

# The Correlation Between Self-Esteem and Body Image: A Study on Female Adolescent Instagram Users

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## ABSTRACT

The overall affective evaluation of one's own worth, value, or importance, as known as Self-esteem (Blascovich & Tomaka, 1991), is constructed by various aspects of self-evaluation, and physical appearance is one of these aspects. Individual body image, how a person perceives his or her body and how satisfied he or she is about it (Grogan, 2016) is likely linked with their self-esteem especially in adolescence which is a period of time when body image concern in young women is at its peak (Burgess et al., in Grogan, 2016). Social media usage, particularly Instagram which is a picture based social media may affect the users' perceptions about their body due to comparison that possibly happen. The aim of this research is to identify whether self-esteem is linked with body image in female teenager Instagram users. The research involved 150 female teenagers who were using Instagram recently by using snowball sampling technique. The method that was used in this research is a non-experimental quantitative method. There were two instruments used in the research. Self-esteem was measured by State Self-Esteem Scale and body image was measured by Multidimensional Body-Self Relations Questionnaire-Appearance Scale. The result showed that there is correlation between self-esteem and body image in female teenager Instagram users, meaning that the research hypothesis is accepted. Furthermore, it was shown that Appearance Evaluation is the body image dimension with highest correlation with self-esteem ( $r=0.713$ ).

**Keywords:** *body image, self-esteem, Instagram users*

## 1. INTRODUCTION

Adolescence is the transition period from childhood to adulthood [1]. Based on Erikson's stages of development theory [2], during this period of time, adolescents are faced to decide who they really are. To completely discover their identity, they have to go through a crisis where various things about themselves are being questioned such as what they valued, their ideal self, their future career, and their sexual identity [3]. Therefore, adolescents are prone to external influences during this age.

Recently, social media usage is commonly found in adolescents. Instagram, one of the popular social media in adolescents, is a rapidly growing photo social media [4]. However, a number of studies stated the worrying impact of this media social usage. According to the study conducted by Royal Society for Public Health and Young Health Movement, Instagram is ranked the worst out of all social media platform in terms of detriments to mental health. Moreover, the study that involved young individuals aged 14-24 years old stated the impacted mental health issues are depression, loneliness, anxiety, and body image disturbance [4].

These harmful impacts are indicated caused by Instagram's image-focused form. The comparison that continually occur between images on the social media and the real self negatively affects individual perception about their body and make them feel dissatisfied about their body [5,6,7,8]. There are two mechanisms that mediate the exposure of these impacts to one's body image. First, the internalisation of the social standard of physical appearance, and second, the social comparison process related to physical appearance [9]. The body ideal that internalized tends to increases the desire to have a slender body, sets the unrealistic standard of physical attractiveness, then leads women to perceive themselves unattractive and feel dissatisfied about their body [10].

Vogel, Rose, Roberts, dan Eckles [11] explained that people do have a fundamental urge to compare themselves to others. But according to Festinger in Grogan [10], social comparison could be happened in two different ways; upward comparisons and downward comparisons. Upward comparisons are where other is judged to score higher than oneself in the target attribute. This kind of comparisons are often make people feel inadequate, worsen self-evaluation, and feel poor.

Social media is a media commonly used for self-branding. The users selectively share contents that fit with the self they want to build or to be seen, their ideal self [11].

Therefore, most of the comparisons happen in the social media are the upward comparisons.

Moreover, the kind of content seen in media, how much exposure ones get, the level of satisfaction before, gender, age, and intelligence are some factors that take part in media influence to one's body perception [8]. The kind of content related to appearance or images of ideal body in Instagram that particularly influence women's perception and poor feelings about their body [5,7].

According to Slade [12], the picture we have in our mind of our own body size, shape, and form, and our feelings concerning these characteristics is known as body image. If those picture and feelings are poor, then the person is likely dissatisfied about their own body [10]. This feeling of dissatisfaction is more often found in women than in men. Some studies claimed that adolescence is the period of time when body image concern in young women is at its peak because of some changes happen due to puberty [10]. In this period of time adolescents' mind are filled with their own body and developing the picture of what their bodies look like [2]. According to Feldman [1], adolescent, especially female, commonly feels embarrassed with the changes happen to their body during the puberty. While boys are generally satisfied with the changes happen to their body because of the increasing of muscle mass, girls are generally unhappy and dissatisfied with their new body probably because of the increasing fat on some body parts and the waist and butt that becoming larger, bringing their body far from the social ideal beauty; the unrealistic skinny body [2].

