



Research Paper: The Relationship Between Self-Esteem and Academic Achievement with Test Anxiety in Students



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Abstract

Objective: The purpose of this study was to investigate how middle school students at Fakhri Zadeh School in Ardabil Province, during the 2023–2024 academic year, related their self-esteem and academic achievement to test anxiety.

Methods: The descriptive-correlational research approach was used for the objective of the study. All middle school students at Fakhrizadeh School were included in the population, and 60 students from the same school were chosen for the study using a convenience sampling method. The Rosenberg Self-Esteem Scale (RSES) and the Test Anxiety Scale (TAS) were the instruments utilized in this study. The SPSS program version 23 was employed for the tests, which included linear regression and the Pearson correlation coefficient.

Results: The current study's findings indicated no significant correlation between academic success and either test anxiety ($p=0.47$) or self-esteem ($p=0.88$). Test anxiety and self-esteem, however, were significantly and negatively correlated ($p<0.001$). Furthermore, test anxiety was significantly predicted by self-esteem ($p<0.001$).

Conclusion: The findings of this study show that self-esteem plays a part in predicting test anxiety, and since students' self-esteem may be raised by offering them courses, it is feasible to establish the conditions necessary to lessen test anxiety.

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1. Introduction

Globally, students are battling several challenges, including anxiety, depression, deteriorating mental health, and other associated disorders (Seyedi Asl et al., 2018; Abaspour et al., 2014). Test anxiety is one of the issues that students face globally, since it impairs their skills and performance. Test anxiety is a broad phrase that describes a form of anxiety with particular social worries that cause people to question their skills, which lowers their ability to handle situations like exams, situations that expose people to evaluation, and call for problem-solving. Therefore, it can be said that people who suffer from test anxiety are aware of the course materials, but they are unable to demonstrate their knowledge during the test due to their extreme worry. High test anxiety causes people to engage in irrelevant activities, which hinders or interferes with their performance (Lashkaripour et al., 2006).

Debilitating anxiety sensations that arise during test preparation or during the actual test are referred to as test anxiety, which is one of the varieties of anxiety (Onyeizugbo, 2010). Test anxiety is described as a collection of behavioral, psychological, and phenomenological reactions linked to the fear of failing a test or other similar assessment scenarios (Chamorro et al., 2008). It is crucial to look into the origins of test anxiety because it can lead to issues with how people perform. Self-esteem is one of the factors that could be connected to test anxiety.

Over the past century, many psychologists have supported the idea that people require

self-esteem, and self-esteem is one of the concepts that has drawn a lot of attention from researchers and psychologists in recent decades. Like a priceless life asset, self-esteem is one of the most crucial elements for the development and blooming of a person's abilities and creativity. Due to unfavorable views from parents, unpleasant peer experiences, and a history of academic setbacks, people with disabilities eventually lose hope and motivation. According to Valizadeh et al. (2008), the series of such setbacks and issues causes individuals to feel unworthy, which in turn damages their self-esteem.

Self-esteem is one of the ideas that has drawn a lot of interest from scholars and has been the focus of in-depth investigation. The assessment of one's own abilities, which is represented in one's attitudes toward oneself, is known as self-esteem. Put another way, it's the level of self-worth, acceptance, affirmation, and approval that an individual feels for themselves. It could be a sensation that is independent of other people or in relation to them. Like the notion itself, self-esteem consists of a stable core that is complemented by a number of auxiliary values to make a whole (Shamloo, 2003).

Anxiety and self-esteem are linked, according to research. These traits, for instance, have been found to make people more acceptable and likely to lead active lives. They also have a sense of autonomy, are less anxious, and are better able to handle stress and internal conflict without separating from their inner experiences. In light of these considerations and the possible correlation between test anxiety and self-esteem, the

current study was carried out to investigate the association between test anxiety and self-esteem in middle school students.

2. Methods

This study is correlational in nature, and in this kind of research, the goal of the study determines how the variables relate to one another.

2.1. Sampling Method, Sample, and Population

All middle school students enrolled in Ardabil Province's Fakhri Zadeh School for the 2023–2024 academic year make up the population of this study, while 60 students were chosen from the school using convenience sampling.

2.2. Instruments

The two questionnaires listed below serve as the measurement instruments for this study:

Rosenberg Self-Esteem Scale (RSES): In 1965, Rosenberg created the Rosenberg self-esteem scale (RSES). Ten elements make up this scale, which gauges a person's positive and negative self-perception. This scale has been very popular, especially among researchers, because its psychometric qualities have been found to be highly appropriate in numerous investigations. Although two factors, positive and negative, have received more attention in recent years, the tool's designer claims that it is a unidimensional scale. For rating this concept, a number of approaches have been put forth; some use a two-point Likert scale (agree and disagree), while others use a four-point scale (from strongly agree to strongly disagree).

The second version of this survey has been created in Iran and is rated as agree or disagree. Surveying the undergraduates, the researcher found a correlation between the Rosenberg scale and the life satisfaction test of 0.54, whereas in a group of adolescents, it was 0.43 (Greenberger et al., 2003). This scale's dependability on a sample of Shiraz University students was reported to be 0.69 using Cronbach's alpha and 0.68 using the split-half approach in a study by Mohammadi (2005). The scale's test-retest coefficients were also reported to be 0.77, 0.73, and 0.78 for one, two, and three weeks, respectively. The Cronbach's alpha coefficient for this questionnaire was 0.71 in a different study by Barkhouri et al. (2009) on 120 students from the city of Jiroft.

