

## Research Article

# Body Image Perception as a Predictor of Self-Esteem among High School Adolescent Students: A Study in Ghion Secondary School, Bahir Dar, Ethiopia

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### ABSTRACT

The main target of this research article was to know whether body image perception predicts self-esteem of high school adolescent students. To realize this linear regression analysis was computed. Apart from this, the article tried to assess the status of adolescent's body image perception and self-esteem via one samples t-test. Finally, the study identified sex differences among adolescent male and female students regarding body image perception and self-esteem by employing independent samples t-test. Participants of the study were 94 (male= 47 and female= 47) selected through

stratified simple random sampling technique. According to results of the study, adolescent students had higher level of body image perception and self-esteem. On the other hand, finding of the study indicated that body image perception predicted self-esteem of adolescent students. Regarding sex disparity on body image perception and self-esteem among male and female adolescent students, there was no significant distinction between the two sex groups.

**Keywords:** Adolescence, Body image, Self-Esteem, Sex Difference

### Introduction

The period of Adolescence typically starts around age of ten and ends in the early twenties. Adolescence can be conceptualized as a period of change from childhood to adulthood, and, it is identified by major bodily, psycho-social, physiological, and cognitive, growth, development and maturation [1]. In addition to these, the period of adolescence is full of vital changes in the aspects of physical, social, emotional and moral development [1]. Because of these transformations, body posture is very fundamental for youngsters during adolescence and it is mentioned that females give greater focus to be skinny and adolescent males give higher emphasis for being masculine [2]. Childhood and adolescence are considered as vital stages by which body images of teens can be developed in a significant fashion [3]. Similarly, study by Richards [4] indicates that young adolescents are overly dedicated with their body physique and the way they are seen by others.

Body image is seen as people's personal outlook of their body physique [5]. Similarly, it shows us how adolescents perceive their physical appearance and bodily figures on the basis of self-appraisal and the way they conceive how others look them. Body image can be further conceptualized as "the perception of overall physical appearance" [6]. predicted physique shape and other researchers suggested to its perceptual aspect, emphasizing on pleasure of, and appraisal of ones physique [7]. It is described as the cumulative of one's emotions and thinking about themselves, the idea of self-shows progresses during adolescence relying on adolescents' relationship with their surrounding [8]. Human beings idea and emotion on their physical appearance is commonly explained as their self-concept and self-esteem. Self-esteem is the appraisal and emotional aspect of the self-

concept, and is seen as similar to self-worth, personal appraisal and importance of oneself [9]. Others also defined Self-esteem as it relates to a people's world evaluation of their optimistic or pessimistic views attached to it; depending on the values individual's attaches to themselves in various functions and aspects of their experience [10]. The value, the acceptance and development of self-confidence towards our self is considered as positive self-esteem. People with greater self-esteem appraise their self optimistically and perceive best regarding the things they exceed [11]. An optimistic view in appraising adolescents one's own self produces greater level of self-worth; however, pessimistic evaluation leads to diminished level of self-esteem, this again results a perception of internal dissatisfaction. Bodily physique and individual's level of knowledge and skill may also produce reduced self-esteem which become the sources of inability to adapt in societal relationships and interaction which in turn through time influences psycho-social health of adolescents [12].

Different research findings indicated that Physical appearance has been the one that significantly predicts adolescent's self-esteem. There is a high level association amidst adolescents who show dissatisfaction to their physical shape and others who had reduced status of self-worth [13]. Similarly, Body image appraisal for example, physical image unhappiness was a significant indicator of depression and reduced level of self-worth amidst Caucasian, African American, Latino, Asian, and multiethnic ninth grade male and female students [14].

In the adolescence period, females, greater than males, have special interest in their body mass, physical posture and self-concept. When we see more rigorous information that body image is pessimistically viewed by the large number of female

adolescents [15]. Numbers of women's are unhappy with their physical appearance and body mass. This dissatisfaction can be resulted due to; skinny body shape is considered as the acceptable measure and as the attractive standard, particularly for adolescent girls. In adulthood period even skinny or thin physical appearance is largely widespread amongst female adolescents than male counterparts [16]. Other Studies that was conducted on body image around the globe indicated the disparity amidst the two sex groups, and that the physical shape unhappiness was largely widespread in the case of women's [17].