Regarding this issue, in 2019 Mental Health Foundation held a study on 1.118 adolescents. The study found that 37% of these adolescents are upset about their body shape and 31% of these adolescents are ashamed of their body. Moreover, 35% of these adolescents have restrained what they consume worrying about their look [6,14]

The poor body image and body dissatisfaction need immediate concerned because are likely impactful to our physical and mental health. Having a poor body image in some ways could lead to several mental issues such as low self-esteem, depression, eating disorder, and suicidal thought [8,15]. Frost and McKelvie [16] found that women dissatisfied with their own body size and shape have a lower self-esteem than women that satisfied with their own body.

Self-esteem is an important part of one's mental state. Self-esteem is how a person accept, value, or like him or her own self [17]. According to William James in Harter [18], individual self-esteem is based on how adequate a person feels on areas particularly important for him or herself. Self-esteem is a very important psychological factor and strongly linked to mental and/or physical health and social behaviour. High self-esteem related to a better health and positive social behaviour. On the other hand, low self-esteem related to social issues, behavioural issues, and health issues such as depression, anxiety, and suicidal tendency [19]. High self-esteem associated with better impact, whether in individual context or in social context. Moreover, enhancement in self-esteem, particularly in childhood and adolescence, are likely beneficial for the individual own self and social context [20].

A number of previous studies shown that self-esteem found lowest in adolescence, compared to childhood and adulthood [2,16]. The increasing level are found higher in girls. One of the reasons is the puberty that caused some changes in body happen during this age [2]. Moreover, Davidson and McCabe [21] explained the low level of self-esteem in female adolescent is related to concern about others' evaluation on their appearance.

Previous study shown that self-esteem is significantly correlated with women's body image [16]. However, the study identified these two variables in women generally, not in particular group of age. The aim of this study is to identify whether women's self-esteem is linked with their body image in adolescence, considering some of adolescent's traits mentioned before that indicates the correlation between these two variables. Body image and self-esteem are crucial things in this period of age, especially on women. These two things are impactful to one's mental health, even could possibly lead to some disorders, and influence other areas of life. Adolescent's body image that generally are poor due to some changes happen caused by puberty, are likely found worse in Instagram users because the images found in the social media internalized to be the ideal body. The continuous exposure to these ideal body may possibly affect female adolescent's perception of her body in a negative way and lead to body dissatisfaction.

## 2. RESEARCH METHODOLOGY

This study involved 150 female teenagers (12-18 years old) who were using Instagram at least in a recent week and based in Tangerang. This is a non-experimental quantitative study. Correlation between the two variables were tested with Pearson correlation method.

### 2.1 Scale of Self-Esteem

In this study, self-esteem was measured by the State Self-Esteem Scale (SSES). SSES was invented by Heatherton and Polivy [23] and was translated to Bahasa and validated through expert judgement process before. This measurement comprises three different areas of self-esteem; Appearance, Social, and Performance. There are 20 items in total consisted in this measurement; 6 items in Appearance area, 7 items in Social area, 7 items in Performance area. Likert-type scale was used in this measurement, consisting five different options ranging from "not at all" to "extremely".

The Cronbach's Alpha score of Appearance area in SSES was 0.744. The Cronbach's Alpha score of Social area in SSES was 0.670. The Cronbach's Alpha score of Performance area in SSES was 0.772. There was no item with corrected item total correlation less than 0.2, therefore all of the items in this scale was used in the measurement.

### 2.2. Scale of Body Image

In this study, body image was measured by Multidimensional Body Self Relations Questionnaire – Appearance Scale (MBSRQ-AS), obtained from MBSRQ

measurement device borrowed from *Badan Riset dan Pengukuran Fakultas Psikologi Universitas Tarumanegara* [24]. MBSRQ-AS or MBSRQ-Appearance Scales is a simpler MBSRQ version, which is also invented by Cash, without items about health and fitness and only focuses on dimensions related to appearance [22]. Mentioned measurement unit is comprised by 34 items that measure 5 dimensions; 8 items measure Appearance Evaluation dimension; 12 items measure Appearance Orientation dimension; 9 items measure Body Areas Satisfaction Scale dimension; 3 items measure Overweight Preoccupation dimension; 2 items measure Self Classified Weight dimension [25].

The adopted response format was a fully anchored 5-point Likert-type from “definitely disagree” to “definitely agree.” This response scale is applied in all of the dimensions in MBSRQ-AS, though there are slight difference in the Body Areas Satisfaction Scale and the Self Classified Weight dimension. Body Areas Satisfaction Scale uses a 5-point response scale from “very dissatisfied to very satisfied,” whereas in Self Classified Weight subjects are required to choose one of the five options that is most suitable to their own perception and label regarding their own weight, from very underweight to very overweight.

