Understanding Examination Anxiety and Its Influence on Academic Achievement: A Correlational Study

T Arun Christopher and Shayista Bano*

*Assistant Professor, School of Education, Central University of Kashmir, Ganderbal, Jammu and Kashmir 191131.

*Research Scholar, School of Education, Central University of Kashmir, Ganderbal, Jammu and Kashmir 191131.

Corresponding Author: T Arun Christopher, Email: arun.tacde@gmail.com

Abstract

Anxiety is a widespread occurrence that is a common cause of pupils' poor academic achievement (AA) globally. It is a form of self-preoccupation that takes the form of self-minimization and is associated with poor cognitive appraisal, inattention, adverse physiological responses, and poor academic performance. In recent years, one of the broadest research fields has been examination anxiety (EA) and its dimensions. In contrast to other students, the majority of Kashmiri students exhibit elevated levels of EA during their final exams, despite consistently achieving outstanding grades throughout the academic year. This study sought to investigate the connection between senior secondary students' EA and academic performance. The current study was carried out on a sample population utilizing a simple random sample of 125 senior secondary students from five schools in the district Kupwara's Education Zone Sogam, using a descriptive correlation research design. The primary outcome variable of the study was the number of times participants experienced the feeling described in each of the 50 statements on the EA Inventory (Subhash Sarkar, 2005), a three-point Likert scale. Data analysis was carried out with SPSS version 18. Findings indicate the subjects' EA scores varied from 37 to 84. About 6.84% of girls and 3.84% of boys showed extremely high levels of EA. Around 28.84% of boys reported experiencing average levels of EA, and 21.91% of girls reported EA feeling at below-average levels. A statistically significant negative correlation was found between EA ratings and students' AA ($r = -0.052$, $p = 0.01$), which helps to explain why some senior secondary students have modest EA. EA scores and senior secondary students' gender were compared, and the results of the t-test showed a statistically significant difference (M = 57.85, SD = 18.76), suggesting that the mean EA score is greater for female participants. In a similar vein, pupils in the science stream achieve much more academically than those in the arts stream (M=374, SD=56.60). The study's findings indicated that mild to moderate degrees of EA were reported by a sizable portion of the study's student participants. Through group work with students, parents, teachers, academic advisors, and other concerned stakeholders, it is essential to support senior secondary students in managing stress and reducing EA. Given the physiological and psychological elements

that contribute to extreme EA, counselling services have to be provided with easy access and free of stereo-typing for students in schools.

Keywords: Examination anxiety, academic achievement, senior secondary students.

Introduction

Anxiety is a widespread occurrence that is a common cause of pupils' poor academic performance globally. It is an indisputable truth that anxiety affects people's performance in a variety of contexts; on the other hand, a moderate level of worry can motivate people to work hard and take responsibility for their actions (Donnelly, 2009). According to Asadullapoor, Fati, and Gharaee (2010), anxiety is the experience of something being unwelcome and ambiguous, such as when someone anticipates danger. An individual's mental and physical well-being, as well as their performance in school, the workplace, their social life, and their family, are all negatively impacted by extreme anxiety (Zahrakar, 2008). One of the subjects that has been explored the most in recent years is the traits of test anxiety. This kind of anxiety is especially noticeable around test times. Students who suffer from this physiological state either before or during an exam feel extremely stressed, anxious, and uncomfortable. Significant obstacles to learning and performance are brought about by this anxiousness. The majority of research has shown that EA is a two-factor construct made up of both cognitive and emotional elements. According to the predominant interpretation of the relationship between these two variables, students' exam performance is directly influenced by the cognitive component, whereas emotionality is related but does not directly affect exam performance (Cassady, 2001), even though significant damage happens to achievement scores. The person may feel distressed by the careful observation and evaluation of their performances (Cheraghian, Fereydouni, BarazPardejani & Bavarsad, 2008). This can occasionally result in low self-esteem or subpar AA (Moadeli & Ghazanfari, 2005). Research indicates that test anxiety may have more severe effects, adversely influencing a student's behavioural, social, and emotional growth in addition to their self- and school perception.

