

Original Research Article

CORRELATION OF SELF-PERCEPTION, PERCEIVED STRESS, RESILIENCE, RISK BEHAVIORS, AND SELF-ESTEEM WITH WELL-BEING AMONG ADOLESCENTS OF SELECTED SCHOOL IN SOUTH 24 PARGANAS, WEST BENGAL

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ABSTRACT

Background: Adolescence is a critical developmental stage marked by major psychological, emotional, and social changes. Psychosocial factors including self-perception, perceived stress, resilience, risk behaviors, and self-esteem significantly influence well-being. Understanding these relationships can help identify at-risk adolescents and guide targeted interventions to promote mental health and overall well-being. The present study aimed to assess the correlation of self-perception, perceived stress, resilience, risk behaviors, and self-esteem with well-being among school-going adolescents. The study also aimed to identify the psychosocial factors associated with better or poorer well-being outcomes in this population.

Materials and Methods: The present study was a cross-sectional observational study. This Study was conducted for 24 months. Selected school at South 24 Parganas Study population 430.

Results: Among 430 school-going adolescents, age showed a weak negative and non-significant correlation with adolescent well-being ($r = -0.088$, $p = 0.068$) and ($r = -0.088$, $p = 0.068$). Significant positive correlations were observed between well-being and self-perception ($r = 0.247$, $p < 0.0001$), perceived stress ($r = 0.174$, $p < 0.0001$), resilience ($r = 0.517$, $p < 0.0001$; strongest correlation), risk behaviour ($r = 0.177$, $p < 0.0001$), and Rosenberg self-esteem ($r = 0.150$, $p = 0.002$), indicating that higher scores in these domains were associated with better adolescent well-being.

Conclusion: Psychological and behavioral factors significantly influence adolescent well-being. Enhancing self-perception, resilience, and self-esteem while reducing perceived stress and risk behaviors through early school-based identification and supportive interventions may improve mental health, well-being, and healthy adolescent development.

Keywords: Adolescents; Self-perception; Perceived stress; Resilience; Risk behaviors; Self-esteem; Psychological well-being; Mental health; School health.

INTRODUCTION

Adolescence is a critical developmental stage characterized by profound biological, psychological, and social changes that influence an individual's transition from childhood to adulthood. During this period, adolescents develop their identity, self-

concept, emotional regulation, coping strategies, and interpersonal skills. The experiences and behaviors established during adolescence often have a significant impact on future physical health, mental health, and social functioning. According to the World Health Organization (WHO), adolescence represents a unique phase of life where promoting

positive mental health and well-being is essential for healthy development.^[1] Adolescent well-being is a multidimensional concept that includes emotional, psychological, and social functioning. It reflects an individual's ability to manage stress, maintain positive relationships, develop self-confidence, and achieve personal potential. However, adolescents are increasingly exposed to various challenges such as academic pressure, family expectations, peer influence, social comparison, and uncertainty regarding future goals. These factors may negatively affect their psychological health and contribute to increased emotional distress and maladaptive behaviors.^[2] Self-perception is an important psychological construct that influences how adolescents view themselves, their abilities, appearance, personality, and social acceptance. The development of a positive self-perception during adolescence is associated with improved confidence, emotional stability, and better adaptation to social environments. Conversely, negative self-perception may contribute to feelings of inadequacy, low confidence, increased psychological distress, and reduced quality of life. Since adolescence is a period of identity formation, self-perception plays a significant role in determining overall psychological well-being.^[3] Perceived stress refers to an individual's subjective assessment of stressful experiences and their perceived ability to cope with those challenges. Adolescents commonly experience stress related to academic demands, examinations, interpersonal relationships, parental expectations, and social pressures. High levels of perceived stress have been associated with emotional disturbances, anxiety, depressive symptoms, and poorer mental health outcomes. The Perceived Stress Scale developed by Cohen et al. is widely used to assess an individual's perception of stress and its impact on psychological functioning.^[4] Resilience is another important factor that contributes to positive adolescent development. It refers to the ability to adapt successfully in the face of adversity, recover from stressful events, and maintain psychological balance. Adolescents with higher resilience demonstrate better coping abilities, emotional regulation, problem-solving skills, and greater capacity to overcome challenges. Resilience acts as a protective psychological factor by reducing the negative impact of stress and promoting improved mental health outcomes.^[5] The Connor-Davidson Resilience Scale has been widely validated for measuring resilience across different populations.^[6] Self-esteem, defined as an individual's overall evaluation of self-worth and personal value, is closely related to emotional well-being and social functioning. Adolescents with higher self-esteem tend to demonstrate greater confidence, positive interpersonal relationships, and effective coping mechanisms. In contrast, low self-esteem has been associated with increased vulnerability to depression, anxiety, social isolation, and engagement in unhealthy behaviors. Rosenberg's Self-Esteem Scale

