



PRESSURE TO PERFORM: EXAMINING THE RELATIONSHIP BETWEEN ACADEMIC STRESS, MENTAL WELL-BEING, AND SELF-ESTEEM AMONG ADOLESCENTS

Mental Health

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ABSTRACT

Background: Adolescence is a crucial developmental stage characterized by rapid physical, emotional, and social changes. Academic demands during this period may influence adolescents' mental well-being and self-esteem. **Objectives:** This study aimed to assess mental well-being, self-esteem, and academic stress among adolescents and to examine their relationships. **Methods:** A cross-sectional descriptive study was conducted among 200 adolescents aged 13–19 years. Data were collected using a socio-demographic questionnaire, the Warwick–Edinburgh Mental Well-Being Scale (WEMWBS), the Rosenberg Self-Esteem Scale (RSE), and the Academic Stress Scale (ASS). Descriptive statistics and Spearman's correlation analysis were used for data analysis. **Results:** The mean mental well-being score was 47.72 ± 8.40 , indicating moderate to good well-being, while the mean self-esteem score was 22.08 ± 3.40 , reflecting moderate to high self-esteem. The mean academic stress score was 107.81 ± 21.06 , suggesting moderate to high levels of academic stress. Major stressors included examination pressure, difficulty remembering studied material, heavy syllabus, teacher-related demands, and low self-confidence. A significant weak negative correlation was found between mental well-being and academic stress ($\rho = -0.240$, $p = 0.001$), indicating that higher stress was associated with poorer well-being. No significant relationships were observed between self-esteem and mental well-being or academic stress.

KEYWORDS

Adolescents; Academic Stress; Mental Well-Being; Self-Esteem

INTRODUCTION

Adolescence is a crucial developmental period characterized by rapid physical, emotional, cognitive, and social changes that significantly influence psychological health and future well-being. During this stage, increasing academic demands, competitive educational environments, and social expectations may contribute to academic stress, adversely affecting adolescents' mental health and adjustment. Mental well-being encompasses positive emotions, effective functioning, resilience, and healthy interpersonal relationships and is recognized as an important indicator of overall health among young people (Clarke et al., 2011). Self-esteem, defined as an individual's overall evaluation of self-worth, plays a vital role in emotional adjustment, coping ability, and psychological resilience (Rosenberg, 1965).

Academic stress has emerged as a major concern among adolescents, with evidence linking excessive stress to anxiety, psychological distress, reduced well-being, and poor academic outcomes (Pascoe et al., 2020). However, limited research has explored the interrelationship among academic stress, mental well-being, and self-esteem among Indian adolescents. Therefore, the present study aimed to assess these variables and examine their relationships among adolescents, providing evidence for school-based mental health interventions. (~155 words)

Research Methodology

A quantitative, cross-sectional descriptive research design was adopted to assess mental well-being, self-esteem, and academic stress among adolescents.

The study was conducted among 200 adolescents aged 13–19 years studying in selected schools. Participants were selected using a non-probability convenience sampling technique. Data were collected using a socio-demographic profile sheet, the Warwick–Edinburgh Mental Well-Being Scale (WEMWBS), the Rosenberg Self-Esteem Scale (RSE), and the Academic Stress Scale (ASS). These standardised tools were used to assess mental well-being, self-esteem, and academic stress. After obtaining administrative approval and informed assent/consent, data were collected through self-administered questionnaires in a classroom setting.

Data Analysis

Data were analyzed using descriptive and inferential statistics. Frequencies, percentages, mean, standard deviation, median, and interquartile range were calculated. Spearman's correlation coefficient was used to determine relationships among mental well-being, self-esteem, and academic stress. Statistical significance was considered at $p < 0.05$.