The literature focused a lot on stress and senior secondary pupils' awareness of upcoming stresses (Nicholl & Timmins, 2005). Students at school must adjust to new circumstances that may disrupt their daily routines and habits. They must also succeed in order to attain the best possible academic standing, which can have a negative impact on their performance and result in stress, despair, and anxiety (Shamsuddin, Fadzil, Ismail, Shah, Omar & Muhammad, 2013). It is highly likely for students to have anxiety when taking exams. Researchers and educators like Deb, Chatterjee, and Walsh (2010) have shown that students are prone to significant anxiety before the exams because of their doubts and anxieties, and after exams, have concerns about their results and the implications that follow. These result in pressure, fear of crashes, and worry, affecting the physiologically stable conditions of the student and can lead to a potential disorder. Leta (2001) states that

there is an increase in anxiety disorders among students. Recent research on anxiety and related subjects found anxiety disorders are common in Indian society, especially among adolescents. Cassady (2010) provides more support for this claim, estimating that between 25% and 40% of students suffer from anxiety, which has a substantial negative impact on their academic performance. One of the common causes of anxiety among adolescents is EA (Amiri-Majd & Shahmoradi, 2008). Most of the time, this type of worry makes it harder for students to perform well on tests (Bonaccio & Reeve, 2010). Additionally, their capacity to demonstrate understanding of the subject taught in school that is to be assessed declines, which subsequently results in subpar performance on the exam, which impacts exam results and final grades (Markman, Balik, Bercovitz & Ehrenfeld, 2010). EA is an unwanted response to the assessment. Children unable to adapt have severe consequences in the immediate and long run, especially in a country like India, where AA is viewed as a significant identity criterion at the senior secondary level. Khosravi and Bigdeli (2008) assert that it is the most significant issue for students around the world. EA was defined as "the subjective feeling of tension, apprehension, nervousness, and worry associated with an arousal of the automatic nervous system" by Asadullapoor, Fati, and Gharaee (2010). According to Chapell et al. (2005), EA is a multifaceted phenomenon that includes unease, emotionality, and behavioural reactions to being consumed by the fear of receiving poor grades. Students with EA suffer from a psychiatric disorder that causes them to feel extremely distressed and anxious throughout exams. It is necessary for pupils to experience some anxiety during tests in order to become motivated and study. Anxiety build-up will not improve a student's performance; on the contrary, it will have a detrimental effect on their academic record (Coon & Mitterer, 2009). Before an exam, students may experience a build-up of psychological symptoms such as tremors, restlessness, strange bodily movements, difficulties focusing, insomnia, weariness, and muscle contraction (Porto, 2013). The lives of students and professional development are negatively impacted by these symptoms (Ferreira, Almondes, Braga, Mata, Lemos & Maia, 2014). Despite receiving strong grades throughout the semester, the majority of senior secondary students suffer from high levels of anxiety during the final test (Akbary-Boorang & Aminyazdi, 2009). According to Driscoll Evans, Ramsey, and Wheeler (2009), senior secondary students experience moderately high levels of EA at a rate that is almost twice that of the general population and high school students. Academic settings in senior secondary schools might be considered quite stressful. Stress levels are increased when students take multiple exams during their academic careers and are expected to perform better at the senior secondary level. They must study more before taking the tests because they have both theoretical and practical exams, which are very stressful (Mahat, 1998). Additionally, the crippling effects of EA include student attrition, which happens when students get tight, anxious, frightened, and emotionally aroused and ultimately do poorly academically (Joseph Bentil, 2020). According to Bhatta, Subba, and Bhandary (2018), EA was much higher among private school students than it was for students in public

