

BODY IMAGE, SELF-ESTEEM AND PSYCHOLOGICAL WELL-BEING IN ADOLESCENTS: A CONTEMPORARY PERSPECTIVE

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ABSTRACT

Adolescence is a critical developmental period marked by profound physical and psychological transformations. They explore their bodies and personalities at this time to develop into distinct adult beings. When adolescents complete a phase of identity exploration, they are more likely to have positive relationships with their surroundings and to accept who they are, both of which are beneficial to their Psychological well-being. This study is focused on exploring how the psychological well-being, self-esteem, and body image of teenagers in Chennai city are interconnected. This study quantitatively employs correlational research methodologies. Using a purposive sampling technique, 102 students from Chennai City in the 12th grade made up the study's sample. Likert scales in the form of body shape image questionnaires by Rowe (2005), the Rosenberg Self-Esteem scale (1965), and a psychological well-being scale by Ryff et al (2007) are used in the data collection process. The data collected were examined through various statistical methods, including percentage analysis, the t-test, correlation analysis, ANOVA, and multiple regression analysis. The findings indicated that the psychological well-being, self-esteem, and body self-image of adolescents showed no significant differences based on gender. Additionally, a notable correlation was found between psychological well-being and health-fitness evaluation, which is a key aspect of body self-image. Academic Achievement, Negative affect, and Fatness evaluation are significantly correlated with Self-Esteem. It is concluded that self-esteem has a significant impact on the psychological well-being of adolescents, whereas body self-image does not show a notable influence.

Key Words: *Adolescents, Body Self Image, Psychological Wellbeing and Self-Esteem.*

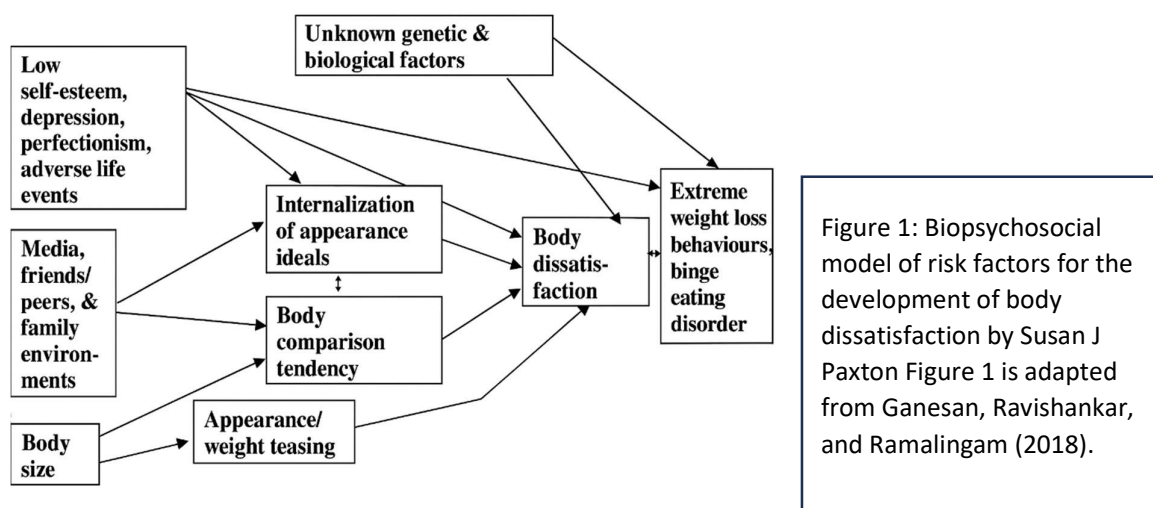
INTRODUCTION

Adolescence is a period marked by physical, psychological, and social development where the individual experiences drastic changes in their body, in particular. Adolescence is a pivotal phase



marking the shift from childhood to adulthood, characterized by significant physical, emotional, and social changes. According to Erik Erikson's psychosocial development theory, the primary developmental challenge during this stage is navigating "identity versus identity confusion" (Santrock, 2007). This stage involves adolescents exploring and defining their sense of self, including their values, beliefs, physical appearance, and personality traits, as they strive to establish a coherent adult identity. Successfully resolving this stage leads to a strong sense of self-acceptance and a clear personal identity. This, in turn, fosters confidence and the ability to form meaningful relationships with others, contributing significantly to their psychological well-being (Papalia, 2009).