remains one of the most commonly used instruments for evaluating self-esteem among adolescents.^[7] Risk behaviors during adolescence, including substance use, unsafe practices, aggression, and other harmful activities, represent significant public health concerns. These behaviors may arise due to peer pressure, emotional difficulties, curiosity, lack of coping strategies, or attempts to manage psychological distress. Engagement in risk behaviors can adversely affect academic performance, relationships, physical health, and long-term psychological outcomes. Understanding the association between psychological factors and risk behaviors is essential for developing preventive strategies targeting adolescent health.^[8] The relationship between self-perception, perceived stress, resilience, risk behaviors, self-esteem, and well-being is complex and interdependent. Positive psychological characteristics such as resilience, self-esteem, and healthy self-perception may enhance well-being, whereas increased stress and risk behaviors may contribute to poorer psychological outcomes. Previous studies have demonstrated that strengthening protective psychological factors can improve adolescents' ability to cope with challenges and promote better mental health.^[9] Schools provide an ideal setting for identifying psychological concerns and implementing preventive mental health interventions among adolescents. School-based programs focusing on stress management, resilience enhancement, self-esteem development, and healthy behavioral practices may contribute significantly to improving adolescent well-being. Early assessment of psychosocial factors can help identify vulnerable students and facilitate timely support and intervention.^[10]

MATERIALS AND METHODS

Study Design: A cross-sectional observational study

Place of Study: Selected school at South 24 Parganas

Period of Study: 24 months.

Sample Size: 430 patients.

Inclusion Criteria

- School-going adolescents aged 13–18 years.
- Students enrolled in the selected schools during the study period.
- Participants who are willing to participate in the study and provide informed assent.
- Parents/guardians of participants providing written informed consent.
- Students who are able to understand and complete the study questionnaires.
- Adolescents available during the data collection period.

Exclusion Criteria

- Students with a known history of major psychiatric illness or psychological disorders diagnosed by a healthcare professional.
- Adolescents with chronic medical conditions that may significantly affect psychological well-being.

- Students currently receiving psychological counseling or psychiatric treatment.
- Participants who are unable to understand or complete the questionnaires.
- Students who do not provide assent or whose parents/guardians do not provide consent.
- Incomplete or improperly filled questionnaires.

Study Variable:

- Self-perception of adolescents, including their evaluation of personal abilities, identity, and characteristics.
- Perceived stress levels and the individual's ability to cope with academic, social, and personal stressors.
- Resilience capacity, including adaptive coping skills, emotional regulation, and ability to overcome challenges.
- Risk behaviors and self-esteem, including unhealthy behavioral patterns and overall sense of self-worth.

- Overall well-being of school-going adolescents, including psychological, emotional, and social functioning.

Statistical Analysis: For statistical analysis, data were initially entered into a Microsoft Excel spreadsheet and then analyzed using SPSS (version 27.0; SPSS Inc., Chicago, IL, USA) and GraphPad Prism (version 5). Numerical variables were summarized using means and standard deviations, while Data were entered into Excel and analyzed using SPSS and GraphPad Prism. Numerical variables were summarized using means and standard deviations, while categorical variables were described with counts and percentages. Two-sample t-tests were used to compare independent groups, while paired t-tests accounted for correlations in paired data. Chi-square tests (including Fisher's exact test for small sample sizes) were used for categorical data comparisons. P-values ≤ 0.05 were considered statistically significant.

RESULTS

Table 1: Distribution of Socio-demographic Characteristics of Study Participants

Variable	Category	Frequency	Percent (%)	P-Value
Age Group	<15 years	89	20.7	<0.0001
	≥ 15 years	341	79.3	
Total		430	100	
Sex	Female	229	53.3	0.056
	Male	201	46.7	
Total		430	100	
Education	IX	151	35.1	0.094
	Madhyamik	151	35.1	
	XI	128	29.8	
Total		430	100	

Table 2: Correlation of Total Score of Adolescent Well-being with Selected Behavioral and Psychosocial Variables