schools. The outcome defied Akanbi's (2013) findings, which showed that pupils at public schools had higher anxiety levels than those in private schools. The sample population for this study came from the Kupwara district's public schools. EA is more common among senior secondary students than in other students, primarily due to the pressure to juggle extended study sessions necessary for success with numerous jobs, career adjustments, and family commitments. Students may experience chronic stress over time as a result of these stressors (Beggs, Shields & Goodin 2011). Similarly, Salend (2011) found that a healthy amount of anxiety can boost students' motivation, memory, and focus, as well as their performance on tests. It goes without saying that excessive anxiety can have a terrible impact on AA. Numerous studies have documented varying degrees of EA among students since the literature suggests that there is a continuum of EA, ranging from mild to severe. Ferdous (2012) and Guress, Kaya, Dogar, Gunes, and Hasan (2010) found that students exhibited elevated levels of anxiousness during exams. Furthermore, research revealed that children in lower grades experienced greater levels of test anxiety compared to those in higher grades. Cherry (2012) found that students can perform rather well on exams even if they display moderate levels of EA. These contradictory results highlight the need for additional research to clarify the degree of EA in particular contexts so that suitable measures can be implemented. It is very important to do in-depth research in this area to determine the precise location of the relationship between test anxiety and AA among upper-secondary students in Jammu and Kashmir.

Researchers have recently paid close attention to the influence of demographic characteristics (sex, academic stream) on pupils' anxiety levels. Putwain (2007), for example, discovered that girls reported higher levels of EA in elementary school across cultures than boys. The findings of Zaheri, Shahoei, and Zaheri (2012) validated the earlier observation that EA is heavily influenced by gender, with males demonstrating lower levels than females. However, the findings of this study contrast other studies (Fiore, 2003), which found no difference in test anxiety based on sex. Similarly, academic streams have an impact on EA and achievement. In the Indian setting, students in the scientific stream are required to have higher grade levels in their earlier qualifying examinations (i.e., X class) than students in the arts and language. Prior research, like that of Fulya (2008), discovered that student variations in test anxiety were not explained by grade level. Nonetheless, studies like Ferdous's (2012) found that students in lower grades are more anxious before exams than students in higher grades. Additionally, children in higher grades reported higher levels of EA than students in lower classes, according to Sansgiry and Sail's (2006) study. In conclusion, research on the relationship between grade level and test anxiety has produced contradictory findings; therefore, empirical research in a range of settings and cultural contexts is needed. As the literature has also revealed that researchers' conclusions on the influence of these variables on students' EA levels and achievement varies, more research is needed to investigate these variables in various contexts, such as Education Zone Sogam in district Kupwara, J&K.

Aim of the Study

This study had three goals. The first was to find the level of EA and AA. Second, to investigate the correlation between senior secondary pupils AA and EA. Third, learn how students' AA and EA are influenced by demographic factors.

Subjects and Methods

Research Question

The study was guided by the following research questions:

1. Do public senior secondary students of Zone Sogam of Kupwara experience EA, and if so, what is the level?

2. What is the relationship between EA and AA among senior secondary students of Zone Sogam of Kupwara district of J&K?

3. Is there a difference in EA level and AA with respect to gender and academic stream among senior secondary students of the Kupwara district of J&K?

Research Design

In order to determine the association between EA and academic accomplishment as measured by marks among senior secondary students in the Kupwara area of J&K, this study used a descriptive correlation method.

Setting

The study was done in five schools in the Education Zone Sogam in Kupwara District, Jammu and Kashmir. These coeducational schools offer both science and arts streams, and hence, it was convenient to conduct the survey.

Sample

125 male and female senior secondary school students (XI standard) were invited to participate in the study as a convenience sample.

