

## Health and Well-being: Academic Stress and Psychological Well-being

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### Abstract

The connection between health and academic stress is significant and has various effects. When students experience stress related to exams, deadlines, or academic performance, it can negatively impact their physical and mental well-being. Managing academic stress requires self-care, learning stress management techniques, and having supportive people around. When students are mentally and emotionally healthy, they are better equipped to handle challenges like exams and deadlines. Good psychological well-being helps them remain resilient in the face of difficulties and regulates their emotions, which is crucial for academic success. The purpose of this study is to explore the relationship between academic stress levels and the psychological well-being of secondary school students, with a specific focus on gender differences. This research aims to understand how academic stress and psychological well-being are interconnected and how these dynamics vary between male and female students. The study sample consisted of 540 students from various secondary schools in Meerut city, with a gender distribution of 262 males and 278 females. These participants were selected to ensure a diverse representation of educational backgrounds. To analyze the collected data, both descriptive and inferential statistical methods were employed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistics provided an overview of the basic features of the data, while inferential statistics were used to draw conclusions and identify significant patterns and relationships between academic stress and psychological well-being. This comprehensive approach ensured a thorough examination and interpretation of the study's findings. Descriptive statistics, including calculations of the mean and standard deviation, were used to summarize the data. Additionally, inferential statistical methods, such as Pearson's correlation coefficient and t-tests, were applied to examine the relationships and differences within the data. The correlation analysis unveiled a notably robust negative correlation between academic stress and psychological well-being. This suggests that individuals facing heightened academic stress often exhibit lower levels of psychological well-being. Scatterplots in SPSS were used to visually represent the linear relationship

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*between academic stress and psychological well-being. The study's results indicate that there is no notable discrepancy between male and female students regarding academic stress and psychological well-being. In the last part, we discussed why the study's findings are important for the academic field and combined the main insights from the research to form a clear and strong conclusion.*

**Keywords**

*Health, academic stress, well-being, psychological well-being and secondary school students.*

**Introduction**

**Academic Stress**

Academic stress refers to the emotional, physical, and psychological strain experienced by students due to the demanding nature of their academic responsibilities and expectations. This stress can arise from various sources, including the pressure to perform well in exams and assignments, the weight of a heavy workload, and the competitiveness of academic environments. Students often face internal and external pressures to excel academically, which can lead to feelings of anxiety, fear of failure, and a sense of being overwhelmed. Academic stress may manifest in physical symptoms, such as headaches, fatigue, and sleep disturbances, alongside emotional symptoms like irritability and difficulties in concentration. Students must recognize and manage academic stress effectively through healthy coping strategies and seeking support when needed, to maintain their well-being and academic performance.

Lazarus and Folkman (1984) defined stress as “involving a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her wellbeing”.

Stress is often likened to a double-edged sword. On one side, it can act as a powerful motivator, propelling students towards peak performance. However, on the other side, stress can render students ineffective and overwhelmed. Moreover, stress is associated with significant adverse effects, including emotional exhaustion, anxiety, and depression. These effects may escalate to behaviors such as alcohol abuse, drug use, and even suicidal thoughts(Sugiura, et al.,2005)

**Psychological Well-being**

Psychological well-being pertains to an individual's general mental condition marked by feelings of contentment, happiness, and fulfillment within their life.

It encompasses various aspects of mental health, including emotional resilience, positive relationships, self-acceptance, and a sense of purpose and meaning. Individuals with high psychological well-being are typically able to cope effectively with life's challenges, manage stressors, and maintain a balanced perspective even during difficult times. They experience positive emotions more

frequently and have a greater sense of autonomy and control over their lives. Psychological well-being is not merely the absence of mental illness but rather a state of flourishing where individuals feel engaged, connected, and purposeful in their daily lives. Achieving and sustaining psychological well-being involves cultivating positive habits, nurturing supportive relationships, engaging in meaningful activities, and developing resilience to setbacks and stressors.

Certain individuals exhibit elevated levels of well-being even in challenging circumstances, while others display diminished well-being despite favorable conditions (Seligman & Csikszentmihalyi, 2000).

As Ryff and Keyes,(1995) proposed psychological well-being is “the striving for perfection that represents the realization of one’s true potential”.

### **Review of Literature**

Chris, Sergin, et.al., (2007) Studies have shown that having good social skills is linked to feeling less stressed and having better overall well-being.