Susan J. Paxton's 2003 work, referenced in *Body Image: Evidence, Policy, Action* from a UK seminar, outlines a biopsychosocial model to identify risk factors for body image problems, particularly in adolescents. This model integrates biological, psychological, and sociocultural factors that contribute to body dissatisfaction and related issues like disordered eating. As per Paxton's biopsychosocial model [Figure 1], body image development is shaped by biological elements like body size, psychological aspects including low self-esteem, depression, and perfectionism, alongside sociocultural influences. This understanding forms the source for reviewing contemporary research on body image and its psychological inferences among adolescents.



LITERATURE REVIEW

Among adolescents, weight plays a crucial role as a primary risk factor influencing negative body image. Obesity has been found to strongly predict body dissatisfaction, particularly among young girls, whereas boys are more likely to be concerned about being underweight or lacking muscularity (Reel, Voelker, & Greenleaf, 2015). Research also indicates that girls are generally more likely than boys to express dissatisfaction with their weight and physical appearance (Ganesan, Ravishankar, & Ramalingam, 2018). However, girls who experience body image dissatisfaction but still maintain psychological well-being often display more outgoing personalities, stronger friendships, and greater family support, which act as protective factors (Delfabbro, 2011). Furthermore, adolescent age and Body Mass Index (BMI) significantly influence self-esteem and body image perception (George et al., 2021), although some studies report no significant gender differences in body image and psychological well-being (Karna & Sivaraman, 2023). Overall, adolescents commonly experience body dissatisfaction and a fear of obesity or weight stigma, which often reflects unhealthy cognitive patterns and social pressures related to body ideals (Levine & Smolak, 2015). Moreover, Studies indicate that media, athletics, and personal relationships shape adolescent body image, with positive body image linked to improved overall health outcomes (Hartman-Munick, Gordon, & Guss, 2020). Furthermore, existing studies reveal varied findings concerning gender differences and the role of factors such as BMI, media exposure, and social support in shaping adolescents' body image and self-esteem. Hence, this study is important to gain a deeper understanding into the interplay between body image, self-esteem, and psychological well-being among adolescents.

OBJECTIVES

The research aims to accomplish the following objectives:

- i) To investigate whether gender and academic performance lead to differences in Body Self-Image, Self-Esteem, and Psychological Well-being among adolescents;
- i) To explore any relationship, exist among Body Self-Image, Self-Esteem, and Psychological Well-being in adolescents; and



iii) To examine how Body Self-Image and Self-Esteem influence the Psychological Well-being of adolescents.

HYPOTHESES

The following Null hypotheses were framed to meet the objectives of the study statistically.

Ho1. There will be no significant difference in the Body Self-Image, Self-Esteem, and Psychological Wellbeing in adolescents based on their gender.

Ho2. There will be no significant difference in the Body Self-Image, Self-Esteem, Psychological Wellbeing among adolescents based on their Academic Achievement.

Ho3. There will be no significant relationship between Body Self-Image and Psychological Wellbeing among adolescents

Ho4. There will be no significant relationship between Self-Esteem and Psychological well-being among adolescents

Ho5. There will be no significant relationship between Body Self-Image and Self-Esteem among adolescents

Ho6. There will be no significant influence of Body Image and Self-Esteem on the psychological well-being of adolescents.

METHOD

Samples

The population in this study were students completed their standard 12 from Chennai City (N=102) taken through a purposive sampling method. Male and female students voluntarily took part in the study. Questionnaires were distributed through Google forms. Students studying only in CBSE and State Board Schools were taken; students studying in other boards were not taken for the study. After the collection of data from the respondents, data were analysed using suitable descriptive and inferential statistical analysis.