The first dimension, Appearance Evaluation, has an Alpha Cronbach coefficient of 0.849. there is one item with Corrected Item Total Correlation value less than 0.2; item 20, therefore this item was removed. The second dimension, Appearance Orientation has an Alpha Cronbach coefficient of 0.842. It has items with a Corrected Item Total Correlation value less than 0.2; item 1 and item 5, so both items were removed. The third, fourth, and fifth dimensions, Body Areas Satisfaction Scale, Self-Classified Weight, and Overweight Preoccupation, have Alpha Cronbach coefficients of 0.795, 0.595, and 0.748 respectively. There are no items with Corrected Item Total Correlation score less than 0.2 in these three dimensions, so none were removed.

### 3. RESULTS

Based on the Kolmogorov-Smirnov normality test conducted, the research data is proven as normal. Researcher did a Pearson correlation test to the body image dimensions with self-esteem. Based on the correlation test done, the first body image dimension, Appearance Evaluation, has a positive significant correlation with self-esteem, which is  $r(148) = 0.713$ ,  $p < 0.05$ .

Based on the correlation test on the second body image dimension, Appearance Orientation, it was found that the dimension has an insignificant correlation with self-esteem of  $r(148) = 0.072$ ,  $p > 0.05$ . The third dimension of body image, Body Areas Satisfaction Scale, has a positive significant correlation with self-esteem of  $r(148) = 0.683$ ,  $p < 0.05$ .

Based on the correlation test on the fourth dimension of body image, Self Classified Weight, it was found that the dimension has a significant correlation with self-esteem of  $r(148) = 0.306$ ,  $p < 0.05$ . The fifth dimension, Overweight

Preoccupation, was found has a negative significant correlation with self-esteem of  $r(148) = -0.283$ ,  $p < 0.05$  based on the correlation test done.

Overall, based on the correlation test on each body image dimension with self-esteem, it was found that there were three out of five dimensions having a positive significant correlation with self-esteem; Appearance Evaluation, Body Areas Satisfaction Scale, and Self Classified Weight. It was found there is one dimension of body image, the Overweight Preoccupation, that has a negative significant correlation with self-esteem. The highest correlation with self-esteem was found in Appearance Evaluation. This result means the higher one's Appearance Evaluation score, the higher their self-esteem.

Table 1: Correlation between Each Dimension of Body Image with Self-Esteem

Dimension	r	p	Description
Appearance Evaluation	0.713	0.000	Positive and significant
Appearance Orientation	0.072	0.383	Positive and insignificant
Body Areas Satisfaction Scale	0.683	0.000	Positive and significant
Self Classified Weight	0.306	0.000	Positive and significant
Overweight Preoccupation	-0.283	0.000	Negative and significant

Furthermore, this study also examined the mean difference in body image dimensions score based on subject's the most frequent viewed content. The subjects were categorized into two different groups, ones with beauty content as the most frequent viewed content and ones with non-beauty content as the most frequent viewed content.

Based on the Independent Sample t Test conducted, differences between the two groups were found in two out of five dimensions of body image. The obtained result in Appearance Orientation was  $t(148) = -2.884$ ,  $p < 0.05$  which means there was a significant difference between the two groups. Subjects with beauty content as the most frequent viewed content had higher total mean score ( $M = 35.059$ ,  $SD = 6.976$ ) than those with non-beauty content as the most frequent viewed content ( $M = 31.138$ ,  $SD = 6.971$ ).

The other dimension that was founded differ in between the two groups was Overweight Preoccupation. The obtained result in this dimension was  $t(148) = -2.622$ ,  $p < 0.05$  which means there was a significant difference between the two groups. It was found that subjects with beauty content as the most frequent viewed content had higher total mean score ( $M = 10.059$ ,  $SD = 3.267$ ) than those with non-beauty content as the most frequent viewed content ( $M = 8.371$ ,  $SD = 3.266$ ).

## 4. CONCLUSION

Based on the results of the study, it was concluded that there is a significant relationship between self-esteem and body image in adolescent girls who use Instagram. This proves that the research hypothesis is accepted. Based on the correlation test conducted, body image dimensions that have a positive and significant correlation with self-esteem are Appearance Evaluation, Body Areas Satisfaction Scale, dan Self Classified Weight.

While the body image dimension that has a negative and significant relationship with self-esteem is Overweight Preoccupation. On the other hand, the Appearance Orientation dimension is insignificantly correlated with self-esteem.

### 4.1 Discussion

Based on the research results, it was concluded that in general, body image has a positive and significant correlation with self-esteem. The more positive the individual's body image, the higher the self-esteem in the individual, and the more negative the individual's body image, the lower the self-esteem in the individual.