		Total score of Adolescent Well-being	Remarks
AGE	Pearson Correlation	-0.088	Negative
	Sig. (2-tailed)	0.068	Not Significant
	N	430	
Total score of Self perception	Pearson Correlation	.247**	Positive
	Sig. (2-tailed)	<0.0001	Significant
	N	430	
Total Score of Perceived stress scale	Pearson Correlation	.174**	Positive
	Sig. (2-tailed)	<0.0001	Significant
	N	430	
Total Score of Resilience	Pearson Correlation	.517**	Positive
	Sig. (2-tailed)	<0.0001	Significant
	N	430	
Risk Behavior	Pearson Correlation	.177**	Positive
	Sig. (2-tailed)	<0.0001	Significant
	N	430	
Total score of Rosenberg self-esteem scale	Pearson Correlation	.150**	Positive
	Sig. (2-tailed)	0.002	Significant
	N	430	

In our study, 89 students (20.7%) were lesser than 15 years in age and 341 students (79.3%) were greater than equal 15 years in age. The difference between the two proportions is statistically significant ($p < 0.001$). In our study, 229 students (53.3%) were female, while 201 students (46.7%) were male. The difference between the two proportions is not statistically significant ($p = 0.056$). In our study, regarding educational status, 151 students (35.1%)

had completed IX standard, 151 students (35.1%) had completed Madhyamik level, while 128 students (29.8%) had completed XI standard. It is not statistically significant ($p = 0.094$) [Table 1]. Pearson's correlation analysis was performed to assess the relationship between age, self-perception, perceived stress, resilience, risk behavior, and self-esteem with the total score of adolescent well-being among 430 school-going adolescents. Age showed a

weak negative and non-significant correlation with adolescent well-being ($r = -0.088$, $p = 0.068$). Self-perception showed a significant positive correlation with adolescent well-being ($r = 0.247$, $p < 0.0001$), suggesting that adolescents with better self-perception tended to have higher levels of well-being. Perceived stress score demonstrated a significant positive correlation with adolescent well-being ($r = 0.174$, $p < 0.0001$). This indicates a significant association between perceived stress levels and well-being among the study participants. Resilience exhibited the strongest positive correlation with adolescent well-being ($r = 0.517$, $p < 0.0001$), indicating that adolescents with greater resilience had significantly better well-being outcomes. Risk behavior showed a significant positive correlation with adolescent well-being ($r = 0.177$, $p < 0.0001$), demonstrating an association between risk behavior scores and overall well-being. Rosenberg self-esteem score was also found to have a significant positive correlation with adolescent well-being ($r = 0.150$, $p = 0.002$), indicating that higher self-esteem was associated with improved well-being among adolescents [Table 2].

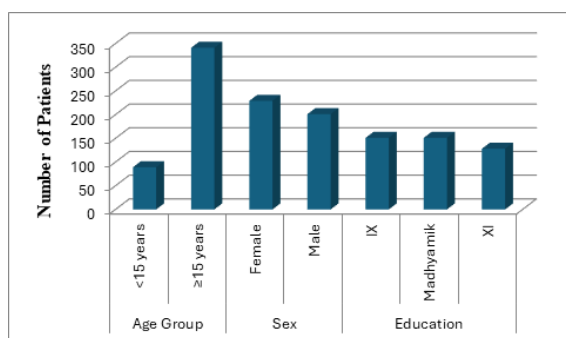


Figure 1: Distribution of Socio-demographic Characteristics of Study Participants

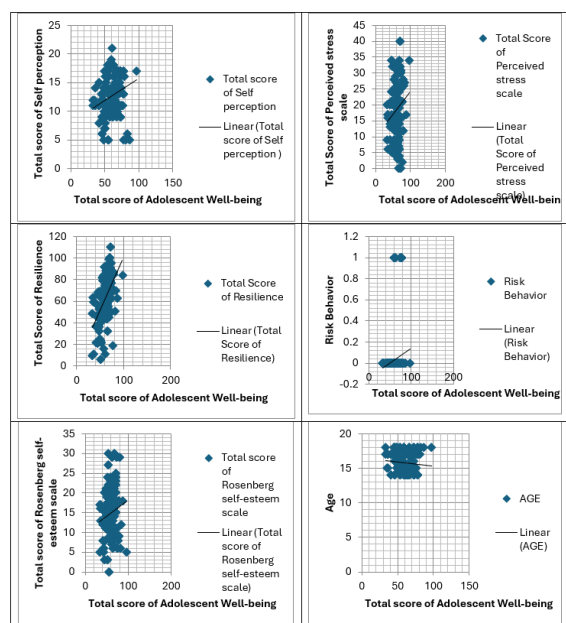


Figure 2: Correlation of Total Score of Adolescent Well-being with Selected Behavioral and Psychosocial Variables