Research Instruments

Research instruments consist of four parts namely Part A: Demographic sheet, which includes their basic information like age, gender, school, board of study, 12th std marks; Part B: Body Self-Image Questionnaire; Part C: Psychological Well-Being Scale & Part D: Self-Esteem Scale

i) Body Self-Image Questionnaire was designed by Rowe (2005) and has nine subscales namely HD = Height Dissatisfaction; FE = Fatness Evaluation; AG = Attention to Grooming; OAE = Overall Appearance Evaluation; HFI = Health Fitness Influence; HFE = Health-Fitness Evaluation; NA= Negative Affect; II = Investment in Ideals and SD = Social Dependence. A 1–5 point scale is used to rate the items, with a=1, b=2, c=3, d=4, and e= 5. The score on each subscale has a minimum of 3 and a maximum of 15 Note: Item 1 should be reverse-scored, i.e., a=5, b=4, c=3, d=2 and e=1.

ii) Psychological Well-Being Scale developed by Ryff (2007), is a simplified version of the 18-item Ryff & Keyes Psychological Well-Being Scale (1995), with a 0.702 reliability coefficient (in the form of a 5-point Likert scale) was employed. Its subscales are: self-acceptance, positive interpersonal relationships, environmental mastery, personal progress, autonomy, and life purpose (<https://sparqtools.org/movement-measure/scale-of-psychological-well-being/>). The greater the score achieved, the higher the level of Psychological Well-being (PWB) the individual exhibits.

.iii) Self-Esteem Scale: The 10-item Rosenberg (1965) Scale was employed to gauge participants' overall sense of worth by assessing both positive and negative self-perceptions. All items on the unidimensional scale are answered using a 4-point Likert scale, with the extremes being strongly disagree and strongly agree.

Statistical Techniques

Percentage analysis, independent sample t-test, Correlation, ANOVA, and Multiple Regression analysis were done using SPSS 20 to test the hypotheses.

RESULTS AND DISCUSSION

Table 1 represents the ‘t’ test results to find the difference in the Body Self-Image, Self-Esteem, and Psychological Wellbeing among adolescents based on their gender.

Variables	Gender	N	Mean	SD	‘t’ Value	Significance
Body Self-Image	Male	66	72.05	10.96	0.969	0.340
	Female	36	68.42	9.34		
Self-Esteem,	Male	66	25.41	4.77	0.505	0.617

	Female	36	24.58	4.10		
Psychological	Male	66	91.82	8.803	1.509	0.298
Wellbeing	Female	36	88.08	11.540		

An independent sample t-test was employed to examine the influence of gender on Body Self-Image, Self-Esteem, and Psychological Well-being among adolescents. Based on their gender, there was no discernible difference found in their Body Self-Image ($t = 0.969$, $p > 0.05$), Self-Esteem, ($t = 0.505$, $p > .05$) and psychological well-being ($t = 1.509$, $p > .05$). The results demonstrate that there is no significant variation in teenagers' Psychological Wellbeing, Self-Esteem,, and Body Self-Image depending on their gender; consequently, hypothesis Ho1 is accepted. In support of the current findings, the results of the earlier study by Karna & Sivaraman (2023) reported that no significant gender difference was observed in Body image and Psychological Wellbeing of adolescents. Even though numerous studies have shown that girls are more likely than boys to have poor body image, low Self-Esteem, and poor psychological health (Ganesan, Ravishankar, Ramalingam (2018) however the current study's findings indicate that there are no appreciable differences between teenage boys and girls in terms of the study variables. The adolescent boys and girls typically have roughly the same levels of psychological well-being, Self-Esteem, and Body Self-Image which may be attributed to currently much propagated gender equality, social media influence, and economic and educational affluence measures.

Table 2 – representing the ANOVA results to find the difference in the Body Self-Image, Self-Esteem, and Psychological Wellbeing among adolescents based on their Academic Achievement.

Variables	Conditions	Sum of Squares	Df	Mean Square	F	Sig.
Body Self-Image	Between Groups	313.244	3	104.415	.957	.426
	Within Groups	3272.873	30	109.096		NS
	Total	3586.118	33			

Self-Esteem,	Between Groups	164.196	3	54.732	3.249	.035*
	Within Groups	505.333	30	16.844		
	Total	669.529	33			
Psychological Wellbeing	Between Groups	157.167	3	52.389	.516	.674
	Within Groups	3043.333	30	101.444		NS
	Total	3200.500	33			

*Significant at 5% level, NS Non-significant.

