

Body-Image and Self-Esteem Among Adolescents: A Correlational Study

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ABSTRACT

The present study was conducted to examine the relationship between body-image and self-esteem among adolescents and to understand whether gender differences exist in both the variables. The sample consisted of 100 participants, studying in grade IX, studying in private schools under Board of Secondary Education of Assam (SEBA) of Guwahati City, including 50 females and 50 males. Data were randomly collected from four schools using Body Shape Questionnaire (BSQ-34) and Rosenberg Self-Esteem Scale (RSES). The findings showed that female participants had slightly higher level in both body-image and self-esteem compared to males, however the differences were not statistically significant ($t = 0.54, p > 0.05$). Pearson Correlation revealed a significant positive relationship between body-image and self-esteem ($r = 0.288, p < 0.01$). The result indicates that individuals with higher body dissatisfaction reported in higher self-esteem. Overall, the study suggests that while gender may not play a major role, body-image and self-esteem is an important factor influencing body-image among adolescents. This finding will contribute to psychological support to the adolescents and can be address during adolescent's counselling.

Keywords: Body-Image, Self-Esteem, Adolescents, private school, counselling, psychological support

INTRODUCTION

Adolescence is a very critical stage of development which can be characterized physically, emotionally, psychologically. During these changes individuals become very aware of their appearances and where they stand in the society. Body-Image is another aspect that comes into picture during adolescence. Where adolescents start to look into the mirror and inspect themselves about what they lack on, in their appearance and what they can do to acquire those missing characteristics. Self-Esteem is the belief of the overall worth of an individual, this aspect too develops significantly during adolescents.

A positive body-image can boost a person's confidence whereas, a negative body-image can do the opposite. Because many people are really critical about how they look or what they should look like and if they fail to do so they spiral and tend to become underconfident.

Research has consistently shown that adolescents are particularly vulnerable to body dissatisfaction due to heightened self-consciousness and comparison with idealized images portrayed in media.

Understanding both the concepts is really important in order to know and understand an adolescent's mindset, of how they view themselves and others too. It will help us to understand their view points in certain decisions they make in their life.

THEORETICAL FOUNDATIONS

Body-Image and Self-Esteem

Body-Image and Self-Esteem are two closely related aspects of psychological constructs that play a major role in shaping an adolescent's mindset or how they view certain things.

One of the most prominent frameworks is **Sociocultural Theory**, which suggests that societal standard of what beauty is or how it should be, which is further shaped by one's peers, family, society, etc. which significantly affects one's idea of body-image.

Social Comparison Theory, "which posits that individuals evaluate themselves by comparing their attributes with others". In the context of body image adolescents often compare themselves to others which can result in either positive or negative self-esteem.

Self-Discrepancy Theory, it explains how there are two selves which are created by us one is the actual self and the other is the ideal self. When the bridge between the actual self and the ideal self keeps on building up and are too distanced then there is dissatisfaction among adolescents.

Conceptual Link Between Body-Image and Self-Esteem

Previous Research shows a negative relationship between body image and self-esteem, indicating that individuals who are dissatisfied with their bodies tend to report lower levels of self-esteem (Grogan, 2016). Another study explored body image perception and self-esteem among female students and found that body-image concerns are closely linked or associated with psychological well-being and self-esteem (Mallaram, 2023).

Study found that body image plays a mediating role in self-esteem development among adolescents, indicating that body perceptions can influence self-worth indirectly through social and familial factors (Huang & Wan, 2025).

Also, not always the relationship is negative some can be positive too. As adolescent may not consider that self-esteem is only related to a positive body image, high self-esteem can also be a result of good academics performance or sports performance or any other activity they enjoy doing.

REVIEW OF LITERATURE

Ajmal (2019), conducted a study, that explores the impact of body-image on self-esteem in adolescent males and females. A sample of 290 adolescents (144=male, 146= females) was taken from different schools and colleges of Multan. RSES and BIS scales were used to measure the impact. Findings indicated a positive relationship between the level of confidence in the body image of adolescent males and their self-esteem. Moreover, it was found that adolescent females in their later years of adolescence had a high level of self-esteem as compared to adolescent females in their early years of adolescence. Independent t-test scores found that adolescent females report feeling more conscious about their body image and weight as compared to adolescent males. Results also showed that adolescent females disclose less information about themselves as compared to adolescent males.

