

Impact of Anxiety on Performance in Exam

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Abstract

Anxiety is a significant indicator of academic achievement. Test anxiety has a direct impact on a student's academic progress. Whenever a student questions himself and his capacity to perform well on tests, his primary concentration becomes worrying about poor grades and he is unable to focus on academics. People who have anxiety illnesses have a cautious approach towards their studies, like taking less interest while studying and worst results in tests and projects. This study investigates the association between students' educational achievement and their level of academic stress. Particularly, whether test anxiety prior to an exam influences students' academic performance. This survey included 100 male and female students. The findings revealed a substantial link between test anxiety and exam grades. Furthermore, linear regression studies revealed that test anxiety could predict exam grades.

Keywords: anxiety, exam performance, correlation, regression

Introduction

Anxiety is a psychological feeling of stress, uncertainty, uneasiness, and fear caused by nervous system excitation. A high level of anxiety renders normal life challenging, such as disrupted activities and social life. Tests and examinations play a crucial part in defining people's careers, therefore it's not unexpected that students experience anxiety when taking them. Many studies have shown that test anxiety affects students from all over the world and at all educational levels. Assessments at all levels of education, particularly at the level of higher studies, have long been seen as a significant and strong decision-making instrument in our competitive culture. It is thought that test and examination stress prevents certain people from realizing their academic competence. It has been discovered that students constantly see assessments as a cause of worry and a circumstance fraught with unpredictability in allowing them to showcase their genuine abilities.

There are numerous causes of test anxiety. The initial sign is poor preparation of papers, as seen by (a) cramming the syllabus before the date of the exam, (b) ineffective management of time, (c) inability to arrange text content, and (d) poor study habits. The other is being concerned about (a) previous performance; (b) The way classmates, as well as other children, are performing, and (c) the unpleasant implications of failing. During an exam, a student may also experience physical signs of stress such as sweating, sweaty hands, unnecessary pains, stomach problems, increased in heartbeat, muscle pains, etc.

There are numerous kinds of exam anxiety effects. The first is anxiousness, which includes having trouble reading and comprehending the exam questions, experiencing trouble arranging somebody's thinking, having some trouble recovering important terms and keywords while answering long questions, and performing poorly on an exam despite knowing the content. The second consequence is associated with mental obstruction. It includes blanking on questions and recalling the right answers after completion of the exam. Finally, common anxieties that enhance exam anxiety include concerns about performance, physical responses, the way others are behaving, and potential negative repercussions.

Review of Literature

(Wolf & Smith, 1995) According to the findings, the test's outcome had a big impact on motivation and a small, but significant, impact on performance. It has been discovered that motivation and anxiety have opposing effects on performance.

(Salehi & Marefat, 2014) examined how test anxiety and European language standardized achievement tests interact. The anxiety of knowing a foreign language and test anxiety have an important positive correlation, according to correlation analysis. Therefore, it is always suggested that English instructors attempt to minimize students' anxiety by fostering a positive and encouraging setting at school, promoting participation in class activities, and teaching them anxiety-reduction tactics.

(Hong, 1999) The level of concern and emotionality was significantly influenced by students' views of examination complexity. Whereas perception regarding difficulty before and during the exam both had an impact on test anxiety perception at each related time, students' perception of

tough paper during the exam had a greater clear impact on the creation of test anxiety than test difficulty perception before the exam. Slight variations in the strength of these associations were also observed.

(Stowell & Bennett, 2010) discovered that students who typically have high levels of depression and anxiety in the classroom reported a lower test anxiety when taking tests online, whereas the opposite was true for students who typically have low levels of test anxiety in the classroom. Additionally, compared to a classroom setting, the association between exam performance and test anxiety was weaker online.

(2017) Mavridis & Tsiatsos It was discovered through the gathering and analysis of numerical and conversational statistics that the student's test anxiety decreased during the game-based evaluation. Additionally, when the game method was applied, the student's exam performance was noticeably better. The findings revealed that the students' test nervousness and exam performance have a linearly negative association.

(DordiNejad et al., 2011) looks into the connection between students' academic success and exam anxiety in a medical university. Results indicate that lower-level pupils are more worried than those who are more accustomed to taking tests in an academic setting.

(2010) Rana and Mahmood This research study's main goal were to investigate the link between post-graduate students' academic success and test anxiety. Regression analyses, multivariate statistics, and Pearson correlation were employed to test the data. It has been discovered that there is a negative association relationship between students' proficiency level and their test anxiety levels.

(Al-Qaisy, 2011) seeks to determine the effects of mental illnesses, particularly anxiety and depression, among a group of learners at a Technical University on their academic success. Also, the study concentrated on determining how much despair and anxiety each gender experiences. It also looks into the variations in mood and anxiety levels among colleges.

All learners may suffer from the detrimental impacts of stress, according to (Dobson, 2012). Low academic achievement, low self-esteem, and low self-worth are common in students with anxiety

issues. Students, teachers, and parents all need to put efforts for the reduction of anxiety. Anxiety-reduction techniques include mindfulness, thinking skills, adapting, teacher involvement, and board exam order.

(2002) Cassady & Johnson The findings supported the hypothesis that intelligence quotient anxiety has an important, and detrimental effect on academic performance evaluations and was consistent with psychological assessment and data processing conceptions of psychological distress. Apparently, students may encounter memory problems while preparing for tests, writing essays, or both.

(2015) Adeoye-Agboola and Evans Particularly among overseas students, anxiety has a significant impact on academic achievement. Several difficulties that international students encounter raise their anxiety levels. Their environment greatly affects them, resulting in cultural variances, language barriers, prejudice, and variations in educational systems. Also, the sum of all these factors may affect how fun their learning is for them.

