Impact of Test Anxiety on Paper Management and Students' Performance

Asif Iqbal, Sabahat Parveen*
University of Education Faisalabad
*E-mail: sabahatmushtaq@hotmail.com

Abstract

The current study was conducted to explore the impact of test anxiety on paper management and performance of students**.** The main objective of the study was to investigate the test anxiety impact on paper management indicators with respect to their performance. All the students enrolled in the department of Education and directorate of distance learning at GC University Faisalabad were the population of the study. Three hundred and fifty six students participated in this study. Data were collected with the help of self-developed instrument, Paper Management and Anxiety Scale [PMAS] with Alpha reliability 0.836. Mean, Standard deviation, t- test, and ANOVA were applied to analyze the data on five indicators (time management, physical environment, content clarity, content mastery, and anxiety) of paper management and anxiety. Results revealed that students were less satisfied with the indicators of physical environment and content mastery. Female students were less satisfied with the paper management techniques, so, they performed poor with higher anxiety when compared with male students. Further studies may be conducted to train the students regarding paper management and anxiety reduction techniques.

Keywords: test anxiety, paper management, content clarity, content mastery, time management

Introduction

The outcomes of educational objectives are the result of attentive learning in the classroom, appropriate teaching strategies, and actual reflections in the final assessment in exams. Sometimes all the academic activities went in vain due to poor management of paper. Students face anxiety and ultimately fail in exams or they show poor performance. Test or exam anxiety influences students' grade level. It is a challenging task to help students' manage and reduce anxiety. It is not an individual task rather a team effort by teachers, parents, and peers (Harris & Coy, 2003). However, teaching styles of teachers have no link with test anxiety and students' evaluation about test (Crişan, Albulescu, & Copaci, 2014). There are two types of test anxiety. The first is somatic anxiety which concerned with one's feelings. The second is cognitive anxiety which is concerned with one's thinking (Nolting, 2000).

Review of Related Literature

Effective Management of Paper

Poor paper management is a common problem that many university students face which in turn creates exam anxiety (Study Skills Resource, n.d.). Often the students did well in the exam but on result day all their expectations went disappointed. Basically they are unable to attempt their paper effectively. The students should prepare their test well, pin point major concepts but never skip minor topics too. They must start their paper from strong points to avoid negative perception by the examiner or paper checker. The students should solve all questions and do not left an answer unattempt with the hope to attempt it afterwards but it never comes. Losing a single question is like surrendering certain marks. Keep your paper clean and avoid unnecessary overwriting. Make your paper easy and legible for paper checker (www.eduinn.pk).

Test or exam anxiety is a state of distress or uneasiness that examinee face during, before, or after exams which leads to poor performance. The examinee with exam anxiety feel low concentration, distractibility and mental disorders (Study Skills Resource, n.d.). The factor that affect exam performance are reported as lack of self-confidence, limited time, intelligence, and low writing skills (Amiryousefi & Tavakoli, 2011). Knowledge development is linked with students' anxiety, time perception, and impetuosity (Bagana & Raciu, 2012). Many studies highlighted the negative relationship between academic performance of students and test anxiety for both genders (Crişan & Copaci, 2015; Stomff, 2014).

Gender and Paper Management

Exam anxiety is a natural phenomenon. It may affect students' career positively as well as negatively. It depends upon the situation where students are attempting the papers. All students show test anxiety during exams but female students had higher level of exam anxiety than that of males (Gürses, Kaya, Doğar, Günes, & Yolcu, 2010). Translation test anxiety has significant relationship between motivation of students, anxiety level and attitudes. Gender wise comparison revealed that female students indicated greater level of translation test anxiety than that of male students (Gorjian, Mahmoudi, & Mir, 2012). The female students were more concerned than that of males with respect to English speaking skills in classroom (Öztürk & Gürbüz, 2013). Female students showed more anxiety and worry than male students (Hosseini & Khazali, 2013). There is no significant difference regarding the reading test performance and anxiety (Javanbakht & Hadian, 2014). A study conducted by Karadeniz (2011) revealed that no significant difference was found between test anxiety and students' achievement on the basis of gender in mobile based tests. Male students with low level test anxiety performed better. The students experience more anxiety in learning English (Latif, 2015). The writing anxiety is concerned with written tests, linguistic and cognitive factors (Qashoa, 2014).