RESULTS

Table 1: Socio-demographic Profile of Adolescents (N = 200)

Socio-demographic variables	n (%) / Mean $\pm$ SD
Age (years)	
10–14 years	44 (22.0)
15–19 years	156 (78.0)
Gender	
Male	67 (33.5)
Female	133 (66.5)
Study Class	
11th standard	86 (43.0)
9th standard	61 (30.5)
12th standard	38 (19.0)
10th standard	15 (7.5)
Place of Living	
Semi-urban	100 (50.0)
Rural	62 (31.0)
Urban	38 (19.0)
Type of Family	
Joint/Extended	106 (53.0)
Nuclear	78 (39.0)
Others	16 (8.0)
Monthly income (As per B.G. Prasad, 2025 revised scale)	
• Upper class: 9,100 and above	85 (42.5)
• Upper middle class: 4,600 – 9,100	56 (28.0)
• Middle class: 2,700 – 4,600	37 (18.5)
• Lower middle class: 1,400 – 2,700	22 (11.0)
Family Size	
4–8 members	123 (61.5)
<4 members	45 (22.5)
>8 members	32 (16.0)

***Age:** Mean $\pm$ SD = 15.59 ± 1.47 (Range: 13–19 years)

****Monthly income:** Mean $\pm$ SD = $6,228.5 \pm 3,424$, Range = 1,400–13,600

*****Family size:** Mean $\pm$ SD = 5.74 ± 2.49 , Range = 1–10

The study included 200 adolescents with a mean age of 15.59 ± 1.47 years (range: 13–19 years), predominantly aged 15–19 years (78.0%). Females constituted 66.5% of the sample. Most participants were studying in the 11th standard (43.0%). Half of the adolescents resided in semi-urban areas (50.0%), and the majority belonged to joint/extended families (53.0%). The mean monthly family income was $6,228.5 \pm 3,424$, and 42.5% of families were classified as having upper socioeconomic status according to the revised B.G. Prasad Scale (2025). The mean family size was 5.74 ± 2.49 members,

and most adolescents lived in families of 4–8 members (61.5%). Overall, the sample was predominantly composed of older adolescent females from semi-urban, joint-family backgrounds with relatively higher socioeconomic status.

Table 2: Assessment of Mental Well-Being among Adolescents as assessed by Warwick Edinburgh Mental Well-Being Scale (WEMWBS) (N=200)

WEMWBS	Median (IQR)	Mean $\pm$ SD (Range)
Total Score	49 (42–55), 13	47.72 $\pm$ 8.40 (26–66)

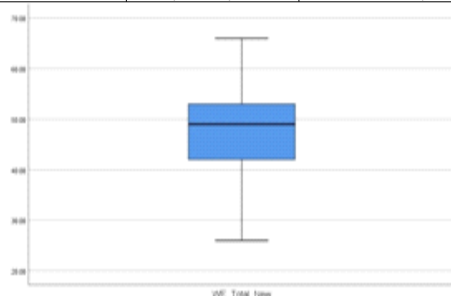


Figure 1. Boxplot showing the distribution of Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) scores among adolescents

The median WEMWBS score was **49 (IQR: 42–55)**, while the mean score was **47.72 $\pm$ 8.40** (range: 26–66), indicating that the study participants generally demonstrated **moderate to good mental well-being**. The relatively narrow interquartile range indicates moderate variability in adolescents' well-being scores.

Table 3. Assessment of Self-Concept among Adolescents as assessed by Rosenberg Self-Esteem Scale (N=200)

RSE Total score	Median (IQR)	Mean $\pm$ SD (Range)
	22 (20–24), 4	22.08 $\pm$ 3.40 (12–32)

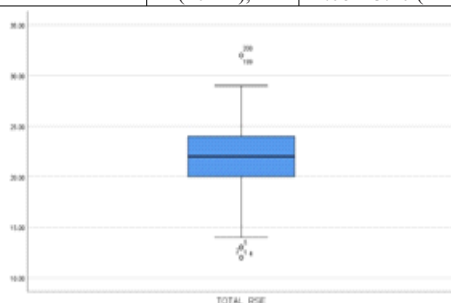
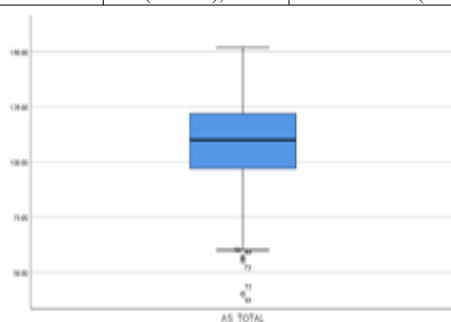


Figure 2. Boxplot Showing the Distribution of Rosenberg Self-Esteem Scale (RSE) Scores among Adolescents

The median RSE score was **22 (IQR: 20–24)**, while the mean score was **22.08 $\pm$ 3.40** (range: 12–32). These findings indicate that adolescents generally had moderate to high **self-esteem**, with relatively low variability in self-esteem scores across the sample.

