High school students and their academic examination anxiety: A study of Warangal and Hyderabad students

R. Anjani Devi

Department of Education, Osmania University, Hyderabad - 500007, Telangana, India

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ABSTRACT

One of the factors that adversely impact the students and their academic performance is the Examination anxiety. As a result, students fail to perform at their full potential, leading to critical consequences. Numerous studies have already been conducted on students' anxiety regarding examinations. Considering the existing research and the significance of this issue, the researcher found a strong basis to conduct a study within the Indian context. This study aimed to assess the extent of examination anxiety among secondary school students in Hyderabad city. Using a comparative approach, a sample of 120 students was randomly selected and evaluated using the Examination Anxiety Scale (EAS). The data were analyzed using an Independent t-test to examine the hypotheses. The findings demonstrated no significant difference in examination anxiety levels between boys and girls in secondary school, with only slight variations in anxiety levels. Moreover, the results confirmed that both boys and girls experience similar levels of examination anxiety. In conclusion, while students exhibit exam-related anxiety, the difference between genders is not substantial.

KEYWORDS: *Examination, Anxiety, Secondary school students.*

INTRODUCTION

Individual's thinking and behavior is expected to affected by the education and the efforts involved within the process of education that too in a desirable direction. Assignments and examinations are conducted in order to measure the success of these efforts. In Indian education system, examinations play a pivotal role in assessing students' abilities. Examinations will allow teachers to evaluate different aspects of teaching-learning process. Inspiration and guidance will be provided by the result declaration of these examinations. Better performers always inspire other students to perform well. Examinations also are also used to assess the effectiveness of the curriculum and teachers' performance. According to Qureshi (1996), an examination is a tool used to improve the quality of education at levels of education.

Out of all levels of educations, secondary level of education plays a critical part of the educational system. It acts as a stepping stone to higher education. The students enter adolescence in this secondary level of education.

In the secondary level of education, the basic perceptions and behavior patterns begin to form, leading to various challenges. Some students, on their way to adjust themselves for their behavior patterns develop a fear towards examinations. Due to this developed fear, some students will feel the headache and some even become seriously ill before examinations. This type of fear is referred as examination anxiety.

Literature indicates that Examination anxiety is a mix of physiological over-arousal, tension, somatic symptoms, worry, dread, and fear of failure that leads to a condition where individuals experience extreme stress. This anxiety creates significant barriers to learning and performance. Research indicates that high emotional distress correlates with reduced academic performance and higher student dropout rates. Test anxiety can also negatively affect a student's social, emotional, and behavioral development, as well as their self-esteem and attitude toward school. Students with high test anxiety score about 12 percentile points lower than their low-anxiety peers.

Test anxiety is a common issue among students worldwide and has been systematically researched since the early 1950s by scholars such as George Mandrel and Seymour Sarason. Irwin G. Sarason expanded on this work by exploring the connection between test anxiety, other specific anxieties, and generalized anxiety. Test anxiety is also known as anticipatory anxiety, situational anxiety, or evaluation anxiety. While a certain level of anxiety can be beneficial in maintaining alertness, excessive anxiety may cause emotional or physical discomfort, trouble concentrating, and persistent worry. In many cases, poor academic performance is not due to a lack of intelligence or inadequate preparation but rather to the psychological distress caused by testing environments, which interferes with attention and memory.

Studies suggest that approximately 25 to 40 percent of students experience test anxiety. Higher levels of test anxiety are particularly prevalent among students with disabilities and those in gifted education programs. Those affected by test anxiety often find it difficult to focus during exams, struggle to comprehend basic instructions, and face challenges in organizing or recalling important information.

Anxiety is a natural human emotion that everyone encounters from time to time. Many individuals feel nervous when dealing with work-related problems, preparing for an exam, or making significant life decisions. However, anxiety disorders are distinct from occasional nervousness. They can be severe enough to disrupt daily life, making routine activities difficult. For individuals with anxiety disorders, persistent worry and fear become overwhelming and can significantly impact their well-being.

Experts suggest that anxiety responses have evolved to help individuals prepare for potential threats. Anxiety symptoms in humans exist on a spectrum, with different levels leading to varied outcomes. These responses include an elevated heart rate, the release of stress hormones, heightened alertness, and fear in response to a potentially dangerous situation. Anxiety triggers physical, cognitive, and behavioral changes that enhance an individual’s ability to detect and respond to threats. As a result, the body increases oxygen intake through hyperventilation, redirects blood flow to muscles, and initiates sweating to regulate body temperature.

The intensity of an individual's anxiety response is influenced by their perception of the likelihood of negative events occurring and their ability to manage them. In the case of test anxiety, this might manifest as a fear of failing an exam, which could hinder admission to higher education institutions. A person’s self-perception of their abilities plays a crucial role in evaluating potential threats. When individuals lack confidence in their skills, they are more likely to expect negative outcomes, such as failure, in uncertain situations. Consequently, students with low self-confidence tend to perceive evaluative situations, including tests and exams, as more intimidating.