Managing Test Anxiety

Exam is the source of stress among learners. Most of the students' performance depends on it and they require to report, retain, and interpret the entire course in three hours. Stress has negative effect on students' performance. Prepared test has optimistic feeling that unprepared. There are many coping strategies to reduce anxiety. Well eating, proper rest and physical comfort can reduce stress related to exams. Sleep improves the memory process. Spending all night cramming with small rest may lose your effort (Smith, 2001). Arrive at exam hall well in time and start the paper with positive ritual (Managing Exam Anxiety, 2014). Technology can increase the learning ability of learners and hence reduce the anxiety (Hong et al., 2012). The different management techniques may be used to reduced anxiety. They are managed by developing study habits and memorizing the content (Wright, n.d.). The training of mind consciousness education is an effective technique to reduce exam anxiety (Sohrabi, Mohammadi, & Delavar, 2013). Training is one of them that decreases anxiety among test takes (Ejei, rezaei, & Lavasani, 2011). Test anxiety can be reduced by applying goal orientation by the teacher in the classroom as it positively related with students' goal orientation (Dewi & Mangunsong, 2012). The students in lower grades show more anxiety than that of higher grades as they are not familiar with the exams and academic environment (DordiNejad et al., 2011).

Test anxiety may be attributed to subjects. Openness to experience was negatively correlated with fear of statistics teachers and fear of asking for help. Extraversion was positively correlated with interpretation anxiety, test and class anxiety, and fear of asking for help (Hong, Chew, & Dillon, 2014). The performance and academic motivation of students directly affects statistics anxiety (Lavasani, Weisani, & Ejei, 2011). The attainment goals affect statistics anxiety

through educational motivation (Lavasani, Weisani, & Shariati, 2014). The social interaction with peers also reduces the anxiety level among students and improves the learning motivation when they discuss about exams (Magelinskaitė, Kepalaitė, & Legkauskas, 2014). Test anxiety is the outcome of interconnected views and experiences. Unproductive learning methods and interruption can cause anxiety and a depressed self-esteem (Mashayekh & Hashemi, 2011). Different sources are used to study exam anxiety like class demonstration, math tests, language problems and social interaction (Vitasari & Wahab, 2010). There is a negative relationship between anxiety and Math test (Aarnos, 2012).

There are many feelings and senses of test anxiety among students. Test anxiety may create physical problems in students like headaches, body temperature, sweating, rapid heart beat. The emotional problems are feelings of fear, anger, disappointment, depression and helplessness. The behavioural problems are abuse, pacing and avoidance. The cognitive problems are going black, self talking and low concentration (Miller, n.d.). The anxiety is not a single variable that affect exam score, so with out rely on final exams, on going evaluations may be more appropriate assessments (Mohamadi, Alishahi, & Soleimani, 2014). The anger management training may reduce the level of anxiety and enable social adjustment among students related to exams (Mohammadi, Kahnamouei, Allahvirdiyan, & Habibzadeh, 2010). Same findings were explored by Niusha, Farghadani, and Safari (2012) that confidence building training may improve morale of students by reducing anxiety and they feel stable with the passage of time.

Paper Management and Students' Performance

A study conducted by Mohammadyari (2012) revealed that test anxiety and academic achievement had negative correlation among female students and self-efficacy and academic achievement had positive correlation among male students. So, females have anxiety characteristics and males have belief characteristics are the indicators of success among gender. The perceptions of male and female students are different in terms of test anxiety. Female students show higher anxiety than males but did not show lower performance in multiple choice questions and open ended questions than males (Núñez-Peña, Suárez-Pellicioni, & Bono, 2016). The learners with more test anxiety may lose their academic performance and repeat a class. If the problems prevails, a professional must be consulted for such reasons (Fletcher and Associates, 2007).

Objectives

The objectives of the study were as under:
1.   To explore the performance of male and female students during paper management.
2.   To investigate the differences of anxiety between male and female students with respect to paper management indicators.
3.   To identify the difference in the paper management indicators with respect to class of students.

Hypotheses

Following Hypotheses were designed to achieve the desired objectives:

Ho1: There is no significant difference in the performance and paper management anxiety indicators with respect to male and female students.

Ho2: There is no significant difference in the performance and paper management anxiety indicators with respect to students' class level.

Methodology

The study was descriptive in nature. Survey method was used for data collection.

Population and Sample

The population consisted of all the students enrolled in the year 2015 in department of education and directorate of distance learning education at GC University Faisalabad. Three hundred and fifty six students participated randomly from four classes, B. ed., M. ed., MPhil education first semester and second semester.