There are various studies conducted at different times all over the world on the concept of body image, self-esteem and the relationship between the two variables amidst young teen adolescent students. However, there are no adequate literatures and published study sources in Ethiopia on the issues of body image perception and self-esteem among adolescents. So, this study is conducted to fill this gap. Accordingly, the study primarily intended to show the level of and the prediction of body image over self-esteem of adolescents in selected high school students at Bahir Dar city Ethiopia. To do so, three research questions were raised;

1. What is the status of student's body image perception and self-esteem?
2. Do body image perceptions of adolescents predict their self-esteem?
3. Is there significant sex difference in body image perception and self-esteem?

## Methods

### Design of the Study

Design of the study was correlational research method. This was because, correlational research design is best way to see the predictive relationship between and among variables.

### Sampling Technique, Sample Size and Population

Population of the study was the entire grade 9 and 10 high school adolescent students who are learning at Gion senior secondary school. Participants of the study were selected from grade 9 and 10 students by using stratified simple random sampling 94 (47 male and 47 female) as a sample population.

### Instruments

The main instrument utilized to collect data from the respondents was self-report questionnaire. These self-report questionnaires measure; socio-demographic information that was sex of students, instruments that measured the level of body image perception and self-esteem of adolescents.

### Body Image Instrument

The 20 item self-report questionnaire, that appraise both the personal evaluation and actions and reactions and social aspects of body image were employed. Questions in the scale were modified from two various instrumental scales; the Body shape questionnaire and Satisfaction with Appearance Scale (SWAP) [18,19]. The body image questionnaire has 7 point liker scale

ratings that domains from strongly agree 7 to strongly disagree 1. The higher the score in the scale the higher body image perception students have. That means it should be above the mean test value which was 4.

### Self-Esteem Measure

To measure the level of adolescent's self-esteem Rosenberg's 10 items self-report scale Rosenberg, 1965 was utilized. The scale has 4 point liker rating scale that domains from 4 strongly agree to 1 strongly disagree. The higher students score in the scale the higher their self-esteem is. At minimum it should be greater than the mean test value which was 2 to have greater status of self-esteem.

### Pilot Test

To measure the content validity of the questions in each scale dimensions a Pilot test was carried out. The pilot test was administered on randomly chosen twenty five pupils of Ghion senior secondary school. Based on this the reliability coefficient of the entire body image scale was calculated and identified to be ( $\alpha=0.79$ ). Accordingly, the reliability coefficient of the total self-esteem scale was calculated and discovered to be ( $\alpha=0.77$ ); which was abundant for proceeding to data collection and it was abundant and reliable to go to final study of the article.

### Data Analysis Methods

To made analysis for the collected information both descriptive and inferential analysis techniques were implemented. To know the status of body image perception and self-esteem one sample t-test was utilized. On the other hand, to identify whether body image perception of adolescents predict self-esteem linear regression model was employed. To show sex differences amidst adolescents on body image perception and self-esteem independent samples t-test was utilized.

### Findings of the study

Results of the study were presented here beginning from demographic information of the respondents Table1 status of body image and self-esteem of students, prediction of body image on self-esteem and sex disparity on body image and self-esteem of male and female adolescent students here under sequentially.

As indicated in table one, the number of male and female students that were taken as participants of the study were equal. That was 47 (49.5%) each sex and totally 94 respondents were participated in the study. This was done to make equal representation of both sex groups.

As the results of Table 2 demonstrates, student's level of body image perception mean score which was (5.0294) discovered to be significantly greater than the average test score which was 4. Similarly, the results of one sample t-test indicated that students' self-esteem average score (3.0947) discovered to be significantly greater than the average test score which was 2. So, participant adolescent students of Ghion secondary school have higher level of body image perception and self-esteem.