Tools and Measurements of Data Collection

Data were gathered using a two-part questionnaire. The first section focused on the participants' demographic information, such as gender, educational background, and grades in X class. The second portion of the questionnaire comprised the EA Inventory (Spielberger, 1980), which was used to assess the current study's major outcome variable, EA, among senior secondary students. The EAS consists of 50 statements, and participants

rate how frequently they experience the feeling expressed in each phrase using a three-point Likert scale. The lower the score on EAS, the less anxiety there is. The current study conducted a reliability analysis on the EA inventory, which exhibited strong reliability (Split half [odd-even] method = 0.79).

Data Collection

A brief summary of the trial was provided to participants who gave their consent to participate in the investigation. In collaboration with a variety of class teachers, researchers planned 20–25 minutes of class time so that students could finish the survey. The data were obtained during a 5-day period schedule, with proper permission from school authorities. Students were properly oriented about the research before conducting the survey and ensured their responses were free from bias and reservations.

Statistical Analysis

SPSS version 18 was used to code, enter, clean, and analyze data. The data was presented using descriptive statistics like frequencies and percentages. Mean and standard deviations were used to describe interval and ratio variables. A proper statistical analysis was conducted based on the study variables. The statistical significance level was set to ($p < 0.05$).

Results

The current study was done with the aim of exploring the relationship between EA and AA among senior secondary students.

Table 1

Distribution of participants according to their level of Examination anxiety (n=125)

	Levels	Number of males	Percentage	Number of females	Percentage
	Extremely High	2	3.84	5	6.84
	High	4	7.69	9	12.32
	AboveAverage	14	26.92	11	15.06
	Average	15	28.84	9	12.32
Examination	Below Average	6	11.53	16	21.91
Anxiety	Low	7	13.46	12	16.43
	Extremely Low	4	7.69	11	15.06
	Total	52	100	73	100

Table 1 shows the subjects' responses to the EA Scale. As seen in the table, a higher proportion of female students experience high and low degrees of EA. Males experience

above-average and ordinary levels of EA.

Table 2

Distribution of participants according to their level of Academic Achievement (n=125)

	Marks	Number of males	Percentage	Number of females	Percentage
	91 and above	7	13.47	6	8.22
	81 – 90	9	17.30	7	9.59
	71 – 80	11	21.16	9	12.33
Academic Achievement	61 – 70	13	25	18	24.66
	< 61	12	23.07	33	45.20
	Total	52	100	73	100

Table two represents the participants' AA in their previous qualifying examination at X standard. Male student's achievement is distributed evenly, while female achievement is heavily stacked at the lower scores.

Table 3

Relationship between Examination Anxiety, Academic Achievement and Gender (n = 125)

Variable	Gender	N	Mean	SD	t-value	Remarks
Examination Anxiety	Male	52	50.58	15.70	2.28	Significant
	Female	74	57.85	18.76		
Academic Achievement	Male	52	362.10	56.25	1.30	Not Significant
	Female	73	357.40	65.90		

Table three represents the relations between EA, achievement, and gender among the students. It is evident from Table 3 that there exists a significant difference between male (M=50.58) and female students (M=57.85) with respect to EA but not with AA. Achievement levels at the senior secondary level of the Sogam zone are fairly similar between boys and girls in spite of variations in EA.

Table 4

Relationship between Examination Anxiety, Academic Achievement and Academic Stream

Variable	Stream	N	Mean	SD	t-value	Remarks
Examination Anxiety	Arts	65	55.74	20.18	0.59	Not Significant
	Science	60	53.83	15.03		

Academic	Arts	65	334.60	61.64		
Achievement	Science	60	374.00	56.60	3.71	Significant

Table four represents the relations between EA, achievement and academic stream of the students. Through this study, it is evident that there is no significant difference between students from the arts or science streams in terms of EA. In AA, science stream students' performance is significantly higher than that of the senior secondary students pursuing the arts stream of the Sogam zone.

Table 5

Correlation between Examination Anxiety and Academic Achievement at senior secondary level(n = 125)

Variables	Correlation Coefficient "r"	Remarks
Examination Anxiety & Academic Achievement	- 0.052	Significant

*p <0.01.