The above findings demonstrate a significant difference in the students' Self-Esteem, in relation to their academic performance at the 0.05 level (F-value = 3.249, $p < 0.05$). In contrast, there is no significant difference found in their Psychological Well-Being (F-value = 0.516, $p > 0.05$) and Body Self-Image (F-value = 0.795, $p > 0.05$) with reference to the students' Academic Achievement. Table 2 makes it clear that there are notable differences in the students' Self-Esteem, depending on their academic performance which lead to the partial rejection of the hypothesis Ho2. In line with the current investigation, Zhao et al. (2021) discovered that Self-Esteem positively influenced adolescents' academic engagement, with academic self-efficacy serving as an indirect mediating factor. Studies by Lim & Lee (2017) and Sirin & Sirin (2015) also reported the same. As Per expectancy-value theory, positive self-evaluation can predict academic outcomes such as academic engagement (Fang, 2016).

Table 3 represents the relationship between Body Self-Image and Psychological Wellbeing among adolescents

Dimensions of Body Self-Image	Dimensions of Psychological Wellbeing - 'r'- value						
	AT	EM	PG	PR	SA	PL	PWB
OAE	-0.206	-0.55	0.150	0.066	0.270*	0.093	-.024
HFI	-0.030	0.088	-0.036	0.226	-0.157	-0.114	.020



II	0.172	0.249*	0.163	0.004	0.040	0.052	.204
HFE	0.223	0.431**	0.323**	-0.225	0.267*	-0.001	0.28*
AG	0.223	0.242*	-0.156	0.090	-0.007	0.175	.161
HD	-0.361*	-0.168	-0.154	0.085	-0.52	0.028	.026
FE	-0.93	0.086	-0.037	0.038	-0.252*	-0.306*	-.210
NA	-0.28	-.169	-0.298*	-0.016	-0.629**	0.175	-.230
SD	-0.16	0.089	-0.055	-0.137	-0.126	-0.184	-.117

Pearson's Product-Moment Correlation analysis was conducted to explore the relationship between the components of Body Self-Image and Psychological Well-being in adolescents.

Overall Appearance Evaluation (OAE) and Self-Acceptance (SA) are positively correlated ($r = 0.270$, $p < 0.05$). This suggests that those who are more satisfied with their overall image are probably more likely to be self-acceptant about what they are and, which may result in better psychological well-being. Studies on body image and psychology lend credence to the notion that people's general mental health can be impacted by their perceptions of their own appearance.

Health Fitness Index was not significantly correlated with any of the dimensions of the Psychological Wellbeing.

Investment in Ideals (II) and Attention to Grooming (AG) are significantly correlated with Environmental Mastery (EM). The positive correlation between Investment in Ideals (II) ($r = 0.172$, $p < 0.05$) and Environmental Mastery (EM) ($r = 0.431$, $p < 0.05$) suggests that, on average, adolescents spend more time to manage or enhance the way they look tend to report higher levels of 'capacity to manage effectively one's life and surrounding world' (Ryff and Keyes, 1995, p. 720) and vice versa. Investment in ideals often involves personal development and growth. As adolescents strive to achieve their ideals in body image, they may adopt a positive mindset and proactively engage with their surroundings, contributing to a positive correlation with environmental mastery. Similarly, individuals who pay attention to grooming, which involves



personal care and appearance, are likely to have higher levels of environmental mastery in terms of psychological well-being. Positive grooming habits and investment in ideals can contribute to a sense of self-confidence, social acceptance, and an overall positive self-image, which could potentially influence one's perceived mastery of their environment.

Health-Fitness Evaluation (HFE) is significantly correlated with three dimensions of psychological well-being: Environmental Mastery (EM) ($r = 0.431$, $p < 0.05$); Personal Growth (PG) $r = 0.323$, $p < 0.05$; and Self-Acceptance (SA) $r = 0.267$, $p < 0.05$). The perception about their body is fit and healthy is correlated with these dimensions of psychological well-being namely EM, PG & SA aligns with the holistic perspective that physical well-being can contribute to both mental and social well-being. Positive health and fitness evaluations may lead to self-acceptance and increased confidence, a sense of control over the environment in which they are living which in turn leads to personal development.

Height Dissatisfaction (HD) is significantly negatively correlated $r = -0.361$, $p < 0.05$ with Autonomy (AT). A possible explanation of this correlation could be that adolescents who are dissatisfied with their height might perceive limitations or challenges and become dependent, possibly related to societal expectations, stereotypes or personal negative experiences associated with height.