Data Collection

Data were collected with the help of a self-constructed instrument Paper Management and Anxiety Scale [PMAS]. It had 50 items with five indicators, namely time management, physical environment, content clarity, content mastery, and anxiety. The students were requested to fill up the questionnaires after completing the paper in examination hall. Verbal instructions were delivered to students. Data were analyzed with the help of t-test and ANOVA.

Data Analysis

Ho1: There is no significant difference in the performance and paper management anxiety indicators with respect to male and female students.

Table 1 Performance of Male and Female Students wrt Paper Management Indicators

	Gender	N	Mean	SD	t-value	p
Time Management	Male	165	3.66	.966	2.358	.019*
	Female	191	3.43	.855		
Anxiety	Male	165	3.45	.732	2.084	.038*
	Female	191	3.90	.767		
Content Clarity	Male	165	3.23	.697	-.320	.749
	Female	191	3.25	.675		
Content Mastery	Male	165	3.34	.596	2.500	.013*
	Female	191	3.18	.630		
Physical Env	Male	165	3.33	.604	2.821	.005**
	Female	191	3.15	.638		
Performance	Male	165	69.61	7.439	2.961	.003**
	Female	191	66.91	9.457		

In Table 1, there revealed a significant difference between male and female students. Thus, the null hypothesis that, "there is no significant difference in the performance and paper management anxiety indicators with respect to male and female students" was rejected for time management, anxiety, content mastery, physical environment and performance of students. It was clear that male students had a vital difference with respect to those indicators when compared with female students. Male students had performed better than female students. They were clear in mastering the content and perceive the physical environment better than female students. The anxiety level of female students was higher than that of male students. However, the aspect of content clarity did not show any significant difference with respect to gender.

Ho2: There is no significant difference in the performance and paper management anxiety indicators with respect to students' class level.

Table 2. Comparison of Classes wrt Paper Management Indicators

		Sum of Squares	df	Mean Square	F	Sig.
Time Management	Between Groups	76.94	3	25.64	37.706	.000**
	Within Groups	239.42	352	.68		
	Total	316.36	355			
Anxiety	Between Groups	50.65	3	4.03	7.475	.000**
	Within Groups	175.88	352	.50		
	Total	226.54	355			
Content Clarity	Between Groups	23.41	3	7.80	19.195	.000**
	Within Groups	143.11	352	.40		
	Total	166.53	355			
Content Mastery	Between Groups	17.14	3	5.71	16.907	.000**
	Within Groups	119.00	352	.33		
	Total	136.15	355			
Physical Env	Between Groups	15.06	3	5.02	14.086	.000**
	Within Groups	125.45	352	.35		
	Total	140.51	355			
Performance	Between Groups	46.63	3	15.54	.205	.893
	Within Groups	26670.23	352	75.76		
	Total	26716.87	355			

**p<0.01

ANOVA was used to explore the impact of class level on the performance and paper management indicators. The table 2 found that all the indicators had strong significant impact on paper management. However, performance indicator did not show any significant difference with respect to class level.

Results and Discussion

A significant difference was found between male and female students. It was clear that male students had a vital difference with respect to those indicators when compared with female students. Male students performed better than female students. They were clear in mastering the content and perceive the physical environment better than female students. They handle the emergency

environment better than that of female students. The study favours the previous researches (Latif, 2015). The anxiety level of female students was higher than that of male students. The reason may be that female students are more shy and unable to handle their shyness. The current study favour the findings of previous studies (Gorjian, et al., 2012; Gürses, et al., 2010; Hosseini & Khazali, 2013; Öztürk & Gürbüz, 2013). However, the aspect of content clarity did not show any significant difference with respect to gender.

All the indicators had strong significant impact on paper management and test anxiety. However, performance indicator did not show any significant difference with respect to class level of students.