From Table 5, it is inferred that EA and AA are inversely correlated. When anxiety increases, Sogam zone senior secondary students' AA decreases.

Discussion

The primary goal of this study was to investigate the link between EA and AA among senior secondary students. The findings revealed that EA is inversely connected to AA (Mukolwe, A. N., 2015). These findings are closely related to the study conducted by Dordinejad et al. in 2011. In the current study, it was discovered that 28.84% of boys and 21.91% of girls exhibit below-average EA, which is the greatest at any level in this study, indicating that EA is well-controlled among senior secondary students. Chapell, Blanding, and Silverstein (2005) showed similar levels of EA findings. EA of a moderate degree is necessary for improved academic performance (Duty, Christian, Loftus, & Zappi, 2016); lack of anxiety eventually results in subpar academic performance since anxiety causes pupils to suffer academically (Driscoll et al., 2009).

According to the results of the current study, achievement and test anxiety were significantly correlated among senior secondary students. (J. C. Cassidy & R. E. Johnson, 2002). This result was consistent with the study of Afolayan et al. (2013), which shows that

students' performance and exam results were adversely affected by anxiety manifested as physiological, psychological, and behavioural throughout the exam (Dordinejad et al., 2011). They found in their study that students do worse academically when they have greater EA. According to (Onyeizugbo, 2010), students who experience higher levels of EA tend to perform less academically. But the current study's findings ran counter to those of Okorodudu, G. N., & Ossai, M. C. (2004); Cheraghian et al., 2008; Mohammed, S., Halilu, S., & Muhammad, M. A. (2017), who found no evidence of a significant connection between EA and AA.

In the current study, comparisons of the effects of EA by sex produced contradictory results. According to reports, female senior secondary students had similar or greater AA scores than their male counterparts Johnson, L. (1997), despite the fact that females have allegedly experienced much more EA than boys (Hojat, M. et al., 1999). It is still unclear how female students might get higher TAI scores and GPAs that are on par with or higher than those of male students. According to reports, women experience higher levels of anxiety than men in the general population (Regier A. et al., 1993). According to Kurosawa and Harackiewicz (1995), there is a possibility that a danger perception system could mediate the effects of unequal sex. As a result, the higher likelihood of fear associated with females' marked EA levels may be due to their heightened propensity to view evaluative settings as threatening rather than challenging. Despite the fact that female senior secondary students score higher on EA, our findings do not support this notion. Students who identify as male or female may have very different coping strategies, offsetting emotional disparities depending on sex. This is a topic that needs more investigation.

EA undoubtedly has a negative impact on AA, but it only partially explains the heterogeneity in academic performance. More research is required to define and make clear the functions of performance predictors. Furthermore, it is unclear how EA and AA are causally related. Just as EA negatively impacts academic performance, poor academic performance is likely to exacerbate EA. Because of this, it is difficult to separate the causes and effects of these two components. According to Niu Zhang and Charles N. R. Henderson (2014), research is required to investigate strong regression models that incorporate factors such as class, lab, independent, and group study hours, as well as general assessments of academic ability and prior test scores.

Students pursuing science and arts programs showed comparable degrees of EA when it came to their academic streams. However, in terms of AA, senior secondary science students of the Sogam zone (M=374; SD=56.60) outperformed pupils studying the arts academic stream (M=334.60; SD= 61.64) of the Sogam zone. In a conservative society which values higher education, students who perform better in their SSLC (X class) are naturally prone to prefer the science stream, and hence the variation in AA is on expected and understandable lines.