**Table 1: Demographic Information of Respondents.**

	Frequency	Percent	Valid Percent	Cumulative Percent
	1	1.1	1.1	1.1
Male	47	49.5	49.5	50.5
Female	47	49.5	49.5	100.0
Total	95	100.0	100.0	

**Table 2: Level of adolescent Students Body Image Perception and Self-Esteem.**

One-Sample Test						
Test Value for body image = 4 Test Value for self-esteem = 2						
	N	Mean	Sd	t	df	Sig. (2-tailed)
Body image	94	5.0294	0.63115	15.812	93	0.000
Self-esteem	94	3.0947	0.48446	21.907	93	0.000

**\*p<0.05 n=94**

**Table 3: Whether Body Image Perception Predicts Adolescent Students Self Esteem**

Model Summary						
R	R Square	Adjusted R Square	Std. Error of the Estimate			
0.206 <sup>a</sup>	0.042	0.032	0.47667			
Predictors: (Constant), Body Image						
ANOVA <sup>a</sup>						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	0.924	1	0.924	4.067	0.047 <sup>b</sup>
	Residual	20.903	92	0.227		
	Total	21.827	93			

**\*p<0.05 n=94**  
Dependent Variable: self-esteem  
Predictors: (Constant), body image

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	2.300	0.397	5.796	0.000
	Body image	0.158	0.078	0.206	2.017

a. Dependent Variable: self-esteem  
**\*p <0.05 n=94**

As the model summary illustrates Table 3 the R square is (R<sup>2</sup>=0.042). This showed that, 4.2% of variance on students' self-esteem was accounted by their body image perception. This implies that, the level of adolescent student's body image perception contributed 4.2% to their self-esteem status.

As the ANOVA result dictates that, body image perception significantly and positively predicted adolescent students' self-esteem at F (1,92) =4.067, p=0.047. This is because; the significance level the study result 0.047 was less than the P value which is 0.05.

Since there was one predictor variable that was body image perception of students, it was difficult to see the relative contribution of each of other independent variables. However,

as the finding of the study indicated that, body image perception of students' had a significant contribution for self-esteem, that was (β=.206, t=2.017, p<0.05) significant at 0.047.

As indicated in Table 4, the results of independent samples t-test showed that, there was no significant average score disparity amidst women and men students in their body image perception, Male (M=5.0409, SD=0.65872) and Female (M=5.0179, SD=0.60925) at t=.176, p=.861>0.05. This enfolds that women and men students are almost similar in their level of body image perception. Similarly, there was no significant disparity amidst women and men students in their level of self-esteem, Boys (M=3.1106, SD=0.45599) and Girls (M=3.0787, SD=0.51581) at t=.318, p= 0.751>0.05.

**Table 4: Gender Disparity in Body Image and Self- Esteem amidst Adolescents**

Independent Samples Test							
	Sex of students	N	Mean	Std. Deviation	t	Df	Sig.(2-tailed)
Body image	Male	47	5.0409	0.65872	0.176	92	0.861
	female	47	5.0179	0.60925			
Self-esteem	Male	47	3.1106	0.45599	0.318	92	0.751
	female	47	3.0787	0.51581			

\* $p < 0.05$   $n=47$  for male and  $n=47$  for female

## Discussion

### Level of Adolescent Students Body Image Perception and Self-Esteem

The primary study issue was evaluating the level of adolescent student's body image perception and their self-esteem. Based on findings of the study, the level of student's body image perception ( $M= 5.0294$ ,  $SD=.63115$ ) and self-esteem which was ( $M= 3.0947$ ,  $SD=.48446$ ) significantly higher than the mean test values which were 4.00 and 2.00 respectively. So, these result revealed that, adolescent students of Ghion secondary school have higher status of body image perception and self-esteem. Various studies around the world revealed that, the status of adolescent's body image perception and self-esteem was inconclusive. For instance, this study is in line with Holsen. That indicates body satisfaction step by step grows through adolescence and stabilizes in adulthood. Similarly, another research finding by Asgeirsdottir discovered that the status of body physique unhappiness amidst teens had risen profoundly ranging from the year 1997 to 2010. Contrarily, other research findings revealed that large number of American adults are currently labeled either high level of body mass or extremely overweight, greater than 36% growth in the last thirty years and more than half of all girls are unhappy with their general physical appearance and body mass [20]. Even though, studies revealed that a considerable population of boys are also unhappy with their physical appearance, they put greater emphasis for their body shape and masculinity than with body mass [21]. Similarly, A Canadian study found that 36%–50% of the teens from six grades to ten were dissatisfied with their physical appearance.

On the other hand, the study finding is not in line with Kelly Marie Picard May, 2009 who asserted mean scores of adolescents level self-esteem was below the norm or average level. Similarly, study by Geetashree, 2017 which is conducted in India indicated that adolescent's level of self-esteem was low.