Four of the five dimensions of body image were found have a significant correlation with self-esteem. Significant and positive correlation between the Appearance Evaluation dimension and self-esteem means that the more the individual feels positive and satisfied with their appearance, the higher the individual's self-esteem. Significant and positive correlation between the Body Areas Satisfaction Scale dimension and self-esteem means that the higher the individual feels content with most area of her body, the higher the individual's self-esteem. Significant positive correlation between the dimensions of Self Classified Weight and self-esteem means that the more an individual labels and perceives her body weight as normal, the higher her self-esteem. Whereas, the Overweight Preoccupation dimension has a negative and significant relationship with self-esteem, which means that the higher the individual's self-esteem, the lower the individual's concern to be fat.

These four dimensions generally are dimensions that are more evaluative and measure the individual's perception and satisfaction regarding her body. This finding was aligned with the study conducted by Frost and McKelvie [16] which showed that women who dissatisfied with their physical appearance have lower self-esteem than women who are satisfied with their bodies.

However, one dimension of body image, the Appearance Orientation dimension, was found have insignificant correlation with self-esteem. This concluded that how important physical appearance to an individual and how much effort she put to maintain her appearance does not correlate significantly with individual self-esteem. Even so, the orientation on appearance was found generally high in subjects, considered the hypothetical mean that was higher than the empirical mean. The results of this study were consistent with previous study conducted by Burgess [10] that adolescence is the peak period of women's

attention to body image. According to Mueller [2] physical changes due to puberty that occur in adolescents result adolescent minds filled with thoughts about his/her body.

According to Santrock [2], adolescent girls are generally unhappy and dissatisfied with their new body shape due to changes that occur during puberty which distanced from the social ideal image of beauty. This was consistent with the results of this research that subjects generally have low evaluation and feel dissatisfied with their overall physical appearance, considered the empirical mean of the Appearance Evaluation dimension which is lower than the hypothetical mean.

Furthermore, the Appearance Orientation and Overweight Preoccupation scores that were found higher in subjects with beauty content as the most frequent viewed content than ones with non-beauty content showed that individual that received more exposure to beauty or appearance related content are likely to place more importance on how they look and engage in extensive grooming behaviours, are more likely to have fat anxiety, weight vigilance, dieting, and eating restraint [22]. In line with this result, previous study found that compared to social media usage in general, the usage of image-focused social media negatively influenced body image in young women. Moreover, it was explained that activities involving Exposure to images and following appearance-focused account are associated with slim body ideal image internalization and body surveillance, and pressure to be thin [7]. This finding was also aligned with the study conducted by Tiwari and Kumar [8] that several factors found responsible for accruing the impacts of media on body image, and one of it is the amount and nature of media contents.

This study also has several limitations. First, the number of study samples was too small compared to the study population, that was adolescent girls using Instagram in Tangerang. The age of the subjects was also likely spread unevenly. There were too few early adolescent subjects compared to the overall subjects, especially that were in the age of 12 years old. Moreover, the explanation of each options in the questionnaire were not provided, let the respondents possibly misinterpret the chosen answers.

### 4.2 Suggestion

For further research, researchers are suggested to take a larger number of samples for the study so that the sample taken may represent the population of research subject better. Researchers are also suggested to expand the study by distributing questionnaires into broader region so that data figures could be more representative. For future research, further studies about the Instagram's impact to body image are also suggested to be conducted.

Several suggestions are also given to parties related to this study. Firstly, for female adolescent who generally have self-esteem that tends to be lower at this age. Female adolescents advised to wisely set their self-evaluation standards that are fit and appropriate for themselves, and not to view deficiency as something bad in themselves, but as motivation to be better. It is important to remember that there are no absolute ideal standards that can be applied to

everyone, because every individual is basically different from one another.

Regarding to this, parents also play a great role in their child's self-esteem and body image that are formed since childhood, including in adolescence. Parents are responsible to help adolescents go through this period well, so that self-esteem and body image in adolescents can remain positive. Parents are responsible to accompany and educate their adolescent child so that adolescents are fully aware that the changes occur are normal, have appropriate evaluation standards for themselves, fully accept themselves, and perceive evaluations as something constructive, and not destructive.

Lastly, the research suggestions are also addressed to social media users. Social media users are both producers and consumers of content posted on social media. For this reason, it is important for social media users to wisely consider content uploaded on social media because these contents are might possibly play a part shaping the ideal image of other users. Social media users are advised to carefully examine their postings to avoid these posted contents reinforcing the assumption that physical beauty refers to a certain standard. As consumers, social media users are advised to be more prudent in using social media, and not necessarily internalize the ideal body image from social media uploads. Social media users are advised to continually examine the ideal self that is fit with each unique individual.

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