Pedalino (2022), conducted a research that studies how Instagram use and body dissatisfaction, where there were 291 female adolescents and young women from which the (Mage= 19.8, SD= 4.6; 94.8% Italian) results showed that browsing on Instagram was associated with lower levels of body appreciation, fully mediated by upward social comparison with social media influencers, not close or distant peers. Findings highlights the need for public health intervention to raise awareness about the posting practices of social media influencers and to strengthen a positive body-image among young females susceptible to social comparison processes.

Rusu,L; Piese,D; et al (2025), conducted a research to study the correlation between physical activity, body image and self-esteem, where there were 100 males and 100 female participants, the result of which showed that males had higher obesity rates and exceeded normal weight limits more often than females, who had twice as many normal weights. Both genders reported body shape dissatisfaction (BSQ) and moderate self-esteem (RSES) where average scores for females was 20.27, and for males it was 19.60; the mean self-esteem value was 66% of the maximum value. Despite greater obesity and related health risks in males, their self-esteem indicated higher confidence.

Despite many researches done in this topic still there stands a lack of researches which includes both male and female participants, especially school attending students. This gap emphasizes the need for the present study.

RESEARCH OBJECTIVES AND CONCEPTUAL HYPOTHESES

- 1) To assess the level of body-image among adolescent, in regard to gender.
- 2) To assess the level of self-esteem among adolescent, in regard to gender.
- 3) To assess the relationship between body-image and self-esteem among adolescents.

Based on the research objectives, the following hypotheses were formulated:

- 1) H01: There will be no significant difference in the level of body-image among adolescents, in regards to gender
- 2) H02: There will be no significant difference in the level of self-esteem among adolescents, in regards to gender
- 3) H03: There will be no significant relationship between body-image and self-esteem among adolescent.

METHODOLOGY

Research Design

The present study has employed a quantitative, correlational research design to examine the relationship between body-image and self-esteem among adolescents.

Population and Sampling and Data Collection Fidelity

The target population comprised of school going students of Guwahati City enrolled in various schools which are affiliated by Board of Secondary Education of Assam (SEBA), who voluntarily agreed to participate in the research. The population is diverse in terms of age and gender, which enhances the generalizability of the results. Participants were both male and female students aged between 15-16 years. The total sample size is N=100, male (50), female (50), collected from four different schools of Guwahati City for the investigation.

Data collection procedures adhered to strict ethical standard. Necessary permissions were secured from the Principals of the school, and prior verbal consent was obtained from all participants. Data were collected through self-report questionnaires administered to participants and proper instructions were given. Data collection process ensured strict confidentiality.

Measurement Tools

- 1) **Body Shape Questionnaire – 34 (BSQ-34)**, developed by Cooper et al. (1987), assesses body dissatisfaction. It consists of 34 items rated on a 6-point Likert scale from never to always. It evaluates concerns related to appearance, body shame, and feelings of fatness. The BSQ-34 has been widely used internationally and nationally and will be appropriate for measuring body image among adolescents. As, for BSQ-34 it is a 6-point Likert type Scale. Each item in scale will have 6 alternative answers and each alternative have some assigned point ranging from Never (1) to Always (6), therefore total score ranges from 34-204; higher scores indicate greater body dissatisfaction.

The Body Shape Questionnaire, demonstrating concurrent and convergent validity and shows high Cronbach Alpha values, often ranging from 0.95 to 0.98 and test- retest reliability with strong correlation coefficients reported between 0.81 and 0.98.

- 2) **Rosenberg Self-Esteem Scale (RSES)**, developed by Morris Rosenberg (1965) is one of the widely used instruments for measuring global self-worth by assessing both positive and negative feelings about self. The scale consists of 10 items rated on a 4-point Likert scale ranging from strongly agree to strongly disagree. The scale evaluates overall self-worth and confidence. Items 1,3,4,7 and 10 are positively worded, while Items 2,5,6,8 and 9 are negatively worded and therefore reverse scored. The total score ranges from 10 to 40. High score- indicating high self-esteem and Low score indicates low self-esteem.

The Rosenberg Self-esteem Scale demonstrates strong construct validity, as supported by its positive correlation with measures of psychological well-being and negative correlation with anxiety and depression. Furthermore, the Scale has demonstrated a strong internal consistency, with Cronbach’s alpha ranging from 0.77 to 0.88, indicating good reliability

Statistical Techniques

Data analysis was performed using Microsoft Excel. Descriptive Statistics including Mean, Standard Deviation, were calculated. To test for gender differences (Objective 1, Objective 2), an independent samples t-test was employed, comparing the mean scores between male and female participants. To determine the direction and strength of the relationship between body-image and self-esteem (Objective 3) Pearson’s Correlation was employed.

