satisfied with the cooperation from their friends. Rab et al (2008), concluded that students with more friends have lower anxiety, however, the present study does not give significance in this regard.

Parents were found to be the people of great honour as majority of the university students were found satisfied of parental support and care. Mirza (2004), considered household relationship, domestic problems and lack of education etc. as the prevailing causal factor of anxiety. The present study supports his findings, where students at university level may adopt mechanisms to normalize the household relationships and domestic problems through education.

More ever, some of the university students found with severe anxiety and lack of coping behavior asked the researcher for assistance in overcoming their difficulties; hence they were referred for psychotherapy to expert counselors and psychologists. Thus there may be proper psychological assessments from time to time for students who are at risk. Some of the respondents were found reluctant in their behavior while filling the questionnaire, which demands for encouraging a research environment in the campus. Doubts on the validity of data due to irresponsible behavior of some respondents might change the results.

5.3 CONCLUSION

Based on the findings of the study, summing up the anxieties, academic grades, correlation between anxiety and academic grades of students and anxiety correlates with their intensities, it was concluded that on average, a two-third majority of the university students were found with low anxiety while the one-third university students were found with high anxiety.

Majority of the university students were found with higher academic grades, fewer of which were found in the outstanding category, and mostly in excellent and very good categories. About one-third of the university students were found with low academic grades, out of which, majority of cases were found at the category of good academics while fewer were found at fair level.

On average, the university students revealed an inverse relation between anxiety and academic grades, with significant values of correlation coefficient. The negative correlation prevailed among the male university students as compared to females. Positive correlation between anxiety and academic grades was also found where the faculty of management sciences was on top.

The social correlates of anxiety including inadequate parenting, less cooperation from friends and disliking the teachers were found with low intensities among the university students. The highest intensity was recorded for worry about the future among all of the students of the university. Discomfort due to examinations was found as second most prominent correlate of anxiety among the university students. Burden of studying the course and fear of failure were found with same intensity as correlate of anxiety among university students. The next prevailing correlates were uneasiness in classroom and fear of surprise test among the students of University of Peshawar.

5.4 SUGGESTIONS

The researcher formulated the following suggestions hierarchically based on their requirements.

- Under psychometric significance, the 19 percent of male and 19 percent of female university students having severe anxiety represents a high population of students which needs to be treated properly, as if the case continues, it will become further alarming. Proper therapeutic measures may be employed for this purpose.
- The moderate cases of anxiety were found among 18 percent male and 25 percent female students of the university which is the level is nearer to the severe one, thus, again it seems to be handled properly, as it may reach to severity after continuous existence.
- The mild and minimal levels of anxiety found among the university students are being needed for better academic achievements as per the findings of various researches.
- As majority of students with 28 percent among the males and 36 percent among the females showed a high worry about their future, thus the university curricula may provide the students with guaranteed future, so as to eliminate their worry about career and hence to minimize their anxiety.
- Career counseling on part of university students may be highly effective; hence proper management may be made regarding the resolution of future oriented issues of students.
- As a total of 46 percent of the university students revealed a high discomfort due to examinations, thus the examination system may be reformed and renovated by discouraging annual system, so as to avoid its discomfort faced by students. It may be done through a series of testing

through out the year, while making examination an interesting routine activity.

- The study showed 43 percent of the university students who feel it difficult to study their courses, therefore, the courses of studies, the contents of curricula and the methods of teaching may also be made student-centered, so as to minimize the burden of studying it. In other words, activities regarding in time coverage of the courses may be encouraged, through out the academic session, which may be supportive in terms of studies.
- Shown in the findings, 43 percent of the university students have a high fear of failure, thus student may be encouraged to work hard and consider failure as part of life. The extreme fear of failure, especially in examinations and the social influences over the failed or low grade students may also be minimized to develop a fear-free environment and to encourage an un-tired student's community.
- The study revealed 33 percent of the university students with high uneasiness in classroom, therefore, the classroom environment, class duration, instructional methodologies and class timings, may be re-organized, so as to make students psychologically attached with their institutes and to avoid any sort of uneasiness. The classrooms may be provided with sound facilities in order to maintain proper mental hygiene.
- A percentage of 32 among the university students showed a high fear of surprise tests, thus the students may be made prepared regularly for academic tests and similar classroom activities, which may encourage them for being tested in arranged and surprise manner. Rewarding students for better performance and providing gentle help and support for correcting their mistakes may act as remedial measure to avoid fear of surprise tests.