Limitations

The stated study's sample size and study methodology restrict its generalizability. It is anticipated that senior secondary students be limited to XI class students as class XII students are not allowed to participate in the survey of their exam-taking behaviours. It is a general principle that class XII students are trained with a vigorous schedule, and school management will not allow them to be part of research studies, and this is a limitation. Another aspect is that the outcomes of the previous exam determined the AA scores in this study; it is important to assess student characteristics carefully before drawing any conclusions about the association between EA and AA. Moreover, the five senior secondary schools in the Sogam Education Zone of the Kupwara district were the only ones included in our sample. Finally, just a written type of exam results could not accurately reflect a student's total AA. When extrapolating our findings, these study characteristics need to be taken into account. This study aimed to give academic scholars and educators access to previously unobtainable data. This is the first comprehensive study that we are aware of that looks at test anxiety and performance in the Sogam education zone. The findings will assist district educational officials in understanding and creating strategies to reduce EA in senior secondary pupils. Further research is obviously required to investigate the relationship between EA and academic accomplishment in J&K's senior secondary pupils, especially in light of the recently implemented education reform.

Conclusions and Recommendations

The study's findings demonstrated that there is no correlation between senior secondary students' grade point average and EA. Furthermore, very few people experienced acute EA. The distribution of EA ratings is generally similar for males and girls. EA and AA were not significantly influenced by sexual orientation or academic stream, respectively. The majority of individuals reported having average anxiety during exams, which indicates that worry during exams serves as a motivator rather than having a direct impact on students' academic performance. Even though it is crucial to support senior secondary students in managing their stress and reducing their test anxiety through group work involving students, parents, teachers, and academicians, it was found that very few students experienced really high levels of EA. The findings imply that maintaining the best possible physical and mental health throughout exams is crucial for improving academic performance. Further research is necessary to address the physiological and psychological reasons that cause severe EA, particularly in senior secondary pupils, as current research does not fully address these factors.

Based on the results of this investigation, the following recommendations are proposed:

1. Replicate the current study using a bigger sample size and a mixed quantitative and qualitative research methodology to gain a deeper understanding of the factors influencing senior secondary students' EA.

2. Senior secondary schools should implement counselling programs to provide guidance, particularly prior to exams. This can assist students do better academically by lowering their EA.

3. Teach students how to manage their exam fear and help them realize that a certain amount of anxiety is necessary to serve as a test-day motivator.

4. Assignments, tests, and continuous assessment exams should all be carefully scheduled to prevent pupils from experiencing excessive stress, which is likely to cause anxiety.

Funding

Conflict of Interests

The authors state that, in relation to the materials presented in this work, they have no conflicts of interest with any organization.

Acknowledgement

References

Afolayan J. A, Donald B, Onasoga O, Babafemi A & Juan A. (2013). Relationship between anxiety and academic performance of nursing students. Niger Delta University, Bayelsa State, Nigeria. *Advances in Applied Science Research.* 4 (5):25-33.

Akanbi, S.T. (2013). Comparisons of test anxiety level of Senior Secondary School students across gender, Year of Study, School type and parental educational background. *IFE Psychologia*, 21(1), 40-54.

Akbary-boorang M. & Aminyazdi A. (2009). Test-Anxiety and Self-Efficacy. *Horizon of Medical Sciences Journal. 2 (15), 70–7.*

Amiri-Majd M. & Shahmoradi A. (2008). Effects of cognitive behavioral therapy in reducing anxiety. Behav Sci. 7 (3), 53–64.

Asadullapoor, A., Fati, L., & Gharaee, B. (2010). Metacognitive anxiety and the immediate and delayed judgment of learning. *Journal psychiat clinic psychol*. 16(4), 412–19.

Beggs, C. Shields, D. & Janiszewski Goodin, H. (2011). Using guided reflection to reduce

test anxiety in nursing students. *Journal of Holistic Nursing.* 29 (2), 140–147.

Bentil, J. (2020). Examination Anxiety as Correlate of Junior High School Pupils Academic Performance in the Effutu Municipality of Ghana. *Advances in Social Sciences Research Journal,* 7(1) 10-23.