Fatness Evaluation (FE) is significantly negatively correlated $r = -0.252$, $p < 0.05$ with Self-Acceptance (SA) and Purpose in Life (PL). This means that individuals who have a negative evaluation of their fatness, i.e., obese, are likely to experience a lower level of self-acceptance and a diminished sense of purpose in life. It's worth noting that societal standards, body image perceptions, and cultural influences can play a role in shaping these relationships.

Negative Affect (NA) is significantly negatively correlated with Personal Growth ($r = -0.298$, $p < 0.05$) (PG) and Self-Acceptance (SA) $r = -0.629$, $p < 0.05$). Negative correlations in this context imply that as negative feelings about their own body image increases, Self-Acceptance



and Personal Growth tend to decrease, or vice versa. This aligns with psychological theories that suggest a link between negative emotions and well-being.

Social Dependence (SD) has no significant correlation with all the dimensions of Psychological Wellbeing. It means that social situations do not influence present day adolescents. Similarly, none of the components of Body Self-Image are correlated with Positive Relations with Others and Purpose in Life, components of Psychological well-being.

HFE is significantly correlated with Overall PWB. Supporting to the present study, the findings of Ma et.al (2024) reported that physical fitness was found to be related to higher psychological well-being among Chinese university students. Physically fit individuals generally experience fewer mental health challenges, including somatization, obsessive behaviors, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychosis (Ma et al., 2024).

Table 4 representing the relationship between Self-Esteem, and Psychological Wellbeing in adolescents

Dimensions of Psychological Wellbeing- 'r' value							
	AT	EM	PG	PR	SA	PL	PWB (total)
SE	0.173	0.450**	0.539**	-0.005	.684**	.140	0.453**

Self-Esteem, of adolescents have significant Positive correlation with SA (Self-Acceptance) ($r=0.684$), PG ($r=0.539$) (Personal Growth), EM ($r=0.450$) (Environmental Mastery). However, PR (Positive Relationships with Others) ($r=0.005$) and PL (Purpose in Life) ($r=.140$) were not correlated with Self-Esteem,. From the table it is evident that Self-Esteem, of adolescents is positively correlated (0.453) with overall PWB (Psychological Well-Being). It means that those who have higher Self-Esteem, tend to have higher Psychological Wellbeing and vice versa.

In support to the present study's results Choudhary & Wani (2023) also found that significant positive relationships between Self-Esteem, and Psychological Well-Being. Earlier Researches done on the same area reveals that students with high Self-Esteem, tend to have better psychological well-being (Singhal & Prakash, (2021); Orth, Robins & Widaman, (2011). They are better able to cope with stress, have a more positive outlook on life, and experience less anxiety and depression. On the other hand, students with low self- esteem are more likely to experience negative emotions, such as anxiety, stress depression, and low self-worth, which in turn could impact their overall psychological well-being (Pyszczynski et.al, 2004).

Table 5 representing the relationship between Body Self-Image satisfaction and Self-Esteem, in adolescents in r-value

Dimensions of Body Self-Image satisfaction – r-values									
	OAE	HFI	II	HFE	AG	HD	FE	NA	SD
SE	0.089	-0.071	-0.007	0.233	0.024	0.156	-0.285*	-0.479**	-0.157

SE has a significant negative correlation only with FE (Fatness Evaluation ($r = -0.285^*$) and NA (Negative Affect) ($r = -0.479^{**}$). Being obese and dissatisfaction about their body self-image affects (reduces) their Self-Esteem (Naz et. al, 2022).

Table 6 a) representing the model summary of the Multiple Regression Analysis of Body Self-Image and Self-Esteem, on Psychological Wellbeing (PWB) among adolescents

a) Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.562 ^a	.316	.196	8.765	2.132

a. Predictors: (Constant), SE, II, HFI, AG, OAE, HFE, SD, HD, FE, NA

b. Dependent Variable: PWB

Table 6 b) representing the ANOVA of the Multiple Regression Analysis of Body Self-Image and Self-Esteem, on Psychological Wellbeing (PWB) among adolescents

b) ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2022.429	10	202.243	2.633	.010 ^b
	Residual	4378.571	57	76.817		
	Total	6401.000	67			

a. Dependent Variable: PWB TOT

b. Predictors: (Constant), SE TO, II, HFI, AG, OAE, HFE, SD, HD, FE, NA

Table 6 c) representing the coefficients of the Multiple Regression Analysis of Body Self-Image and Self-Esteem, on Psychological Wellbeing (PWB) among adolescents