References

Aarnos, E. (2012). Early signs of mathematics anxiety? *Procedia -Social and Behavioral Sciences*, *46*(2003), 1495–1499. http://doi.org/10.1016/j.sbspro.2012.05.328

Amiryousefi, M., & Tavakoli, M. (2011). The relationship between test anxiety, motivation and MI and the TOEFL iBT reading, listening and writing scores. *Procedia - Social and Behavioral Sciences*, *15*, 210–214. http://doi.org/10.1016/j.sbspro.2011.03.075

Bagana, E., & Raciu, A. (2012). Anxiety, impulsiveness and time perception among secondary and high school students. *Procedia - Social and Behavioral Sciences*, *33*, 890–894. http://doi.org/10.1016/j.sbspro.2012.01.250

Crişan, C., Albulescu, I., & Copaci, I. (2014). The Relationship between Test Anxiety and Perceived Teaching Style. Implications and Consequences on Performance Self-evaluation. *Procedia - Social and Behavioral Sciences*, *142*, 668–672. http://doi.org/10.1016/j.sbspro.2014.07.683

Crişan, C., & Copaci, I. (2015). The Relationship between Primary School Childrens' Test Anxiety and Academic Performance. *Procedia - Social and Behavioral Sciences*, *180*, 1584–1589. http://doi.org/10.1016/j.sbspro.2015.02.311

Dewi, N., & Mangunsong, F. (2012). Contribution of Student's Perception Toward Teacher's Goal Orientation and Student's Goal Orientation as a Mediator in Test Anxiety on Elementary's Final Exams. *Procedia - Social and Behavioral Sciences*, *69*, 509–517. http://doi.org/10.1016/j.sbspro.2012.11.440

DordiNejad, F. G., Hakimi, H., Ashouri, M., Dehghani, M., Zeinali, Z., Daghighi, M. S., & Bahrami, N. (2011). On the relationship between test anxiety and academic performance. *Procedia - Social and Behavioral Sciences*, *15*, 3774–3778. http://doi.org/10.1016/j.sbspro.2011.04.372

Ejei, J., rezaei, M. reza, & Lavasani, M. G. (2011). The Effectiveness of Coping Strategies Training with Irrational Beliefs (Cognitive Approach) on Test Anxiety of Students. *Procedia - Social and Behavioral Sciences*, *30*, 2165–2168. http://doi.org/10.1016/j.sbspro.2011.10.420

Gorjian, B., Mahmoudi, K., & Mir, F. (2012). Effects of learners' individual differences on test anxiety among the students majoring in translation in islamic azad university of abadan. *Procedia Technology*, *1*, 395–399. http://doi.org/10.1016/j.protcy.2012.02.090

Gürses, A., Kaya, Ö., Doğar, Ç., Günes, K., & Yolcu, H. H. (2010). Measurement of secondary school students' test-anxiety levels and investigation of their causes. *Procedia - Social and Behavioral Sciences*, *9*, 1005–1008. http://doi.org/10.1016/j.sbspro.2010.12.276

Hanum, J., Abdul, B., & Lecturer, A. (2014). Managing Exam Anxiety, 1–3.

Harris, H. L., & Coy, D. R. (2003). Helping Students Cope with Test Anxiety. ERIC Digest. *ERICCounseling and Student Services Clearing House*. Retrieved from http://eric.ed.gov/?id=ED479355

Hong, K., Chew, P., & Dillon, D. B. (2014). Statistics anxiety and the Big Five personality factors. *Procedia Social and Behavioral Sciences*, *112*(Iceepsy 2013), 11771186. http://doi.org/10.1016/j.sbspro.2014.01.1282

Hosseini, L., & Khazali, H. (2013). Comparing the Level of Anxiety in Male & Female School Students. *Procedia - Social and Behavioral Sciences*, *84*, 41–46. http://doi.org/10.1016/j.sbspro.2013.06.506

Javanbakht, N., & Hadian, M. (2014). The Effects of Test Anxiety on Learners' Reading Test Performance. *Procedia - Social and Behavioral Sciences*, *98*, 775–783. http://doi.org/10.1016/j.sbspro.2014.03.481

Karadeniz, sirin. (2011). Effects of gender and test anxiety on student achievement in mobile based assessment. *Procedia - Social and Behavioral Sciences*, *15*, 3173–3178. http://doi.org/10.1016/j.sbspro.2011.04.267

Latif, N. A. binti A. (2015). *A Study on English Language Anxiety among Adult Learners in Universiti Teknologi Malaysia (UTM). Procedia - Social and Behavioral Sciences* (Vol. 208). Elsevier B.V. http://doi.org/10.1016/j.sbspro.2015.11.198

Lavasani, M. G., Weisani, M., & Ejei, J. (2011). The role of achievement goals, academic motivation, and learning strategies in statistics anxiety: Testing a causal model. *Procedia - Social and Behavioral Sciences*, *15*, 1881–1886. http://doi.org/10.1016/j.sbspro.2011.04.020