Questioning technique and discussions applied during instruction may also be helpful in this regard.

- The support provided by teachers and parents in positive academic activities may be kept continued and the students may be made aware of the fact that they are the future builders of their nation. Similarly, mutual cooperation and friendship among students may be encouraged and in case of any conflict, corrective measures may be made.

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

The researcher suggested the following recommendations.

1. Keeping the study limited to the anxiety prevalence and its academic influences among university students, a comparative analysis among students at undergraduate level may be made which may give different results.
2. There have been found fewer of the correlates of anxiety among university students with significant contribution towards anxiety and academic grades. An in-depth study of the anxiety correlates in qualitative manner may be conducted using other tools including interview schedules, observations and sociometric techniques.
3. The present study was conducted as a descriptive investigation in a quantitative frame work. Action research and experimental studies over students in controlled environment may be investigated to refine the causal factors of anxiety and its academic influences.
4. The external validity of the study may be improved by applying randomization and increasing the sample size over other communities of students at university, college and school levels.
5. The present study focuses over the academic anxiety and its correlates and influences among students. Beyond the academic influences of anxiety, its

other aspects including physical, physiological, psychological, social, financial, cultural, moral and religious effects among university students may also be investigated, using validated tools and techniques.

6. Sociological problems, including drug addiction among students, parental abuse, terrorism and unemployment etc. may be taken under consideration regarding anxiety and its influences over academic achievements of students at different levels.
7. Genetic and family influences in psychological aspects of behaviour may be taken into account in terms of biological and chemical analyses among the students at different levels for being influencing anxieties and academic performance.
8. Studies may also be conducted on the utility of mobile phones, printed and electronic media and other such factors, contributing to the anxiety prevalence among the youth.
9. The research is open to criticism and further improvement by using miscellaneous paradigms of academic success and failures among the university students.

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APPENDIX 1

To
The Director Admissions,
University of Peshawar.

Subject: **PROVISSION OF GENDER-WISE RECORED OF POST
GRADUATE STUDENTS FOR THE SESSION 2011-12**

Sir,

It is submitted that I am a Ph.D. scholar, at I.E.R, University of Peshawar, under the supervision of Dr. Arbab Khan Afridi. I am conducting research in the field of Educational Psychology, under the title **Anxiety prevalence and its academic influences among university students.**

Sir,

I have to collect data for the stated purpose from the students of the University of Peshawar, for which I need the exact data of the enrolled students at masters (final), in the running session.

It is requested that I may kindly be provided with the data of gender-wise enrolled students at the University of Peshawar, for the session 2011-12.

Thanks

Yours obediently

Khisro Kaleem Raza
Ph.D. Scholar,
I.E.R.
University of Peshawar.

APPENDIX 2

**Overall Department-wise summary of enrolled students at University of
Peshawar, Session 2009 onwards**



APPENDIX 3

INVENTORY FOR ANXIETY PREVALANCE AND ITS ACADEMIC INFLUENCES AMONG UNIVERSITY STUDENTS

Note:

My name is **Khisro Kaleem Raza** and I am a Ph.D. scholar at Institute of Education and Research, University of Peshawar. I am conducting research under the title **Anxiety prevalence and its academic influences among university students**. I need your kind support in this regard by filling the given questionnaire and providing the correct information. It is composed of THREE parts and takes a total of about 10 minutes for responding. You are hereby requested to read each statement carefully and provide the exact response on your behalf. For knowing your Anxiety level, you may provide your email address.

I will be cordially thankful to you.

PART 1 (Demographic Information)

Name: (Optional) _____

Age: _____

Gender (M/F): _____

Domicile (District): _____

Financial Status (High/Middle/Low): _____

Department/Institute: _____

Hostel (Boarder/Non Boarder): _____

Percent Score in last exam: _____

Email Address (Optional) _____

PART 2
Beck Anxiety Inventory

Below is a list of some common symptoms of anxiety. Please carefully read each item in the list. Indicate how much you have been bothered by each symptom during the past week including today, by placing an X in the corresponding space in the column next to each symptom.