According to (Ndirangu et al., 2009), exam anxiety affects boys and girls equally. The findings demonstrated that teachers fall short in assisting students in overcoming exam anxiety. Academic achievement and test anxiety did not significantly correlate. It was suggested that a curriculum be created that covers coping mechanisms for test anxiety. So the efforts are required on the part of administrators and faculty to work upon managing the stress of students before exam. Some of the psychological techniques may be employed by administrators for their students.

Research Questions

The research questions listed below were addressed:

1. Is there a link between students' anxiousness and their exam performance?
2. How much is the exam performance affected by anxiety.

Research Methodology

Because this was a descriptive study, survey methodologies were used. This section will detail the sample, research method, and method of collecting data.

Method

To investigate the research questions, this study used both correlational analysis and regression analysis.

Results in present study

Table 1 below depicts that there were 20 males and 40 females in the present survey. The mean score of anxiety level of males is 20.10 and mean score of anxiety of females is 19.43. It shows that there is very less difference in the level of anxiety of both males and females. Both have almost similar level of anxiety.

Table 1: Descriptive analysis based upon gender								
anxiety	Number	Mean	Standard Deviation	Standard Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Male	30		
Female	40	19.43	4.624	.731	17.95	20.90	5	25
Total	70	19.71	4.537	.542	18.63	20.80	5	25

Table 2: Descriptive Statistics			
	Mean	Standard. Deviation	Number
Exam score	80.09	14.109	70
anxiety	19.71	4.537	70

There were 70 participants. Mean (SD=14.109) of test anxiety of the total participants was 19.71 which means on an average students had moderate level of test anxiety (12-20). Mean (SD=4.537) of exam score of the total participants was 80.09.

Table 3: Correlations			
		Exam	anxiety
Pearson Correlation	Exam	1.000	.144

	anxiety	.144	1.000
Sig. (1-tailed)	Exam	.	.117
	anxiety	.117	.
N	Exam	70	70
	anxiety	70	70

It is evident from table 4 that a weak ($R = .144$), positive and insignificant relationship exists between students' level of anxiety and achievement scores. A regression analysis was performed to investigate the link between exam scores and test anxiety. in which anxiety is an independent variable and exam score is a dependent variable. The result is given in table 5.

Table 4: Model Summary									
Model	R	R Square	Adjusted R Square	Standard. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.144 ^a	.021	.006	14.064	.021	1.438	1	68	.235

a. Predictors: (Constant), anxiety

Table 5 :Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T value	Significance
		Beta	Standard. Error	Beta		
1	(Constant)	71.262	7.547		9.443	.000
	anxiety	.448	.373	.144	1.199	.235

a. Dependent Variable: exam

Table 4 shows that only 2.1% of change is measured by the regression model which shows that whenever there is 100% change in anxiety there is only 2% change in exam performance, which means anxiety level of students does not much affect their examination scores.

The data analysis revealed no statistically significant association between test anxiety and exam performance ($p > 0.05$).

On the basis of Table 5: Coefficients, we can develop our Regression Equation as below:

$$\text{Exam} = 71.262 + .448 (\text{anxiety})$$

Conclusion

The present study didn't find any significant association between anxiety and exam performance. Although the available literature has mixed results and some of the past studies conclude that a significant relation exists between anxiety and academic performance. But the sample selected in the present study did not find any significant association between level of anxiety and students performance. Even male and female students have similar level of anxiety.

References

- Adeoye-Agboola, D. I., & Evans, H. (2015). The relationship between anxiety and academic performance of postgraduate international students in a British University: A cross-sectional quantitative design. *Science Journal of Public Health*, 3(3), 331–338.
- Al-Qaisy, L. M. (2011). The relation of depression and anxiety in academic achievement among group of university students. *Int J Psychol Couns*, 3(5), 96–100.
- Cassady, J. C., & Johnson, R. E. (2002). Cognitive test anxiety and academic performance. *Contemporary Educational Psychology*, 27(2), 270–295.
- Dobson, C. (2012). Effects of academic anxiety on the performance of students with and without learning disabilities and how students can cope with anxiety at school. *Unpublished Master's Thesis*. Northern Michigan University, USA.

- 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.
- Hong, E. (1999). Test anxiety, perceived test difficulty, and test performance: Temporal patterns of their effects. *Learning and Individual Differences*, 11(4), 431–447.
- Mavridis, A., & Tsiatsos, T. (2017). Game-based assessment: Investigating the impact on test anxiety and exam performance. *Journal of Computer Assisted Learning*, 33(2), 137–150.
- Ndirangu, G. W., Muola, J. M., Kithuka, M. R., & Nassiuma, D. K. (2009). An investigation of the relationship between test anxiety and academic performance in secondary schools in Nyeri District, Kenya. *Global Journal of Educational Research*, 8(1–2).
- Rana, R., & Mahmood, N. (2010). The relationship between test anxiety and academic achievement. *Bulletin of Education and Research*, 32(2), 63–74.
- Salehi, M., & Marefat, F. (2014). The Effects of Foreign Language Anxiety and Test Anxiety on Foreign Language Test Performance. *Theory & Practice in Language Studies*, 4(5).
- Stowell, J. R., & Bennett, D. (2010). Effects of online testing on student exam performance and test anxiety. *Journal of Educational Computing Research*, 42(2), 161–171.
- Wolf, L. F., & Smith, J. K. (1995). The consequence of consequence: Motivation, anxiety, and test performance. *Applied Measurement in Education*, 8(3), 227–242.