DISCUSSION

The present study assessed the correlation of self-perception, perceived stress, resilience, risk behaviors, and self-esteem with well-being among 430 school-going adolescents. In the present study, 89 students (20.7%) were below 15 years of age, while 341 students (79.3%) were aged ≥ 15 years. The difference between these two age groups was statistically significant ($p < 0.001$). Regarding gender distribution, 229 students (53.3%) were female and 201 students (46.7%) were male; however, the difference between proportions was not statistically significant ($p = 0.056$). Regarding educational status, 151 students (35.1%) were studying in IX standard, 151 students (35.1%) had completed Madhyamik level, and 128 students (29.8%) were studying in XI standard, with no statistically significant difference observed ($p = 0.094$). Similar demographic distributions have been reported in school-based adolescent studies, where secondary and higher secondary students represent a major proportion of participants due to higher school attendance during this developmental stage Yasmin KH et al.^[11]

Pearson's correlation analysis was performed to evaluate the relationship between age, self-perception, perceived stress, resilience, risk behavior, self-esteem, and adolescent well-being. Age demonstrated a weak negative correlation with adolescent well-being ($r = -0.088$), which was statistically not significant ($p = 0.068$). This indicates that increasing age alone was not significantly associated with changes in well-being among adolescents. Similar findings were reported by Suldo et al., who suggested that adolescent well-being is influenced more by psychological resources, social support, and environmental factors rather than age alone.^[12]

Self-perception showed a significant positive correlation with adolescent well-being ($r = 0.247$, $p < 0.0001$). This finding indicates that adolescents with better self-perception experienced higher levels of well-being. Positive self-perception may enhance confidence, emotional stability, social adjustment, and coping ability. Marsh and Craven et al. reported that positive self-concept is strongly associated with better psychological functioning, academic adjustment, and interpersonal competence among adolescents.^[13]

Perceived stress score showed a significant positive correlation with adolescent well-being ($r = 0.174$, $p < 0.0001$). This suggests that perceived stress levels were significantly associated with adolescent well-being. Stress during adolescence is influenced by academic pressure, examinations, family expectations, and peer relationships. Compas et al. emphasized that the impact of stress depends largely on individual coping mechanisms and appraisal processes, which determine psychological outcomes.^[14]

Resilience demonstrated the strongest positive correlation with adolescent well-being ($r = 0.517$, $p < 0.0001$) among all studied variables. This finding highlights resilience as a major protective psychological factor contributing to better adolescent adjustment and mental health. Adolescents with higher resilience are better equipped to regulate emotions, manage difficulties, and recover from stressful experiences. Similar findings were reported by Hjemdal et al., who found that resilience significantly predicts psychological adjustment and reduces vulnerability to emotional distress among adolescents.^[15]

Risk behavior showed a significant positive correlation with adolescent well-being ($r = 0.177$, $p < 0.0001$). Although risk behaviors are generally considered harmful, adolescent behavioral patterns are influenced by developmental needs, social experiences, peer interactions, and psychological factors. Jessor et al. explained that adolescent risk behaviors develop through the interaction between individual personality characteristics, social environment, and perceived opportunities or pressures.^[16] Therefore, understanding the psychosocial context of risk behaviors is important for adolescent health promotion.

Rosenberg self-esteem score also showed a significant positive correlation with adolescent well-being ($r = 0.150$, $p = 0.002$). This indicates that adolescents with higher self-esteem demonstrated better overall well-being. Self-esteem contributes to positive self-evaluation, emotional resilience, confidence, and effective adaptation to social challenges. Orth et al. reported that self-esteem has a reciprocal relationship with psychological well-being and predicts positive emotional outcomes over time.^[17]

CONCLUSION

The present study concludes that self-perception, perceived stress, resilience, risk behaviors, and self-esteem are important psychological factors associated with well-being among school-going adolescents. Resilience showed the strongest positive correlation with adolescent well-being, highlighting its role as a protective factor that enhances coping abilities, emotional regulation, and adaptation to challenges. Positive self-perception and higher self-esteem were also associated with improved well-being, whereas stress levels and risk behaviors influenced psychological outcomes. These findings emphasize the importance of implementing school-based mental health programs focusing on resilience development, stress management, self-esteem

enhancement, and healthy behavioral practices to promote better emotional, psychological, and social well-being among adolescents. Early identification of psychosocial difficulties and timely interventions may contribute significantly to healthier adolescent development and improved long-term mental health outcomes.

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