Coefficients						
Model		Unstandardized		Standardized	t	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
I	(Constant)	61.107	14.546		4.201	.000
	OAE	-.465	.813	-.079	-.572	.569
	HFI	.602	.760	.100	.792	.431
	II	.586	.403	.194	1.453	.152
	HFE	.532	.476	.142	1.118	.268
	AG	.512	.487	.142	1.053	.297
	HD	-.487	.334	-.187	-1.458	.150
	FE	-.144	.513	-.043	-.281	.780
	NA	-.181	.510	-.057	-.355	.724

SD	-.123	.535	-.038	-.230	.819
SE	.909	.289	.416	3.145	.003**

a. Dependent Variable: PWB

Model 1 shows the R square value as 0.316 which specifies the variability in Body Self-Image and Self-Esteem, is accounted to Psychological Well-Being with 31.6%. The R value is 0.562 which represents 56.2 % relationship between Body Self-Image and Self-Esteem, the adjusted R Square value (.196) is less than R square value (.316), and F change (0.010) is significant. Durbin-Watson value 2.633 lies in-between 1.5 to 2.5 values which indicates that there is no auto correlation within the variable.

The Coefficient of Self-Esteem, (SE) shows that at 1 unit increase in the value of Self-Esteem, of an adolescent would result in 0.909 (90.9%) increase in psychological well-being, when other variables being held constant. This coefficient value is significant at 1% level since the t- value (3.145) of indicates that Self-Esteem, accounted for substantial variation in PWB among of adolescents. Hence it is implied that the dimensions of Body Self-Image namely II, HFI, AG, OAE, HFE, SD, HD, FE, NA of adolescents doesn't influence psychological well-being however the Self-Esteem, predicts psychological well-being Dames et.al, (2024).

SUMMARY

Teenage years are a challenging time in one's life since they bring about a lot of changes, such as emotional, cognitive, social, and physical. According to earlier researches, numerous factors affect the Body Self-Image and Self-Esteem of boys and girls. Females' Self-Esteem, is more significantly impacted by their weight, beauty, and menarche status than by their pubertal status. Body image refers to how individuals think, feel and behave with respect to their own body and appearance. During adolescence, self-perception about their appearance is important to the development of Self-Esteem and is also understood to be an important predictor of self-worth. Research has shown that negative perception of the body image and dissatisfaction can lead to both physical and psychological problems at this stage.



In the present study, Gender of the adolescents does not play a vital role in determining their Body Self-Image, Self-Esteem, and psychological well-being, nonetheless, a student's Self-Esteem, is largely influenced by their academic performance. About Body Self-Image and its relationship with Psychological well-being, Health-Fitness Evaluation is significantly correlated. Physical fitness found to be the major determinant of PWB other than physical appearance namely height, fatness, appearance, Grooming and social dependence for ideals.

Though Self-Appraisal and Environmental Mastery, the components of Psychological Well-being are related to components of body image OAE, HFE, FE & NA and II, HFE, AG, HD respectively, it is imperative to note that Adolescents' purpose in life and Personal relationship with others are not impacted by Body self-image. Poor academic Performance, Fatness evaluation and negative emotions are found to affect the Self-Esteem, among adolescents. Being healthy, having positive attitude about their own physical appearance and good academic performance are the key predictors in Self-Esteem, which in turn influences the psychological well-being among adolescents.

CONCLUSIONS

It was concluded that boys and girls do not differ significantly in their body self-image, self-esteem, and psychological well-being. Adolescents with higher academic achievement tend to exhibit higher levels of self-esteem. A significant correlation was found between psychological well-being and health-fitness evaluation, which is a key component of body self-image. Additionally, certain dimensions of psychological well-being and self-esteem among adolescents were also found to be significantly correlated. Self-esteem showed a significant negative correlation with fatness evaluation and negative affect, suggesting that higher self-esteem is associated with a more positive perception of one's body and fewer negative emotions. Overall, the findings indicate that adolescents' psychological well-being is influenced more strongly by their self-esteem than by their body self-image.

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