Lavasani[a], M. G., Weisani, M., & Shariati, F. (2014). The role of Achievement Goals , Academic Motivation in Statistics Anxiety : Testing a causal model. *Procedia - Social and Behavioral Sciences*, *114*, 933–938. http://doi.org/10.1016/j.sbspro.2013.12.810

Magelinskaitė, Š., Kepalaitė, A., & Legkauskas, V. (2014). Relationship between Social Competence, Learning Motivation, and School Anxiety in Primary School. *Procedia - Social and Behavioral Sciences*, *116*, 2936–2940. http://doi.org/10.1016/j.sbspro.2014.01.683

Mashayekh, M., & Hashemi, M. (2011). Recognizing, reducing and copying with test anxiety: Causes, solutions and recommendations. *Procedia - Social and Behavioral Sciences*, *30*, 2149–2155. http://doi.org/10.1016/j.sbspro.2011.10.417

Miller, D. L. (n.d.). Test. http://doi.org/10.2172/923810

Mohamadi, M., Alishahi, Z., & Soleimani, N. (2014). A Study on Test Anxiety and its Relationship to Test Score and Self-actualization of Academic EFL Students in Iran. *Procedia - Social and Behavioral Sciences*, *98*, 1156–1164. http://doi.org/10.1016/j.sbspro.2014.03.529

Mohammadi, A., Kahnamouei, S. B., Allahvirdiyan, K., & Habibzadeh, S. (2010). The effect of anger management training on aggression and social adjustment of male students aged 12-15 of shabestar schools in 2008. *Procedia - Social and Behavioral Sciences*, *5*(2), 1690–1693. http://doi.org/10.1016/j.sbspro.2010.07.347

Mohammadyari, G. (2012). Comparative Study of Relationship between General Perceived Self-efficacy and Test Anxiety with Academic Achievement of Male and Female Students. *Procedia - Social and Behavioral Sciences*, *69*(Iceepsy), 2119–2123. http://doi.org/10.1016/j.sbspro.2012.12.175

Niusha, B., Farghadani, A., & Safari, N. (2012). Effects of Assertiveness Training on Test Anxiety of Girl Students in First Grade of Guidance School. *Procedia - Social and Behavioral Sciences*, *46*, 1385–1389. http://doi.org/10.1016/j.sbspro.2012.05.307

Núñez-Peña, M. I., Suárez-Pellicioni, M., & Bono, R. (2016). ScienceDirect Gender differences in test anxiety and their impact on higher education students' academic achievement. *Procedia -Social and Behavioral Sciences*, *228*(228), 154–160. http://doi.org/10.1016/j.sbspro.2016.07.023

Öztürk, G., & Gürbüz, N. (2013). The Impact of Gender on Foreign Language Speaking Anxiety and Motivation. *Procedia - Social and Behavioral Sciences*, *70*, 654–665. http://doi.org/10.1016/j.sbspro.2013.01.106

Qashoa, S. H. H. (2014). English Writing Anxiety: Alleviating Strategies. *Procedia - Social and Behavioral Sciences*, *136*, 59–65. http://doi.org/10.1016/j.sbspro.2014.05.288

Resource, S. S. (n.d.). the University Learning Center.Pdf.

Sohrabi, R., Mohammadi, A., & Delavar, A. (2013). Role and Effectiveness of Mind Fullness Education on Students Exam Anxiety. *Procedia - Social and Behavioral Sciences*, *84*, 1639–1641. http://doi.org/10.1016/j.sbspro.2013.07.006

Stomff, M. (2014). The Effects of Teachers' Attitudes on Anxiety and Academic Performances. *Procedia - Social and Behavioral Sciences*, *127*, 868–871. http://doi.org/10.1016/j.sbspro.2014.03.370

Two Reasons Students Leave the Test Room Early Instead of Checking Their Answers : the Twelve Myths of Test Anxiety : (n.d.).

Vitasari, P., & Wahab, M. (2010). A research for identifying study anxiety sources among university students. ... *Education Studies*, *3*(2), 189–196. Retrieved from http://ccsenet.org/journal/index.php/ies/article/view/4834/4660\nhttp://ccsenet.org/journal/index.php/ies/article/view/4834

Wright, J. (n.d.). Managing Test Anxiety : Ideas for Students, 1–5.