

A STUDY OF ANXIETY, STRESS AND DEPRESSION AMONG MALE AND FEMALE HIGH SCHOOL STUDENTS

Dr. Jitedrakumar Vitthalbhai Patel

Assistant Professor

DNP Arts and Commerce College, Deesa, Banas Kantha, Gujarat

Abstract

Mental health is an important aspect of adolescents' overall development and educational success. Anxiety, stress, and depression are among the most common psychological problems experienced by high school students due to academic demands, social pressures, family expectations, and developmental challenges. The present study aimed to investigate anxiety, stress, and depression among male and female high school students and to examine the relationship among these psychological variables. A comparative survey research design was adopted for the study. The population comprised high school students studying in selected secondary schools of Ahmedabad District. Data were collected using the Anxiety, Depression and Stress Scale (ADSS) developed by Pallavi Bhatnagar and colleagues. The scale consists of 48 items measuring anxiety, stress, and depression. Mean, Standard Deviation, Independent Sample t-test, and Pearson's Correlation Coefficient were employed for data analysis. The findings revealed significant gender differences in anxiety, stress, and depression among high school students. Furthermore, significant positive relationships were observed among anxiety, stress, and depression, indicating that these psychological variables are closely associated with one another. The study highlights the need for effective counselling services, mental health awareness programmes, and supportive educational environments to promote the psychological well-being of adolescents. The findings may be useful for teachers, parents, counsellors, and educational administrators in designing appropriate intervention strategies for improving students' mental health.

Keywords: Anxiety, Stress, Depression, Mental Health, High School Students, Gender Differences.

1. Introduction

Mental health is an essential component of human development and well-being. It influences an individual's thoughts, emotions, behaviors, relationships, and ability to cope with everyday challenges. Adolescence is a crucial developmental period marked by significant physical, cognitive, emotional, and social changes. During this stage, students encounter numerous academic, personal, and social challenges that often create psychological pressure.

Among the various psychological issues experienced by adolescents, anxiety, stress, and depression are the most common. Anxiety refers to feelings of worry, fear, nervousness, and apprehension regarding future events or uncertain situations. Stress refers to the psychological and physiological response to environmental demands that exceed an individual's coping abilities. Depression is characterized by persistent sadness, hopelessness, lack of interest, reduced motivation, and emotional distress. In the contemporary educational environment, students face intense academic competition, examination pressure, parental expectations, career uncertainty, peer influence, and social media exposure. These factors frequently contribute to emotional disturbances and mental health problems. Anxiety, stress, and depression not only affect students' emotional well-being but also influence academic achievement, social adjustment, self-confidence, and personality development. Researchers have increasingly recognized the importance of examining gender differences in mental health. Male and female students may experience psychological distress differently due to variations in emotional expression, socialization patterns, coping mechanisms, and societal expectations. Therefore, the present study seeks to investigate anxiety, stress, and depression among male and female high school students.

2. Review of Related Literature and Research Gap

Mental health problems among adolescents have become a major concern in educational and psychological research. Studies conducted during the last decade indicate that anxiety, stress, and depression are increasingly prevalent among school-going students. Academic pressure, parental expectations, peer influence, examination anxiety, and social media exposure have been identified as major contributors to psychological distress. Research suggests that anxiety adversely affects concentration and academic performance, while prolonged stress may lead to emotional exhaustion and poor psychological adjustment. Depression among adolescents is associated with low self-esteem, social withdrawal, hopelessness, and reduced academic

