Investigating the Relationship between Test Anxiety and Academic Performance among Psychology Students of Islamic Azad University of Sari City in Iran

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ABSTRACT

The present study aimed to investigate the relationship between test anxiety and academic performance among psychology students. Accordingly, through random sampling, 60 students of psychology from Azad University of Sari city (Iran) in 2011 were chosen. The research method is correlational and cross-sectional. Sarason's Test Anxiety questionnaire was completed and the obtained data were analyzed using SPSS software and through descriptive and inferential statistics. The results suggest that there is a significant relationship between test anxiety and academic performance among psychology students.

KEYWORDS: anxiety, test, academic performance, student, psychology

INTRODUCTION

The need to increase knowledge and the specialization of professions indicate the necessity for assessment and these in turn, reveal the importance of quizzes and growing tests for university admission and employment. This lifestyle approves the existence of test anxiety (Loofi & Darliuk, 2005; Sarason, 1980).

Anxiety disorders are the most common mental problems in society (Sadock & Sadock, 2009). Anxiety is a comprehensive, unpleasant and vague mode which is accompanied by arousal of nervous system, headache, sweating, palpitation, chest cramps, gastrointestinal disorders and restlessness (Sadock 2002) which is caused in response to internal and external stimuli and finally leads to cognitive, emotional, physical and behavioral symptoms (Chamour, 2002). Anxiety is not a new disorder and people of all eras and with every culture have experienced it (Crawford, 2001). But today, one of the biggest concerns and challenges of each country's educational system is anxiety in students which is difficult to bear for many people (Zeidner, 1991). Due to this type of anxiety which is called academic anxiety, most of them have attempted suicide (Keogh, 2001). According to the definition, test anxiety which is a special case of generalized anxiety, includes phenomenological, psychological and behavioral responses which suggests a fear of failure. Test anxiety is an adverse excitement accompanied by behavioral and psychological characteristics that the person experiences it while being in a position of evaluation (Pekron et al., 2002). Academic anxiety which occurs during education, is the most important type of anxiety among teenagers. This type of anxiety threatens students' mental health and will have adverse impacts on their expertise, talents, personality and social identity (McDonald, 2001). Test anxiety is a general term that refers to a specific type of anxiety or social phobia which makes the individual to be doubtful about his or her abilities and its consequence is the reduction of ability to cope with situations such as exam situations that put a person in assessment environment (Khosravi, 2008). This anxiety which is a common type of performance anxiety, involves 10 to 30 percent students in different assessments (Lashkari, 2007). In fact, test anxiety is a form of self-employment which is determined by self-minimization and doubts about individual abilities and mostly leads to negative cognitive assessment, lack of concentration, adverse physiological reactions such as high heart rate, cold fingers and decrease in blood pressure (Keogh, 2006). This anxiety has relationship with students' competition with their classmates and negative evaluation toward them, especially those who are more competent, teachers' work, homework, exam and inappropriate rigor, educational status and concerns about the future (Neil, 2009). In our country, it seems that the fear of getting poor grades and blames, classmates and friends ridicule and fear of inability to go forward, always bothers students (Khosravi, 2008).

Spielberger divides anxiety into two categories of state and trait anxiety. In state anxiety, the person shows a temporary emotional reaction and its reason is the situation that he encounters. On the other hand, trait anxiety, is a stable characteristics that indicates the person is prone to anxiety and regards different situations as threatening (Mousavi et al., 2008). Test anxiety as a form of state anxiety which is situational anxiety (Luffi & Darlvik, 2005; Orbeck et al., 2007) includes three factor: the cognitive factor (thought) such as improper thoughts and concerns about the test, the behavioral factor such as inattention or distraction toward homework and the emotional-psychological factor such as self-organizing cognitive psychological reactions and physical symptoms of anxiety (Pot Wayne & Daniel, 2010; Verne & Benson, 2004). Test anxiety is accompanied by different variables such as improper and inadequate study habits, attention deficits, low self-esteem (Money & Money, 1975; Hembry, 1988), personality and self-confidence (Chamroo & Farnham, 2000; Money & Money, 1975; Spielberger et al., 1980), social phobia (Sadock and sadock, 2003), cognitive errors (Benson, 1987) and negative thoughts and consequence assessment(Zats & Chasin, 1985; King et al., 1995). Also,

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it has been proved that the fall of many students is not due to learning disabilities or low IQ, rather stems from the high level of test anxiety (Sahebi & Asghari, 2002). Basically, there is excitement and anxiety in every particular test. Human's ability is evident when he carries out the examinations with the least anxiety. Human is a creature that is seeking to encouragement and evades punishment. Accordingly, children and young people are always looking for acceptance and encouragement from others. Also, this need is quite natural and normal that everyone loves attention, confirmation and encouragement from others (Zabolestani, 1999, p. 65).