Test Anxiety Scale (TAS): In 1957, Sarason created the 37-item Test Anxiety Scale (TA), a short questionnaire with true/false answers for each item, and based on a self-reporting technique. This enables the assessment of an individual's physiological experiences and psychological moods prior to and following the examination (Sarason, 1957, as cited in Vakili et al., 2010). Reports state that the test-retest reliability coefficient for this scale is 0.88 (Lashkaripour et al., 2006).

2.3. Data Analysis

Both descriptive and inferential statistical techniques were applied to the data analysis. The mean, standard deviation, frequency, and percentage were used in the section on descriptive statistics. The Pearson correlation test was initially used in the inferential statistics section to investigate the connection among academic success, test anxiety, and

self-esteem. Additionally, the possibility that test anxiety could be predicted by self-esteem was examined using linear regression.

3. Results

Table 1 provides descriptive statistics for the key variables in the study.

Table 1

The variable mean and standard deviation for the sample group

Variable	N	Minimum	Maximum	Mean	SD
Age	60	13	14	13.50	0.50
Academic Achievement	60	13.71	20	17.99	1.74
Test anxiety	60	6	32	20.51	6.37
Self-esteem	60	-1	1	0.32	0.54

The average age of the study participants was 13.5 years, and their average academic achievement was a GPA of 17.99, according to the data in the above table. The recorded average anxiety level was 20.51, with a minimum of 6 and a maximum of 32. The average self-esteem was also 0.32.

The Pearson correlation approach was used to investigate the association between test anxiety, self-esteem, and academic accomplishment. The findings are shown in [Table 2](#).

Table 2

Correlation Matrix of Research Variables

	Variable	1	2	3
1	Academic Achievement	1		
2	Test anxiety	-0.09	1	
3	Self-esteem	-0.02	-0.52***	1

Significant correlations at $p < 0.01$ are marked with ***

Test anxiety and self-esteem are significantly correlated negatively ($p < 0.01$), as shown in the above table. This data suggests that test anxiety has considerably decreased in response to an increase in self-esteem and vice versa.

A linear regression test was employed to investigate whether academic achievement can be significantly predicted by self-esteem. First, an ANOVA test was performed; [Table 3](#) displays the results.

Table 3
ANOVA Test for Regression Model Examination

Model	Sum of Square	Df	Mean Square	F	Sig
Regression	51.66	1	51.66	45.22	p<0.001
Residual	46.17	58	76.29	-	-
Total	98.23	59	-	-	-

Regression analysis can be conducted to determine whether self-esteem significantly predicts academic achievement, given that

the ANOVA test is significant, as shown in the table above. Table 4 presents the findings from the linear regression study.

Table 4
Test anxiety prediction by self-esteem using linear regression analysis

B	SE	Beta	T	Sig
16.16	1.30	-0.52	4.73	p<0.001

The above table shows that the linear regression is significant ($p < 0.001$), indicating that test anxiety is significantly predicted by self-esteem.

4. Discussion

There are two categories of anxiety: debilitating and enabling. While crippling anxiety makes a person avoid the language learning process, facilitating anxiety encourages a learner to work hard at the language. Debilitating anxiety symptoms that arise either during or throughout test preparation are referred to as test anxiety (Onyeizugbo, 2010).

Examining the causes of test anxiety is crucial since it can lead to both psychological and physical issues for students. The purpose of the current study was to look into how students' self-esteem can predict their test anxiety.

The current study's findings demonstrated a strong inverse relationship between test anxiety and self-esteem. This implies that test anxiety falls with rising self-esteem and rises with falling self-esteem. Furthermore, the regression analysis's findings showed that students' test anxiety can be considerably decreased by having a high sense of self-worth.

The findings of this investigation aligned with those of other researchers. For instance, a study found that test anxiety can be accurately predicted by academic self-esteem (Arfaa Baloochi & Gaffari, 2012). Furthermore, the self-esteem measure was revealed to be a significant negative predictor of students' test anxiety in the Foladi et al. (2017) study. One element that might affect a person's perception, interpretation, and emotional responses is their level of self-esteem. People with poor self-esteem are more likely to think negatively, and this will

make them more anxious both before and during the test.

Given that the current study only included middle school kids and had a small sample size, it is expected that future research will encompass a bigger sample size and students from various educational levels. To improve the data's generalizability, a nationwide survey encompassing all parts of the nation is also advised. Lastly, it is recommended that additional research be done on how other factors affect test anxiety.

5. Conclusion

The current study's findings demonstrated that while there was a negative and substantial association between test anxiety and self-esteem, there was no significant relationship between academic achievement and either of these factors. Furthermore, test anxiety was significantly predicted by self-esteem. Test anxiety can therefore be decreased by enhancing students' self-esteem in the classroom through better teaching strategies and disciplinary measures.

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Conflict of interest

The Authors declare that there is no conflict of interest with any organization. Also, this research did not receive any specific grant

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