motivation. Singh and Bhatnagar (2016) conducted a factor analytic study of the Anxiety, Depression and Stress Scale (ADSS). The findings revealed that the scale consists of 48 items measuring anxiety, depression, and stress and demonstrated satisfactory reliability and validity. The study established ADSS as an effective tool for assessing psychological distress. Kaur and Sharma (2017) investigated anxiety and depression among secondary school students and reported that female students exhibited higher levels of anxiety and depressive symptoms than male students. The study emphasized the role of academic and social pressures in adolescent mental health. Patel and Desai (2018) examined stress among high school students and found that examination pressure and parental expectations were the major sources of stress. The researchers recommended school-based counseling services to reduce psychological distress. Kumar and Verma (2020) studied the relationship between stress and academic achievement among adolescents and reported a significant negative relationship between stress and academic performance. Students experiencing higher stress levels demonstrated lower academic achievement. Yadav and Singh (2022) explored depression among adolescents and found that social isolation, low self-esteem, and family conflicts significantly contributed to depressive symptoms. The study highlighted the importance of family support in promoting adolescent well-being. Sharma and Joshi (2023) examined gender differences in anxiety, stress, and depression and reported that female students scored significantly higher than male students on all three dimensions.

Research Gap

Despite extensive research on adolescent mental health, several gaps remain. Most studies have examined anxiety, stress, and depression separately rather than simultaneously. Findings regarding gender differences remain inconsistent across educational settings. Furthermore, limited studies have focused specifically on high school students using the Anxiety, Depression and Stress Scale (ADSS) developed by Pallavi Bhatnagar and colleagues. Therefore, the present study was undertaken to compare anxiety, stress, and depression among male and female high school students and to examine the relationship among these psychological variables.

3 objectives

1. To compare anxiety between male and female high school students.
2. To compare stress between male and female high school students.

3. To compare depression between male and female high school students.
4. To study the relationship among anxiety, stress, and depression among high school students.

4. Hypotheses

H₀₁: There is no significant difference in anxiety between male and female high school students.

H₀₂: There is no significant difference in stress between male and female high school students.

H₀₃: There is no significant difference in depression between male and female high school students.

H₀₄: There is no significant correlation among anxiety, stress, and depression among high school students.

5.1 Research Design

The present study adopted a comparative survey research design. This design was used to compare anxiety, stress, and depression among male and female high school students. It also facilitated the collection of quantitative data without manipulating any variables.

5.2 Population

The population of the study consisted of all high school students studying in selected secondary schools of Ahmedabad District. Adolescents were selected because this stage is associated with various emotional and psychological challenges. The population provided a suitable base for investigating anxiety, stress, and depression.

5.3 Sample

The sample comprised high school students selected from various secondary schools in Ahmedabad District. Equal representation was provided to male and female students to facilitate comparison. The sample was considered adequate for achieving the objectives of the study.

5.4 Sampling Technique

A purposive sampling technique was employed for selecting the participants. Students who met the requirements of the study were deliberately chosen. This technique enabled the researcher to obtain relevant information from suitable respondents.

5.5 Variables of the Study

The study included one independent variable and three dependent variables. Gender (male and female students) served as the independent variable, whereas anxiety, stress, and depression were considered dependent variables. The relationship among these psychological variables was also examined.

5.6 Tool Used

The Anxiety, Depression and Stress Scale (ADSS) developed by Pallavi Bhatnagar, Megha Singh, Manoj Pandey, Sandhya, and Amitabh was used for data collection. The scale consists of 48 items divided into three subscales: Anxiety (19 items), Depression (15 items), and Stress (14 items). Responses are recorded in Yes/No format and scored as 1 and 0 respectively. The scale demonstrates satisfactory reliability. The overall reliability measured through Cronbach's Alpha and Spearman-Brown coefficient was reported as 0.81 and 0.89 respectively. Anxiety, Depression, and Stress subscales also exhibited acceptable reliability coefficients.

5.7 Procedure of Data Collection

Permission was obtained from the concerned school authorities before conducting the study. Students were informed about the purpose of the research and assured that their responses would remain confidential. The ADSS was administered in classroom settings. Clear instructions were provided, and participants were requested to answer honestly. Completed questionnaires were collected, scored, and prepared for statistical analysis.

5.8 Statistical Techniques

The Mean and Standard Deviation were used to describe the levels of anxiety, stress, and depression among high school students. The Independent Sample t-test was employed to compare male and female students with respect to anxiety, stress, and depression. Pearson's

Product Moment Correlation Coefficient (r) was used to examine the relationship among anxiety, stress, and depression.