Generally, people are not interested to be evaluated by others in the case of their behavior and due to this reason, whenever they are evaluated, they seem to be anxious. Of course, it is evident that the presence of anxiety itself is not unusual. What can be considered as an annoying and deterrent element is the intensified excitement or anxiety that attacks people while attending various social circles or participating in different tests (Zabolestani, 1999). When students are significantly anxious, this anxiety can bring high psychological and biological effects. Severe anxiety affects the endocrine and exocrine and through affecting human mind, facilitates momentary forgetfulness and perceptual error and due to this reason, in many cases, the results of tests from students who are highly anxious, indicates momentary forgetfulness and perceptual errors (Zabolestani, 1999).

Therefore, we decided to conduct this study in order to investigate whether there is any relationship between test anxiety and academic performance; reducing anxiety in everybody's mind in order to resolve it among students. How to reduce anxiety is a very important issue that should be of interest to everybody, because nowadays students are grappling with the problem of anxiety (Zabolestani, 1999).

METHODOLOGY

The research method is correlational and cross-sectional. For the classification of information, organization of information, drawing diagrams and mean of data, descriptive statistics were used. For sampling error, confidence level, measurement scales, independent and dependent groups, inferential statistics were used. The sample population of this study consists of 800 students studying psychology at the University of Humanities, Azad University of Sari (Iran) in 2011. Among these, the sample of this study consists of 60 participants who were randomly selected. In order to determine the level of test anxiety, Sarason's Test Anxiety questionnaire which contains 37 two-option items was used. This scale is a short questionnaire and the participants should complete it with "yes/no "responses only in 10 to 15 minutes. Accordingly, based on a self-reporting form, it is possible to achieve the psychological mood and physiological experiences of the individuals, before, during and after test. The higher the score, the greater anxiety exists. The scores in the scale range from 0 to 37. The determined cut-off points are as follow: mild anxiety (12 or lower), moderate anxiety (13 to 20), severe anxiety (higher than 20).The reliability and validity of the questionnaire were evaluated in several studies and have been obtained with Crombach's alpha coefficient of 0/88, internal consistency of 0/95 and criterion validity of 0/72 that are totally acceptable.

RESULTS

The data collected through descriptive statistics (setting tables, drawing graphs, calculating the percentages, evaluating the appropriate measures of central tendency and dispersion) and inferential statistics such as correlation coefficient, T-test and Pearson's correlation test were used.

Table 1- inferential statistics of test anxiety and gender

		Leven Test for Equal variances		Independent T-Test							
		f-statistics	Significance. level	t-statistics	Degree of Freedom	Significance. level	Mean of Differences	Standard Error of Differences	95% confidence Interval of differences		
									Low limit	High limit
Test anxiety	Assuming Equal	0.185	0.668	-0.421	58	0.675	-0.3000	0.71183	-1.72489	1.12489
	Assuming Unequal variance			-0.421	57.481	0.675	-0.3000	0.71183	-1.72516	1.12516

According to the above table and the obtained value for P, the value at the confidence level of 95% which is higher than the significant level of α =0 /05, and because the calculated t (t=-0.421) at the confidence level of 95% (a= 0.05) and

degree of freedom of 58 are smaller than the critical t (t=1.671), there is no significant difference between students' anxiety and their gender. It means that there is no relationship between students' anxiety and their gender.

Table 2- inferential statistics of academic performance and gender

		Leven test for Equal variances		Independent t-test						
		F-statistics	Significance. Level	t--test	Degree of Freedom	Significance. Level	Mean of Differences	Standard Error of Differences	95% confidence Interval of differences	
									Low Limit	High Limit
Test Anxiety	Assuming Equal Variance	0.003	0.958	-0.894	58	0.375	-0.3777	0.42229	-1.22297	0.46763
	Assuming Unequal Variance			-0.894	57.996	0.375	-0.3777	0.42229	-1.22297	0.46763

Since the calculated t (t= -0. 894) at the confidence level of 95% (a= 0.05) and degree of freedom of 58 is smaller than the critical t, there is no significant difference between their academic performance and their gender. It means that there is no relationship between the academic performance and their gender.