This study result might be registered from recent changes in the adolescents dieting system and physical exercise. Above all, adolescent's exposure to social Medias and making their physique in line with it contributed a lot for their higher status of body image and self-esteem.

### The Prediction of Self -Esteem from Body Image Perception of Adolescents

The finding of the study illustrates that, body image perception significantly predicts self-esteem of adolescents ( $F(1,92)=4.067$ ,  $p=0.047$ ). This implies that student's higher level self-esteem was the result of or the impact of their positive or higher level of

body image perception. This result is congruent with majority of the research findings conducted in the area. For example, it is consistent with a study by Harter, 2006 that shows prediction of self-esteem from body image perception. Similarly, satisfaction in physical shape among adolescents has been considered as a indicator of self-esteem. However, there are also research findings that are contrary to findings of this study. Accordingly, a study by Kostanski [22] indicates that, even though, the results are inconsistent from studies that shows the association amidst body image unhappiness and self-esteem, a few studies has demonstrated that they are inversely associated, in that a greater status of body image unhappiness is inversely correlated to status of self-esteem. Other studies by Geetashree, also showed that, there was no significant correlation amidst body image and self-esteem of adolescents. Adolescent's optimistic view towards their body image contributed for their higher level of self-esteem.

### Sex Disparity in Body Image Perception and Self- Esteem amidst Adolescents

Regarding sex differences, the result of research article demonstrates that, there was no significant sex disparity amidst women and men students on their level of body image perception (Male ( $M=5.0409$ ,  $SD=0.65872$ ) and Female ( $M=5.0179$ ,  $SD=0.60925$ ) at  $t=.176$ ,  $p=0.861 > 0.05$ ) and self-esteem (boys ( $M=3.1106$ ,  $SD=0.45599$ ) and girls ( $M=3.0787$ ,  $SD=.51581$ ) at  $t=.318$ ,  $p=0.751 > 0.05$ ). This result is supported by a study that shows no significant average score disparity among men and women pupils on their general level of body image and self-esteem. Similarly, the difference in the status of body image happiness amidst the two sexes exists to be becoming tight across time. However, large number of studies revealed that female's level of body image perception and self-esteem was lower than their men counter parts. A study by Bearman [22] indicated that women's body image happiness shows reduction among teens, however, men's body image happiness existed more reliable. Similarly, girls usually have reduced level of physical appearance happiness than boys study conducted in Australia with teens age ranges from 13 to 17 years proved that women's were significantly more likely than men to be unhappy with their body mass and body shape [23].

On the other hand, various studies also showed that female's level of self-esteem is significantly lower than males in the adolescence period; a high level research undertaken in the area of self-esteem in Western countries has justified that female's self-esteem is averagely, though significantly less than boys (Kling, Hyde, Showers, & Buswell, 1999). So, the study result is in contrary to this research finding. Generally, recent changes in the culture of the society contributed for female adolescents to have similar status of body image perception and self-esteem like that of males.

## Conclusion and Recommendation

### Conclusion

Based on results and discussions of the study the researcher forwarded the following conclusions

- Adolescent students had significantly higher level of body image perception and self-esteem.
- Body image perception predicted self-esteem of adolescent students.
- There was no significant sex difference both in body image perception and self-esteem of boys and girls adolescent students.

### Recommendations

Depending on findings of the study, discussions made and conclusions given, the researcher forwarded the following points as recommendations.

- As the result of the study demonstrates, adolescents had higher level of body image and self-esteem. Therefore, the school community should empower adolescents to strengthen and sustain their status of body image pleasure and self-esteem. This can be done via providing different trainings, like, life skill that will enhance body image perception and self-esteem of adolescents.
- Since body image predicts self-esteem of adolescents, various tasks are expected from sport department and other management bodies of the school to build adolescent students body image perception for the sack of fostering their self-esteem. One way of achieving these is through delivering trainings on the issues of balanced dieting and importance of physical exercise for the students.

As the result of the study depicts, there was no significant disparity amidst boys and women students in their mean score of body image perception and self-esteem. So, the school administration and guidance and counseling office should empower female students to have positive self- image and self-esteem in the future as that of their current level of body image perception and self-esteem.

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