Multiple studies have consistently demonstrated a higher prevalence of psychological disorders such as depression, anxiety, and stress among adolescent girls compared to boys. This disparity significantly impacts their overall health and success. Effective interventions and support systems are crucial to address these challenges and promote the well-being and achievements of adolescent girls. (Gelban, 2009),Mundy, et al.,2013). In addition, Gendered patterns of stress and mental health issues are evident across multiple countries, with young girls consistently reporting more problems compared to boys. This disparity underscores a significant gender-based difference in the experience and expression of stress and mental health challenges among youth globally(Needham,2009, Moksnes et al., 2011).

During the teenage years, stress tends to increase and has a more pronounced impact on girls than boys. Research suggests that both boys and girls are more significantly affected by daily stresses during adolescence compared to adults. However, girls demonstrate a higher sensitivity to interpersonal stressors than boys. This heightened sensitivity to interpersonal dynamics can contribute to increased stress levels and mental health challenges among adolescent girls.( Haraldsson, et al., 2010)

Researchers examined the influence of school-related stress and the support received from family and friends on the happiness and mental health of high school students in Ghana. They gathered data from 226 students using questionnaires that measured general health, academic stress, and perceived social support from family and friends. The results indicated that perceived social support could mitigate the

adverse effects of academic stress on psychological well-being. While girls reported higher levels of perceived social support, they also experienced higher levels of depression. Conversely, boys faced greater academic stress but exhibited better psychological well-being, a difference that might be attributed to gender-specific social roles and expectations.

### **Glozah (2013)**

In their 2015 study, Munir, Shafiq, Ahmad, and Khan explored the interplay between loneliness, academic stress, and psychological well-being among 165 first-year college students (67 males and 98 females) aged 15 to 19. The participants were selected using a simple cluster sampling technique. The researchers employed four distinct questionnaires to gauge levels of loneliness, academic stress, and psychological well-being. They looked at different types of numbers and compared them to understand the results. They used things like basic statistics, looking at how things relate to each other, and more complex methods like regression analysis and t-tests to figure out what the data meant. The study revealed a noteworthy correlation between loneliness, academic stress, and psychological well-being. Specifically, loneliness, academic stress, and family income emerged as predictors of psychological well-being. Interestingly, the study did not find significant gender-based differences among the students. The researchers found that feeling lonely and experiencing stress from school were both strongly linked to lower psychological well-being. Additionally, loneliness and academic stress were found to be positively correlated. These results shed light on the complex relationship between emotional states, stress levels, and overall psychological health among college students.

In their 2017 study, Kiani, Rabia Latif, Bibi, Rashid, and Tariq investigated how academic stress affects the mental health of college and university students. They collected data from 70 students, equally divided between 35 males and 35 females, aged 15 to 23. The students completed two questionnaires: the Educational Stress Scale for Adolescents (ESSA) and the Centre for Epidemiological Studies-Depression Scale (CES-D).

Using Pearson product-moment correlation for the analysis, the researchers found no significant link between academic stress and mental health among the students. An independent sample t-test showed that females reported higher levels of academic stress than males. However, there were no significant gender differences in mental health between male and female students.

### **Rationale of the Study**

Adolescence is a crucial stage when young people go through physical changes like puberty, along with feeling more pressure to fit in socially and dealing

with new roles and conflicts with peers. These challenges can cause stress that affects both their body and emotions, impacting their health over time. Adolescents face many stressors that can harm their well-being, and this period can be especially tough. More pressure during adolescence can lead to lower well-being among teens. Therefore, efforts have been made to compare the levels of stress and psychological well-being between male and female school students.

### **Statement of the Problem**

The proposed research is carried out under the formal title:

**“Health and well-being: Academic stress and psychological well-being”**

### **Objective of the Study**

1. To assess the academic stress of secondary school students.
2. To assess the psychological well-being of secondary school students.
3. To explore the relationship between academic stress and psychological well-being in secondary school students.
4. To investigate gender-based differences in academic stress among secondary school students.
5. To investigate gender-based differences in psychological well-being among secondary school students.

### **Hypothesis**

H01: There is no significant correlation between academic stress and psychological well-being in secondary school students.

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

H03: There is no significant difference in psychological well-being between male and female secondary school students.

### **Research Methodology**

#### **Design of the Study**

This study on academic stress and psychological well-being among secondary school students was designed as a quantitative correlational study. The primary objective was to investigate the relationship between academic stress and psychological well-being within this group. Additionally, the study aimed to compare academic stress and psychological well-being between male and female students. By utilizing both correlational and comparative methods, the research sought to clarify how academic stress and psychological well-being are interconnected and how these factors vary by gender among secondary school students.

### **Population of the Study**

The target population for this study comprised 10th-grade students enrolled in recognized schools affiliated with the Central Board for Secondary Education (CBSE) in India.

### **Sample**

The sample for the study consists of 540 students currently in the 10th grade at secondary schools.