SYMPTOM		NOT AT ALL	MILDLY It did not bother me much	MODERATELY It was very unpleasant but I could stand it	SEVERELY I could barely stand it
1. Numbness or tingling	بے حسی، چکر آنا				
2. Feeling hot	گرمی محسوس کرنا				
3. Wobbliness in legs	پاؤں میں لرزش				
4. Unable to relax	آرام میں دشواری				
5. Fear of the worst happening	کچھ ناگوار پیش آنے کا خوف				
6. Dizzy or lightheaded	سر چکرانا				
7. Heart pounding or racing	دل زور سے دھڑکنا				
8. Unsteady	بے قاعدگی				
9. Terrified	دم گھٹنا				
10. Nervous	گھبراہٹ				
11. Feeling of choking	سانس پھولنا				
12. Hands trembling	ہاتھ لرزنا				
13. Shaky	کپکپی				
14. Fear of losing control	بے قابو ہونے کا خوف				
15. Difficulty breathing	سانس لینے میں دشواری				
16. Fear of dying	مرنے کا خوف				
17. Scared	خوفزدہ ہونا				
18. Indigestion or discomfort in abdomen	بدبضمی				
19. Faint	بے ہوشی، بے دلی				
20. Face flushed	رنگ اڑنا				
21. Sweating (not due to heat)	بغیر گرمی پسینہ آنا				

PART 3
Correlates of Anxiety

Below is a list of some common feelings you may face. Kindly read each item carefully and indicate your intensity of feelings by placing a \checkmark in the corresponding column next to each feeling.

SYMPTOM	NOT AT ALL	MILDLY It did not bother me much	MODERATELY It was very unpleasant but I could stand it	SEVERELY I could barely stand it
22. Uneasiness in classroom				
23. Fear of surprise test				
24. Burden of studying course				
25. Less cooperation from friends				
26. Disliking the teachers				
27. Worried about the future				
28. Discomfort due to examinations				
29. Fear of failure				
30. Harsh/Inadequate parenting				

Thanks for Your Cooperation

(Khisro Kaleem Raza)

APPENDIX 4

GRADE-WISE DISTRIBUTION OF PERCENT MARKS, UNIVERSITY OF PESHAWAR

The Registrar
UNIVERSITY OF PESHAWAR

All communications
with this office should be
addressed to:
The REGISTRAR
University of Peshawar
KHYBER PAKHTUNKHWA
PAKISTAN



Telephone No. 091-9216471
Fax No. 091 – 9216736

No. *6167/Acad.*

Dated *03-09-2013*

TO WHOM IT MAY CONCERN

The Grading System in vogue under Annual and Semester Systems of Examinations at Graduate (B.A./B.Sc.) and Post-graduate (M.A./M.Sc) levels of the University of Peshawar, Pakistan for all disciplines are as under:-

Grading under Semester system of Examinations

<u>Grade</u>	<u>Remarks</u>	<u>Marks obtained (%)</u>	<u>Value</u>
A	Excellent	85 & above	4
B	Very Good	72 to 84	3.0 to 3.9
C	Good	60 to 71	2.0 to 2.9
D	Fair	50 to 59	1.0 to 1.9
F	Fail	49 & below	0.0

Grading under Annual System of Examinations

<u>Grade/Division</u>	<u>Marks obtained(%)</u>
First Division	60% marks & above
Second Division	45 – 59.9
Third Division	33 – 44.9

Note: The required Passing marks in each Course in Master Programmes (M.A./M.Sc.) are 40%. A candidate is required to obtain 45% marks in aggregate to qualify the Examination.

[Signature]
Assistant Registrar (Acad)
University of Peshawar

APPENDIX 5

**TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN
POPULATION**

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size
"S" is sample size.

Krejcie, Robert V., Morgan, Daryle W., "Determining Sample Size for Research Activities", Educational and Psychological Measurement, 1970.