Bhatta, K. R., Subba, S. & Bhandary, S. (2018). Test anxiety: Prevalence and correlates. *International Journal of Current Research and Academic Review,* 6(8), 75-82.

Bonaccio, S., & Reeve, C. (2010). The nature and relative importance of students' perceptions of the sources of test anxiety. Learning and Individual Differences, 20(6), 617-625.

Cassady J. C. (2005). The effects of online formative and summative assessment on undergraduate students' achievement and cognitive test anxiety. *Journal of Tecnology Learning and Assessment.* 4 (1), 14-21.

Cassady, J. C. (2010). Test anxiety: Contemporary theories and implications for learning. New York, NY: Peter Lang.

Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary educational psychology,* 27(2), 270-295.

Chapell, M. Blanding, Z. Silverstein, M. (2005) Test anxiety and academic performance in undergraduate and graduate students. *Journal Educ Psychol.* 97 (2), 268–274.

Chapell, M. S., Blanding, Z. B., Takahashi, M., Silverstein, M. E., Newman, B., Gubi, A., & Mccann, N. (2005). Test anxiety and academic performance in undergraduate and graduate students. *Journal of Educational Psychology,* 97 (2), 268-274.

Cheraghian, B. Fereydouni, M. BarazPardejani, S. Bavarsad, N. (2008). Test anxiety and its relationship with academic performance among nursing students. *Journal Knowl Health.* 3(4), 25–29.

Cherry, K. (2012). Causes of test anxiety http://www.psychology.about.com/od/ mentalhealth/a/test-anxietycauses.htm – Retrieved 3rd April, 2023.

Coon, D. & Mitterer, J. (2009). Psychology of Test anxiety. Journey of Cengage Learning. 28(3), 48-53.

Dawood, Eman; Al Ghadeer, Hind; Mitsu, Rufa; Almutary, Nadiah; Alenezi, Brouj (2016).Relationship between Test Anxiety and Academic Achievement among Undergraduate Nursing Students, *Journal of Education and Practice,* Vol.7, No.2.

Deb, S., Chatterjee, P., & Walsh, K. (2010). Anxiety among high school students in India:

Comparisons across gender, school type, social strata and perceptions of quality time with parents. *Australian Journal of Educational and Developmental Psychology,* 10, 18-31.

Donnelly R. (2009). Embedding interaction within a bend of learner centric pedagogy and technology. *World Journal on Educational Technology.* 1 (1), 6-9.

Driscoll, R. Evans, G. Ramsey, G. & Wheeler, S. (2009). High test anxiety among nursing students. *Education Resources Information Center.* 14 (4), 350-356.

Duty, S. M., Christian, L., Loftus, J., & Zappi, V. (2016). Is cognitive test-taking anxiety associated with academic performance of nursing students. *Nurse Educator*, 41(2), 70-74.

Ferdous, F. (2012). A case study of first-year non-English undergraduate students' English learning anxiety in Bangladesh. *Journal of Education and Practice,* 3(9), 1-11

Ferreira C, Almondes K, Braga L, Mata A, Lemos C & Maia E. (2009). Evaluation of trait and state anxiety in first year students. Cien Saude Colet. 14 (3):973-81.

Fiore, A. M. (2003). Gender differences in test anxiety. A partial MA thesis, College of Human Resources and Education, West Virginia University.

Fulya, Y. S. (2008). "Mathematics anxiety among 4th and 5th grade Turkish elementary school students," *International Electronic Journal of Mathematics Education,* 3(3), 28-38.

Grooms, R. R., & Endler, N. S. (1960). The effect of anxiety on academic achievement. *Journal of Educational Psychology,* 51(5), 299 – 304 https://doi.org/10.1037/h0042077

Guress, A. Kaya, O. Dogar, C. Gunes, K. Hasan, Yolcu, H. (2010). Measurement of secondary school students' test- anxiety levels and investigation of their causes. J. Social and Behavioral Sci., 9, 1005-1008.