RESULTS

Data were analyzed using appropriate statistical techniques in accordance with the objectives of the study.

Objective 1

H01: There will be no significant difference in body-image among adolescents, in regards to gender.

Table 1: Body-Image (Group Statistics) with regards to Male and Female among adolescents

	N	Mean	Std. Deviation	Std. Mean Error
1(Female)	50	77.34	39.49	5.59
2(Male)	50	72.50	31.49	4.45

Table 1 : Body-Image (Group Statistics) indicate that Gender 1 (Female) , N=50, the mean body-image score is 77.34 with a standard deviation of 39.49. For Gender 2 (Male), N=50, the mean score is 72.50 with a standard deviation of 31.49, this indicates that Gender 1 (Female) has slightly higher mean score than Gender 2 (Male).

Table 2 : Independent Samples Test

Variable	Group	N	Mean	Std Deviation	t	df	p
Body-Image (BSQ)	1(Female)	50	77.34	39.49	0.11	98	0.11
	2(Male)	50	72.50	31.49			

Data determines the results of the independent samples t-test comparing body image scores between male and female students. The mean difference between the two groups is small (Mean Difference= 4.84), and the t-test result (t=0.11, p = 0.11) indicates that difference is not statistically significant. Therefore, the null hypothesis is accepted, indicating that there is no significant difference in body-image based on gender.

Objective 2

H02: There will be no significant difference in the level of self-esteem among adolescents, in regards to gender.

Table3: shows Self-Esteem (Group Statistics) with regard to Male and Female among adolescents

Gender	N	Mean	Std. Deviation	Std. Error Mean
1(Female)	50	23.68	5.02	0.71
2(Male)	50	23.10	4.40	0.62

Data showed that Self-esteem (Group Statistics) indicates that Gender 1 (Female), N= 50, the mean self-esteem score is 23.68 with standard deviation of 5.02. For Gender 2 (Male), N=50, the mean self-esteem is 23.1 and standard deviation of 4.40, indicating that Group 1 participants reported slightly higher levels of self-esteem compared to Group 2.

Table 4 : Shows Independent Samples Test

Variable	Group	N	Mean	Std. Deviation	t	df	p
Self-Esteem (RSES)	1(Female)	50	23.68	5.02	0.36	98	0.36
	2(Male)	50	23.10	4.40			

Data examines whether difference is significant, and independent samples t-test comparing self-esteem scores between Gender 1 and Gender 2. The mean difference between the two groups is small(Mean Difference- 0.58), and the t-test result (t= 0.36, p=0.36), indicates that the difference is not statistically significant. Therefore, null hypothesis is accepted, indicating that there is no significant difference in self-esteem based on gender.

Objective 3

H03: There will be no significant relationship between body-image and self-esteem among adolescent.

Table 5: Shows correlations between Body-Image and Self-Esteem for the overall sample

		BSQ Total	RSES Total
BSQ Total	Pearson Correlation	1	0.288
	Sig. (2-tailed)		0.004
	N	100	100
RSES Total	Pearson Correlation	0.288	1
	Sig. (2-tailed)	0.004	
	N	100	100

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

The relationship between Body-Image and Self-Esteem is found to be significant at the 0.01 level of significance (p value=0.00; Pearson correlation coefficient= 0.288). The relationship is significantly positive, which means that when Body-Image Dissatisfaction increases , Self-Esteem also increases.

DISCUSSIONS

The present study conducted to examine the Correlation Between Body-Image and Self-Esteem Among Adolescents were interpreted based on the appropriate statistical techniques, including descriptive statistics, independent sample t-test, and Pearson Correlation.

Objective 1: To assess the level of body image among adolescent, on the basis of gender.

The findings of the study revealed that female participants (M = 77.34, SD = 39.49) reported slightly higher body image scores which is higher level of body dissatisfaction compared to male participants, who scored mostly moderate level of body dissatisfaction (M = 72.50, SD = 31.49). However, the independent samples t-test showed that this difference was not statistically significant (t = 0.11, p = 0.11). Therefore, the null hypothesis H01 was accepted, indicating that there is no significant gender difference in the level of body image dissatisfaction as mostly both the genders scored moderate levelbody image dissatisfaction among adolescents.