### **Sampling Method Adopted**

The random Sampling Method was used for the selection of the sample.

### **Tools Used**

- 1. Academic Stress Scale** -The scale, developed and standardized by the researcher, is a 5-point Likert scale comprising 32 items divided into five domains: home environment, school environment, social environment, personal inadequacy, and attitude towards studies. Each item offers five response options: No stress at all, Low stress, Moderate stress, High stress, and Extreme stress. The instrument demonstrated an internal consistency reliability of 0.87, as determined by Cronbach's alpha method.
- 2. Psychological Well-being Scale** -The scale was created by Dr. Devendra Singh Sisodia and Ms. Pooja Choudhary in 2012. It consists of 50 items divided into five domains: Satisfaction, Efficiency, Sociability, Mental Health, and Interpersonal Relations, with ten items in each domain. The scoring system includes five options: Strongly Disagree, Disagree, Undecided, Agree, and Strongly Agree. The reliability of the scale was assessed using both the test-retest method and the internal consistency method. The test-retest reliability was found to be 0.87, while the internal consistency reliability was 0.90. The scale also demonstrated high content validity, with a coefficient of 0.94.

### **Statistical Analysis**

The data collected was subjected to statistical analysis using relevant descriptive and inferential techniques. Specifically, measures such as mean, standard deviation, Pearson's Product moment correlation and t-tests were employed to compare the scores of boys and girls in terms of their levels of stress and psychological well-being. This analytical approach enabled a detailed examination of potential differences between genders regarding stress and psychological well-being among the study participants.

### Procedure of Data Collection

First, permission was obtained from the principals of various CBSE schools in the Meerut district. Subsequently, students were approached in their classrooms, where they were invited to participate in the study. A welcoming atmosphere was created, fostering a friendly rapport with the students. Each student received booklets containing stress and psychological well-being scales and was instructed on how to complete them. Clear guidance was provided to ensure understanding. After completing the tests, the booklets were collected, and scoring was conducted according to the designated scoring system.

### Results and Discussion

**Objective 1: To assess the academic stress of secondary school students.**

**Table 1: Classification of Secondary School Students by Academic Stress Levels Based on NPC Distribution Scores**

Number of students	Mean (M)	Standard Deviation (S.D.)	Above +1 S.D. score (m+s.d.)	Below -1 S.D. score (m-s.d.)	Number (%) of students with high academic stress	Number (%) of students with average academic stress	Number (%) of students with low academic stress
540	46.90	18.78	65.68	28.12	89(16.48)	345(63.88)	106(19.63)

Table 1 presents the mean and standard deviation of academic stress among secondary school students, with values of 46.90 and 18.78, respectively. The analysis indicates that 16.48% of students fall into the high academic stress group (above +1  $\sigma$ ), 63.88% are in the average academic stress group, and 19.63% are in the low academic stress group (below -1  $\sigma$ ). This distribution suggests that the data follows a normal distribution.

**Objective 2: To assess the psychological well-being of secondary school students.**

**Table 2 Classification of Secondary School Students by Psychological Well-Being Levels Based on NPC Distribution Scores**

Number of students	Mean (M)	Standard Deviation (S.D.)	Above +1 S.D. score (m+s.d.)	Below -1 S.D. score (m-s.d.)	Number (%) of students with high psychological well-being	Number (%) of students with average psychological well-being	Number (%) of students with low psychological well-being
540	173.55	24.18	197.73	149.37	78(14.44)	395(73.15)	67(12.41)

Table 2 presents the mean and standard deviation of psychological well-being among secondary school students, with values of 173.55 and 24.18, respectively. The analysis indicates that 14.44% of students fall into the high psychological well-being group (above  $+1 \sigma$ ), 73.15% are in the average psychological well-being group, and 12.41% are in the low psychological well-being group (below  $-1 \sigma$ ). This distribution suggests that the data follows a normal distribution.