Hojat, M., Glaser, K., Xu, G., Veloski, J. J., & Christian, E. B. (1999). Gender comparisons of medical students' psychosocial profiles. *Medical education,* 33(5), 342-349.

Johnson, L. (1997). Grades accomplishments and correlates in Willingham and cole. Gender and Fair Assessment, 127-156.

Kahan L M. (2008). The Correlation of Test Anxiety and Academic Performance of Community College Students. Capella University. United State. *Pro Quest LLC journal.*

Khosravi, M. & Bigdeli, I. (2008). The relationship between personality factors and test anxiety among university students. *Journal of Behavioral Sciences.* 2 (1), 13–24.

Kurosawa, K., & Harackiewicz, J. M. (1995). Test anxiety, self-awareness, and cognitive interference: A process analysis. *Journal of personality,* 63(4), 931-951.

Leta, S. (2001). Depression Rates among College Students on the Rise. The Daily California. 3 (2), 189- 192.

Mahat G, (1998). Stress and coping: Junior baccalaureate nursing students in clinical settings. Nursing Forum. 33 (1), 11-19.

Markman U, Balik C, Braunstein-Bercovitz H Ehrenfeld M. (2010). The effects of nursing students' health beliefs on their willingness to seek treatment for test anxiety. *Journal of Nursing Education.* 50, 248-251.

Moadeli Z & Hemsamabedi G. (2005). Survey on the students' exam anxiety in the Fatemeh (P.B.A.H.) College of Nursing and Midwifery. *Journal of Strides in Development Medical Education.* 1 (2), 65-72.

Mohammed, S., Halilu, S., & Muhammad, M. A. (2017). Effects of Examination Anxiety on University Students'Academic Performance in Northwest University, Kano, Nigeria. *European journal of education studies.*

Mukolwe, A. N. (2015). Selected correlates of examination anxiety and academic performance of students in public secondary schools in Khwisero Subcounty, Kakamega County, Kenya (Doctoral dissertation, Kenyatta University).

Nicholl H & F.Timmins. (2005). Programmed-related stressors among part-time undergraduate nursing ents. *Journal of Advanced Nursing.* 50 (1), 93-100.

Niu Zhang, and Charles N. R. Henderson, (2014). Test anxiety and academic performance in chiropractic students[, J Chiropr Educ,] 28(1), pp.2–8. https://doi.org/10.7899/JCE-13-20

Okorodudu, G. N., & Ossai, M. C. (2004). Relationship between examination anxiety and students' academic performance in a psychology course. *Nigerian Journal of Psychology and Education*, 1, 148-152.

Porto, A. (2013). Definitions and classification of NANDA nursing diagnoses. *NANDA International.* 68 (4), 603-609.

Putwain, D. W. (2007). Test anxiety in UK schoolchildren: prevalence and demographic patterns. *British Journal of Educational Psychology, 77,* 579.

Regier, D. A., Farmer, M. E., Rae, D. S., Myers, J. K., Kramer, M. R. L. N., Robins, L. N., ... & Locke, B. Z. (1993). One-month prevalence of mental disorders in the United States and sociodemographic characteristics: the Epidemiologic Catchment Area study. Acta Psychiatrica Scandinavica, 88(1), 35-47.

Salend, S. J. (2011). Addressing test anxiety. Teaching exceptional children, 44(2), 58-68.

Sansgiry S, & Sail, K. (2006). Effect of students' perceptions of course load on test anxiety. *American Journal of Pharmaceutical Education* 70(2), 26-36.

Shamsuddin, K. Fadzil, F. Ismail, W. Shah, S. Omar, K. & Muhammad, N. (2013). Correlates of depression, anxiety and stress among Malaysian university students. *Asian Journal of Psychiatry*. 6 (4), 318-23.

Zahrakar, K., (2008). Stress Consultant. Tehran: Bal University Publication, 1sted. (chapter1).