6. Data Analysis and Interpretation

Table 6.1

Comparison of Anxiety Scores between Male and Female High School Students

Group	N	Mean	SD	t-value	Level of Significance
Male	100	8.25	2.84	5.12	0.01
Female	100	10.42	3.15		

The obtained t-value (5.12) is greater than the table value at the 0.01 level of significance. Hence, the null hypothesis (H_{01}) is rejected. It may be concluded that a significant difference exists between male and female high school students with respect to anxiety. Female students obtained a higher mean score than male students.

Table 6.2 Comparison of Stress Scores between Male and Female High School Students

Group	N	Mean	SD	t-value	Level of Significance
Male	100	7.83	2.76	4.56	0.01
Female	100	9.68	3.02		

The obtained t-value (4.56) is greater than the table value at the 0.01 level of significance. Hence, the null hypothesis (H_{02}) is rejected. It may be concluded that a significant difference exists between male and female high school students with respect to stress. Female students obtained a higher mean score than male students.

Table 6.3

Comparison of Depression Scores between Male and Female High School Students

Group	N	Mean	SD	t-value	Level of Significance
Male	100	6.94	2.41	4.89	0.01
Female	100	8.76	2.85		

The obtained t-value (4.89) is greater than the table value at the 0.01 level of significance. Hence, the null hypothesis (H_{03}) is rejected. It may be concluded that a significant difference exists between male and female high school students with respect to depression. Female students obtained a higher mean score than male students.

Table 6.4

Correlation among Anxiety, Stress, and Depression

Variables	Anxiety	Stress	Depression
Anxiety	1.00	0.68	0.72
Stress	0.68	1.00	0.75
Depression	0.72	0.75	1.00

Pearson's Correlation Coefficient was calculated to examine the relationship among anxiety, stress, and depression among high school students. The obtained correlation coefficients between anxiety and stress ($r = 0.68$), anxiety and depression ($r = 0.72$), and stress and depression ($r = 0.75$) were positive. Therefore, the null hypothesis (H_{04}) is rejected. It may be concluded that significant positive relationships exist among anxiety, stress, and depression among high school students. This indicates that an increase in one variable is associated with an increase in the other variables.

7. Findings of the Study

1. Male and female high school students differ in their anxiety levels.
2. Male and female high school students differ in their stress levels.
3. Male and female high school students differ in their depression levels.

4. Gender influences psychological well-being among adolescents.
5. Anxiety, stress, and depression are significant mental health concerns among high school students.

8. Discussion

The findings of the study indicate that anxiety, stress, and depression are important psychological concerns among adolescents. Academic competition, examination pressure, parental expectations, peer relationships, and social influences contribute substantially to psychological distress. The observed gender differences may be attributed to variations in emotional expression, coping styles, and social expectations. The findings support previous research indicating that adolescent mental health is influenced by both educational and social factors. The results further highlight the importance of school-based counseling services and mental health interventions for students.

9. Conclusion

The study concludes that anxiety, stress, and depression are prevalent among high school students and significantly influence their emotional and academic functioning. Understanding these psychological variables is essential for promoting healthy adolescent development. Schools, parents, and counselors must collaborate to provide supportive environments that foster emotional well-being and resilience among students.

10. Educational Implications

1. Schools should organize mental health awareness programmes.
2. Guidance and counseling services should be strengthened.
3. Teachers should identify students experiencing emotional difficulties.
4. Parents should provide supportive home environments.
5. Stress-management and life-skills education should be incorporated into school curricula.
6. Regular psychological screening programmes should be conducted.

11. Suggestions for Further Research

1. Similar studies may be conducted on larger samples.
2. Comparative studies may be undertaken between rural and urban students.
3. The influence of socioeconomic status and academic achievement may be investigated.
4. Longitudinal studies may be conducted to examine changes over time.
5. Intervention studies may assess the effectiveness of counseling programmes.

12. Limitations of the Study

1. The study was limited to selected high school students.
2. The sample size was restricted.
3. Data were collected through self-report measures.
4. The study was confined to a specific geographical area.
5. Only anxiety, stress, and depression were considered.

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