This finding is consistent with studies such as Das(2002), Deka & Sharma(2020), which reported that body dissatisfaction is prevalent across both genders. However, it contradicts earlier studies like Borah& Kalita(2014)

and Medhi& Das(2017), where females reported higher dissatisfaction. Although females showed marginally higher level of body dissatisfaction, the lack of statistical significance suggests that both male and female adolescents may experience similar concerns regarding body image.

This finding aligns with recent trends where body image issues are increasingly observed across both genders, possibly due to social media exposure, cultural standards of attractiveness, and peer influence, as discussed in social learning theory how they compare themselves to the rest of the society. Earlier research often emphasized higher body dissatisfaction among females; however, contemporary studies suggest that males are also becoming equally conscious about their appearance.

Objective 2: To assess the level of self-esteem among adolescent, on the basis of gender.

With regard to self-esteem, female participants ($M = 23.68$, $SD = 5.02$) scored slightly higher than male participants ($M = 23.10$, $SD = 4.40$). However, the difference was not statistically significant ($t = 0.36$, $p = 0.36$). Thus, the null hypothesis H02 was accepted, indicating that there is no significant gender difference in self-esteem among adolescents, as mostly both the genders scored moderate level self esteem among adolescents.

The result aligns with Diengdoh& Ali(2022) and Latha (2006), which suggests that self-esteem is influenced more by psychological and social factors other than gender only.

This suggests that both male and female adolescents in the present study possess comparable levels of self-esteem, which is moderate level of self-esteem. The similarity in self-esteem levels may reflect changing societal norms, increased awareness, and equal opportunities for both genders in academic and social settings.

It also indicates that gender alone may not be a strong determinant of self-esteem during adolescence, and other factors such as family environment, peer relationships, and personal achievements may play a more significant role. According to Psychosocial Development Theory, self-esteem develops through identity formation and is shaped by multiple factors beyond gender. Social Comparison Theory, further suggests that both genders engage in similar comparison processes, leading to comparable self-esteem levels.

Objective 3: To assess the relationship between self-esteem and body image among adolescent.

The results of the Pearson correlation analysis revealed a significant positive relationship between body image and self-esteem ($r = 0.288$, $p = 0.004$), significant at the 0.01 level. Therefore, the null hypothesis H03 was rejected.

The positive correlation indicates that as body image dissatisfaction level increases (which means high level of body dissatisfaction) self-esteem level also increases (which means high level in self-esteem). This finding is surely contradictory to any other articles or review of literature that results in negative relationship between body dissatisfaction and self-esteem, where higher dissatisfaction is usually associated with lower self-esteem.

These findings contradict most previous studies like Bhattacharya (2016), Saikia & Hazarika (2019), Mallaram et al (2023), which reported a negative relationship between the two variables. However, some studies such as Diengdoh & Ali (2022) and Ajmal (2019) suggest a positive association between body-image and self-esteem.

From a theoretical perspective, Social Comparison Theory suggests that while comparison often lower self-esteem, individuals with higher self-esteem may still acknowledge dissatisfaction without being negatively affected. Social Learning Theory explains that exposure to media may normalize dissatisfaction, reducing its impact on self-worth. Additionally, Psychosocial Development Theory highlights that self-esteem is influenced by multiple domains, not just appearance.

Future Suggestions

- Future studies can include a larger sample size to improve the reliability and generalizability of the findings.

- Research can be conducted across different regions, cultures, and socio-economic groups to understand the broader applicability of the results.
- Additional variables such as social media influence, peer pressure, family environment, and cultural expectations can be included to gain deeper insights.

Implications of the Study

- The study found no significant gender differences in body image and self-esteem, suggesting that both male and female adolescents experience similar psychological concerns. Therefore, mental health programs should be designed for adolescents as a whole rather than focusing on a single gender.
- Educational institutions can use these findings to implement awareness programs, workshops, and counseling services aimed at promoting positive body-image and healthy self-esteem among students.
- The significant positive relationship between body-image dissatisfaction and self-esteem highlights the complexity of these variables, indicating that their relationship may not always follow traditional assumptions.
- Mental health professionals and counselors should consider individual differences while addressing body image concerns, as higher dissatisfaction does not necessarily imply lower self-esteem in all cases.
- The findings can contribute to the development of more effective intervention strategies that take into account social, cultural, and psychological factors influencing adolescents.

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