Table 4. Assessment of selected personal, interpersonal, teacher-related academic stressors among adolescents as assessed by the Academic Stress Scale (N=200)

Academic Stress Scale	Median (IQR)	Mean $\pm$ SD (Range)
	110 (97–122), 25	107.81 $\pm$ 21.06 (40–152)



The results indicate a **moderate to high level of academic stress** among adolescents. The median score (110; IQR 97–122) and mean score (107.81 $\pm$ 21.06) are close, suggesting a fairly balanced distribution of stress levels. However, the wide range (40–152) shows **considerable variation**, with some students experiencing low stress and others very high stress.

Table 5: Correlation among Mental Well-Being, Self-Esteem and Academic Stress (N=200)

Variables	Mental Well-Being	Self-Esteem	Academic Stress
Mental Well-Being	1.000	-0.062 (p=0.381)	-0.240** (p=0.001)
Self-Esteem	-0.062 (p=0.381)	1.000	0.032 (p=0.650)
Academic Stress	-0.240** (p=0.001)	0.032 (p=0.650)	1.000

Spearman's rho correlation coefficients

**** Correlation is significant at the 0.01 level (2-tailed).**

Spearman's correlation analysis showed a **significant weak negative correlation between mental well-being and academic stress** ($\rho = -0.240$, $p = 0.001$), indicating that higher academic stress was associated with lower mental well-being. However, no significant correlations were observed between mental well-being and self-esteem ($\rho = -0.062$, $p = 0.381$), nor between self-esteem and academic stress ($\rho = 0.032$, $p = 0.650$). These findings suggest that academic stress is significantly associated with adolescents' mental well-being, whereas self-esteem is not significantly related to either variable.

DISCUSSION

The present study examined mental well-being, self-esteem, and academic stress among 200 adolescents and explored their interrelationships. Findings indicated that adolescents demonstrated moderate to good mental well-being, with relatively high scores for positive psychological attributes such as confidence, optimism, and clear thinking. Similar patterns have been reported by Clarke et al. (2011), who emphasized that adolescents generally report positive mental well-being despite academic pressures. However, lower scores in interpersonal domains suggest weaker social connectedness, consistent with Keyes (2006), who highlighted that adolescent mental health is strongly influenced by social relationships and emotional support.

Self-esteem levels in the present study were generally moderate to high, with most adolescents reporting positive self-evaluation. This finding aligns with Rosenberg's (1965) conceptualization of self-esteem as a stable component of self-concept, and is supported by Deb et al. (2010), who reported that Indian adolescents often exhibit adequate self-esteem despite academic challenges.

Academic stress was found to be moderate to high, with major stressors including examination pressure, heavy syllabus, difficulty in retaining study material, and teacher-related factors. These findings are consistent with Pascoe et al. (2020), who identified academic workload and performance pressure as key contributors to adolescent stress globally. Similar results were reported by Verma and Gupta (1990), who noted that academic demands significantly influence psychological distress among students.

The correlation analysis revealed a significant negative relationship between academic stress and mental well-being, indicating that higher stress is associated with poorer psychological well-being. However, no significant relationship was observed between self-esteem and either academic stress or mental well-being. This suggests that while self-esteem remains relatively stable, academic stress plays a more direct role in influencing adolescent mental well-being.

CONCLUSION

The study concludes that adolescents experience moderate to high academic stress, which negatively impacts their mental well-being. Although self-esteem remains relatively stable, academic pressure significantly influences psychological health. The findings highlight the need for school-based mental health interventions focusing on stress reduction, coping skill development, and supportive educational environments to enhance adolescent well-being.

Implications:

The findings highlight the need for school-based mental health programs focusing on stress management, emotional resilience, and

supportive learning environments. Early identification of academic stress and strengthening adolescent coping skills may improve mental well-being and overall psychological adjustment.

Limitations:

The study was cross-sectional, limiting causal inferences. Data were self-reported, which may introduce response bias. The use of a convenience sample from selected schools restricts generalizability to all adolescents.

Delimitations:

The study was limited to adolescents aged 13–19 years from selected schools. It focused only on mental well-being, self-esteem, and academic stress, excluding other psychological or environmental variables. The research employed a cross-sectional design and used standardised self-report tools.

Conflict of Interest: The authors declare no conflict of interest.

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