Table 3- inferential statistics of test anxiety and academic performance

		Test anxiety	Academic performance
Test anxiety	Pearson's correlation Significance level Number	1 _ 60	-0.609** 0.000 60
Academic performance	Pearson's correlation Significance level Number	-0.609** 0.000 60	1 _ 60

Since the calculated correlation coefficient (r=**-.609**) at the confidence level of 95% (a=0/05) and degree of freedom of 58 is larger than the correlation coefficient of critical table (r=0.211), there is significant difference between students' test anxiety and their academic performance and this relationship is negative. It means that the more the test anxiety, the worse the academic performance.

DISCUSSION AND CONCLUSION

Test anxiety, is a kind of state anxiety that is extensively studied in psychology and has a close relationship with the academic achievement of students. Therefore, the present study aimed to investigate the relationship between students' test anxiety and their academic performance. According to the results, the average of females' test anxiety was 16.86 and the average of males' test anxiety was 16.56. Also, the average of females' academic performance was 15.06 and the average of males' academic performance was 14.68. According to the statements, we can see that there is no relationship between students' test anxiety/academic performance and their gender. Also, there is a significant relationship between students' test anxiety and their academic performance and it means that the more test anxiety, the worse academic performance. The obtained results are consistent with the results of studies by Zabolestani (1999), Lashkari (2007), Cheraghian (2008), Larijani (2009), Karimi (2005), Lester (2001), Kamil (2006), and Pitearson (2002) and propose that there is a significant relationship between test anxiety and academic performance. In order to reduce test anxiety, learning strategies are suggested. According to Dembo (1994), learning strategies are activities that learners do while they are learning; in other words, they are learning and recalling strategies that include cognitive and metacognitive strategies. Benjamin and colleagues (1981, 1987) indicate that students with high test anxiety use weak and ineffective learning strategies.

In a study by Coberly and colleagues (1986), they indicate that instructing learning strategies is very effective for those students who have high test anxiety and helps them to improve their academic performance; therefore, learning strategies can reduce the amount of test anxiety.

Among the limitations of this study, we can refer to students' careless responses to questionnaire, lack of cooperation and the use of self-report instruments that usually show people better than what they are. These limitations can limit the interpretation and generalization of the results.

Suggestions

In the course of development, children and young people experience a wide range of anxieties. Sometimes, these anxieties are so severe that affect their daily life and education. One of these anxieties is test anxiety. Therefore, according to the results of the present study, the following points are suggested:
- Proving information for parents and students about anxiety and its consequences through media
- Setting additional and enough time for tests.
- Providing a relaxed atmosphere without any anxiety for test environment
- In order to lower the amount of test anxiety, students should have proper planning and consider their potentials and talents.

REFERENCES

Akbari, M. (2011). Effects of problem solving skills on students' test anxiety 8(29).

Crawford, A.M., Manassis, K. (2001). Familiar predictors of treatment outcome in childhood anxiety disorder. J Am Acad Child Adolesc Psychiatry 40(10), 1182-1189.

Keogh, E., French C. C, (2001). Test anxiety, evaluative stress and susceptibility to distraction from threat. Eur J Pers 15(2), 123-141.

Lashkaripour, K., Bakhshani, N. M., & Soleimani, M. J. (2007). Examining the relationship beween test anxiety and academic performance in secondary school students in Zahedan city. www.SID.ir

McDonald, A.S. (2001). The prevalence and effects of test anxiety in high school. Educ Psychol 21, 89-101.

Sadock, B. J., Sadock, V. A. (2002). Philadelphia: Lippincott Williams & Wilkins.

Sarason, I. G. (1980). Test anxiety: theory, research, and application, Hillsdale, N. J. L. Erlbaum Associates.

Sharifi R. G. (2011). The effect of assertiveness training on students' academic anxiety. Medical University of Sabzevar 18(2).

Vakili, R. (2009). Learning strategies: Goal orientations and test anxiety in blind students. Research in the field of gifted children 10(1).

Zabolestani, V., Kalmari, L. (1999). M.A thesis: effect of test anxiety on junior level students of Sari City. www.SID.ir

Zeidner, M. (1991). Statistics and mathematics anxiety in school science students: Some interesting Parallels. Br J Educ Psychol 61(3), 319-328