Causes

Studies suggest that parental pressure is associated with heightened worry, distracting thoughts unrelated to the test, and more pronounced physical symptoms of anxiety during examinations. Additional factors contributing to test anxiety include fear of failure, procrastination, and previous negative test experiences. Moreover, aspects of the test environment—such as the nature of the task, its difficulty level, overall atmosphere, time restrictions, examiner behavior, mode of test administration, and physical setting—can all impact the degree of anxiety students experience.

Putwain & Best (2011) examined test performance in elementary school children who were subjected to high-stress conditions created by teacher-imposed pressure. Their research found that students in high-threat environments performed worse and reported greater anxiety and intrusive thoughts compared to those in low-stress settings. Test anxiety can become a self-perpetuating cycle: after experiencing anxiety during one exam, a student may develop an intense fear of facing the same situation again, leading to

even greater anxiety in future tests. If this cycle remains unaddressed, the student may eventually feel powerless to overcome it.

Significance of the Study

Anxiety is one of the most extensively studied phenomena in psychology and is the normal human response to stress. Unlike fear, anxiety is a common and integral part of human life, affecting everyone in various ways. It is a state of mind triggered by environmental stimuli that evoke apprehension or fear. When exposed to the cause of anxiety again, the conditioning effect leads to a repeat response, causing the person to avoid the trigger.

Review of literature

Muhammad Javed and Imran Khan (2018) conducted a study on examination phobia among secondary school students. The research focused on the prevalence of exam-related fear in this group. A total of 700 students, comprising 350 boys and 350 girls, participated in the study. Data were collected using a self-designed questionnaire, and statistical analysis was performed using a T-test and SPSS version 16.0. The comparative findings revealed that while students experienced some degree of exam phobia, there was no significant difference between male and female students.

Dr. Taruna Malhotra (2015) studied exam anxiety among senior secondary school students, taking into account variables such as location and anxiety levels. A randomly selected sample of 180 students was analyzed using Mean SD, two-way ANOVA, and a T-test. The results indicated that (i) most senior secondary school students exhibited moderate levels of exam anxiety, (ii) gender and locality had a significant independent effect on exam anxiety, and (iii) these variables also had a significant interactive effect on students' anxiety levels.

Akande, Olowonirejuaro, and Okwara-Kalu conducted a 2014 study assessing the level and sources of stress among secondary school students in the Federal Capital Territory (FCT) Abuja. This descriptive survey targeted senior secondary school students in the FCT. A sample of 24 out of 59 public senior secondary schools was selected, including 686 male and female respondents. Data collection was carried out through a researcher-designed questionnaire validated by experts. Analysis involved percentages, statistically weighted means, standard deviations, and a T-test for hypothesis testing. The findings revealed that students experienced a moderate level of stress, with key contributing factors including academic, intra-personal, and environmental influences. Additionally, there were significant gender differences in the levels and sources of stress.

Lohaus and Klein-Hessling (2003) investigated the effectiveness of progressive muscle relaxation in reducing test anxiety among 160 fourth and fifth-grade students. Their findings indicated that relaxation techniques produced a notable short-term calming effect, with five-session interventions proving more effective than ten-session ones. The study demonstrated that children could quickly acquire relaxation skills. Three hypotheses were tested: (1) the experimental group would experience a significant decrease in anxiety levels between pre-test and post-test, (2) the control group would show no significant reduction in anxiety levels between pre-test and post-test, and (3) post-test anxiety levels would significantly differ between the experimental and control groups.

Rasid and Parish (1998) examined the impact of two relaxation training methods on anxiety levels in 55 high school students using an experimental-control group design. The findings demonstrated that both behavioral relaxation and progressive muscle relaxation techniques significantly reduced anxiety scores in the experimental group compared to the control group.

RESEARCH OBJECTIVES

1. To identify the causes of examination anxiety among boys and girls in secondary school.
2. To assess the level of examination anxiety among boys and girls in secondary school.
3. To examine the influence of gender on examination anxiety among secondary school students.

RESEARCH HYPOTHESES

- There will be no significant difference in examination anxiety between boys and girls.
- There will be no significant difference in the level of examination anxiety between boys and girls.

RESEARCH METHODOLOGY

Research Design

The researcher employs a quantitative research design for this study.

Population and Sample

The population includes secondary school students in grades IX, X in Warangal and Hyderabad cities.

Sample and Sampling Technique

A representative sample is selected due to constraints such as time and cost, allowing for more precise and accurate measurement of the subjects. The sample comprises students from grades IX, and X in secondary schools in Warangal and Hyderabad.

DATA AND SOURCES OF DATA

In this study, the researcher employed a questionnaire method for data collection. The researcher personally visited various secondary schools in Warangal and Hyderabad to administer the questionnaire to both boys and girls. The purpose of the study was explained to the students, who were instructed to respond carefully according to the guidelines provided in the questionnaire. It was a timed test, and students were allotted a specific duration to complete the questions.

TOOL FOR MEASUREMENT

For data collection, the researcher used the standardized Examination Anxiety Scale (EAS), developed by Dr. Subhash Sarkar, to measure examination anxiety among secondary school students.The scale consists of 50 statements and is a three-point scale where respondents score 2 for "agree," 1 for "undecided," and 0 for "disagree."