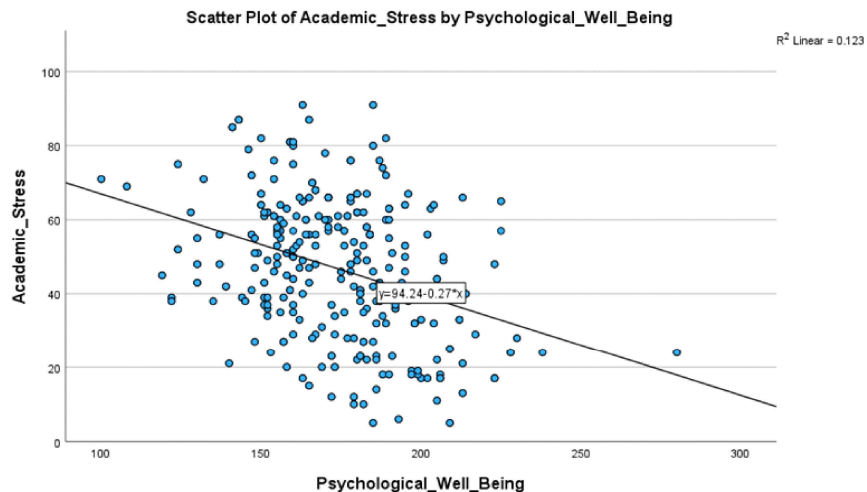
Thus, both Table 1 and Table 2 demonstrate the NPC distribution of academic stress scores and psychological well-being scores of secondary school students. Consequently, the data meets the conditions necessary for analyzing the correlation between academic stress and psychological well-being.

**Objective 3: To explore the relationship between academic stress and psychological well-being in secondary school students.**

**H01 There is no significant correlation between academic stress and psychological well-being in secondary school students.**

Variables	EX	EY	EX2	EY2	EXY	N	r	Level of Significance
academic stress		46.9		190254.99	-85945.59	540	-	P>0.01 Significant
psychological well-being	173.55		315067.84					

\*Significant at the 0.01 level





### Graphical Representation of Correlation Coefficient between Academic Stress and Psychological Well-being among Secondary School Students

Table 3 and Figure 1 provide clear evidence that there exists a significant and negative correlation between the academic stress and psychological well-being scores of students. The correlation coefficient obtained in this study, 0.35, surpasses the minimum significant values of 0.088 and 0.115 at the 0.05 and 0.01 levels of significance, respectively. This suggests that higher academic stress scores predict lower psychological well-being among students. Conversely, students with lower academic stress tend to exhibit higher psychological well-being, indicating a reciprocal relationship between the two variables. Notably, psychological well-being appears to influence the level of academic stress experienced by students. Consequently, the null hypothesis 1, stating that there is no significant relationship between academic stress and psychological well-being among secondary school students, is rejected at the 0.01 level of significance.

#### **Objective 4 To investigate gender-based differences in academic stress among secondary school students.**

**H02: There is no significant difference in academic stress levels between male and female secondary school students.**

Gender	N	Mean	S.D.	Degree of Freedom	t-value	Level of Significance
Male	262	45.96	19.05	538	1.14	NS
Female	278	47.79	18.52			

Table 4 shows that the calculated 't' value is 1.14, whereas the critical 't' value for 538 degrees of freedom at the 0.05 significance level is 1.96 and at the 0.01 significance level is 2.59. Since the obtained 't' value is less than the critical value at the 0.05 level, it indicates that there is no significant difference in academic stress between male and female secondary school students. Therefore, null hypothesis 2 is accepted.

#### **Objective 5 To investigate gender-based differences in psychological well-being among secondary school students.**

**H03: There is no significant difference in psychological well-being between male and female secondary school students.**

Gender	N	Mean	S.D.	Degree of Freedom	t-value	Level of Significance
Male	262	175.33	23.69	538	1.67	NS
Female	278	171.86	24.55			

Table 5 indicates that the calculated 't' value is 1.67, while the critical 't' value for 538 degrees of freedom at the 0.05 significance level is 1.96 and at the 0.01 significance level is 2.59. Since the obtained 't' value is less than the critical 't' value at the 0.05 significance level, it suggests that there is no significant difference in psychological well-being between male and female secondary school students. Therefore, null hypothesis 3 is accepted.

#### **Delimitations of the Study**

The study is delimited to the following –

1. This study is limited to students in Class X attending schools affiliated with the CBSE.
2. The study is delimited to two variables: academic stress and psychological well-being.
3. The study was delimited to the Meerut district only.
4. The study is delimited to the survey method of research.

#### **Conclusion**

Psychological well-being is crucial in helping students cope with academic stress effectively. Students with high psychological well-being are better equipped to manage the challenges and pressures of academic life. Firstly, a strong sense of psychological well-being fosters resilience, enabling students to bounce back from setbacks and academic disappointments with greater ease. They are more likely to adopt positive coping strategies such as seeking social support, practicing self-care, and maintaining a healthy perspective on academic challenges. Additionally, students with good psychological well-being tend to have stronger interpersonal relationships, which can serve as a vital source of emotional support during stressful times. Furthermore, psychological well-being enhances cognitive functioning, including attention and memory, which are essential for academic success. Ultimately, by fostering psychological well-being through mindfulness, self-reflection, and healthy habits, students can cultivate the mental strength and resilience needed to navigate academic stress more effectively and thrive academically.

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