RELIABILITY AND VALIDITY OF THE TOOL

Dr. Subhash Sarkar's EAS is a standardized tool with a reliability coefficient of 0.79, calculated using the Split-Half method, and a significance level of .001. The validity of the scale was established through multiple levels: expert opinions for initial selection and elimination of items, a first tryout to further refine the items based on difficulty level, and item analysis by comparing the mean scores of high and low-scoring groups, leading to the final selection and elimination of items.

STATISTICAL ANALYSIS

The researcher treated the data using an independent sample t-test. Independent t- test- The independent t-test, also called the two-sample t-test, independent-samples t-test, or student's t-test is an inferential statistical test that determines whether there is a statistically significant difference between the means in two unrelated groups. The Independent Samples t Test compares the means of two independent groups to into determining whether there is statistical evidence that the associated population means are significantly different. The Independent Samples t Test is a parametric test.

DISCUSSION

Descriptive statistics uses the data to provide descriptions of the population, either through numerical calculations or graphs, or tables.

Hypothesis 1 testing: There will be no significant difference in examination anxiety between boys and girls.

Table: 1 Group Statistics

VAR002	N	Mean	Std. deviation
VAR00002.00	80,	48.2010,	17.02630
VAR00002.00	80	48.8846	17.95135

Frequency	Degrees of Freedom	Alpha value	t-calculated	t-critical	significance
160	158	0.05	-0.213	1.98	0.832

Interpretations:

At the degree of freedom 118, at alpha value=0.05, t -critical value is 1.98, but the tcalculated value i.e.; -0.214 is less than the critical value therefore null hypothesis is accepted. Thus there is a significant difference between boys and girls in secondary school in their examination anxiety.

Hypothesis 2 testing: There will be no significant difference in the level of examination anxiety between boys and girls.

Table.2.

VAR002	N	Mean	Std.Deviation
VAR00001.1.00	80	48.2010	17.02632
VAR00002.2.00	80	48.8847	17.95187

Interpretation

The data indicates that the boys' mean examination anxiety score is 48.2, while the girls' mean score is 48.8, suggesting that their anxiety levels are nearly identical. Both groups have a standard deviation of 17.9, reinforcing the observation that there is little variation in their examination anxiety levels.

Inferential Statistics

Inferential statistics are used to analyze a sample of data to make generalizations about an entire population, especially when studying every individual is impractical. This method allows for predictions and insights based on a subset of data. In this study, SPSS version 16 was used for data

analysis, and an Independent t-test was applied to assess the levels of examination anxiety among secondary school students.

Conclusion

The study findings suggest that there is no significant difference in examination anxiety levels between boys and girls in secondary school. Exam anxiety creates obstacles to learning and academic performance and has broader consequences, affecting students' social, emotional, and behavioral development, as well as their self-image and attitude toward school. The results indicate that anxiety levels among boys and girls are nearly the same, confirming minimal variation between the two groups.

Educational Implications

To support students with generalized anxiety disorder in the classroom, schools can implement various strategies. Effective collaboration between parents and school personnel, including teachers, guidance counsellors, and school nurses, can help create a structured and supportive learning environment. Some accommodations and modifications may be required to address students' needs. Suggested strategies include:

- Conducting check-ins upon arrival to help students transition smoothly into the school environment.
- Allowing for late arrivals and providing additional time for transitions between activities or locations.
- Recognizing that non-compliance may be a result of anxiety symptoms rather than intentional defiance.
- Identifying reasons for school avoidance and developing a structured plan to facilitate the student's return, possibly starting with a reduced school day to manage anxiety.
- Designating a "safe" space where students can go during stressful moments, with clear guidelines on its appropriate use.
- Teaching relaxation techniques that can be practiced at school and reinforced at home.
- Providing alternative activities to help students manage physical symptoms of anxiety, such as calming exercises.
- Encouraging participation in small group activities to foster peer interactions and build confidence, with adult support when needed.
- Involving students in the development of interventions to increase effectiveness and improve their problem-solving skills.

Suggestions for Future Research

Frequent testing can help students become accustomed to exams, making them feel like routine tasks. Creating a classroom environment that encourages healthy competition—without embarrassing lower achievers—and offering remedial support can reduce the fear of failure in final exams. Parents also play a vital role in motivating their children to perform well. Implementing an internal examination system at the secondary level may help mitigate exam-related anxiety among students.

Maintaining a comprehensive student portfolio that includes class attendance, behavior, test performance, and participation in co-curricular activities could be beneficial. Allocating 40% of marks to the portfolio and 60% to external examinations may create a more balanced assessment system. Introducing a semester system with six-month terms at the secondary level can further enhance student learning. Additionally, each secondary school could establish an Internal Evaluation Committee to oversee internal assessments and maintain student portfolio records.

This study focused on secondary school boys and girls. Future research could examine examination anxiety among senior secondary students, university graduates, and postgraduates. Furthermore, a

comparative study across various educational institutions both by private and governments could offer deeper insights, issues and their origin in connection with examination anxiety.

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