The Effect of Body Images and Self-Esteem on Subjective Well-Being in Adolescents

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Abstract

This study aims to examine whether there is an influence between body image and self-esteem on subjective well-being in adolescents. This research uses a quantitative approach with ex-post facto research techniques. This research was conducted at SMK Nanggulan, Kulonprogo, Yogyakarta with a sample of 306 teenagers, especially teenage girls. The instrument in this study uses subjective well-being scale, body image and self-esteem. Instrument validation techniques used are using content validity and reliability using the Cronbach Alpha formula. Research data analysis techniques using multiple regression analysis. The results of this study indicate that (1) there is a significant influence of body image and self-esteem together on the subjective well-being of adolescents with a value of F = 76.040 ( p <0.05 ), (2) there is a significant influence of body image on subjective well-being in adolescents t = 11.455 ( p <0.05), and (3) there is a significant influence between self-esteem on subjective well-being in adolescents t = 10.436 ( p <0.05). Therefore, it can be concluded that body image and self-esteem can be predictors of subjective well-being in adolescents.

Keywords: Subjective Well-Being; Body Image; Self-Esteem

Introduction

Adolescence is a transition period from children to adulthood, at this time adolescents are more likely to experience identity crises and confusion in shaping identity within themselves (Jacky et al., 2019: 47). Adolescence is a period of "storm and stress" where adolescents have unstable mood changes (Santrock, 2012). At this time adolescents need support and supervision from the surrounding environment, especially parents. If adolescents experience confusion in the formation of identity, it will have an impact on physical, cognitive, social and emotional development.

Negative emotions possessed by adolescents such as anxiety, depression, anger, unstable feelings and feeling less satisfied with their lives will have an impact on their subjective well-being (Lampropoulo, 2018). Subjective well-being is an important factor in measuring a person's life satisfaction and level of happiness in his life (Peterson, Chatters, Taylor & Nguyen, 2014). Reporting from CNN Indonesia (2016) that individuals who have low subjective well-being tend to have unhappy
feelings and have negative emotions. Some studies suggest that adolescents who have problems such as depression, anxiety, deviant behavior, suicide attempts and eating disorders can cause low subjective well-being (Proctor et al., 2010: 167).

This research focuses on subjective well-being that occurs in the city of Yogyakarta, especially in adolescent girls. The Central Statistics Agency (BPS) in 2017 showed that the subjective welfare index in the city of Yogyakarta is 72.93%. Data shows that the gender classification of the subjective well-being of adolescent boys is 73.20% while adolescent girls amounted to 72.66%. Furthermore, (Seligman, 2011) revealed that the level of subjective well-being is influenced by gender. This is supported by Antonio (2013) which states that of the 4877 adolescents living in Portugal, 49.6% of male adolescents were more satisfied with their body shape compared to adolescent girls showing dissatisfaction with their body shape of 50.4%. This is one proof that low subjective well-being can affect body image in adolescent girls.

Research conducted by York University, states that adolescent girls often compare their physical appearance with other women on social media which results in disruption of their own body shape. On the other hand, research entitled "The Effects of Active Social Media Engagement with Peers on Body Image in Young Women" shows that adolescent girls feel dissatisfied with their body shape. Comparing oneself with others can influence an individual's perception of himself (Monica, 2018: 1).

In addition, research conducted by Viren, Ulrich, Stefan & Martin (2014) states that body image is an important factor in subjective well-being for adolescents. Teenagers who have dissatisfaction with their body shape can affect their subjective well-being. Furthermore, it is explained that adolescents who experience physical developments tend to experience fear will form the body (Cristiana, 2017). Most teenage girls often compare their physical appearance with other women especially their body shape. In addition, many demands on women to get a life partner, find work, get married, look more beautiful (Sari, 2012). If it is not fulfilled by teenagers, it will cause dissatisfaction in him and affect the subjective well-being of adolescents (Firdevs, 2015: 536). Adolescent girls who are unable to fulfill developmental tasks properly, then can cause problems in their lives such as psychological disorders, depression and eating disorders Vesile (2017: 178). Thus it can be concluded that negative body image can affect the subjective well-being of adolescents.

Besides body image, another factor that affects subjective well-being in adolescents is self-esteem. Self-esteem is positive and negative feelings about oneself, self-esteem is also an important factor for predicting mental health and subjective well-being (Sasa, 2015). Furthermore Che Lin's (2015) research results state that low self-esteem is a major risk factor for adolescents experiencing depression disorders. The results of research conducted by Zhang (2013) that adolescents who have high self-esteem, then they will respect themselves more and have positive feelings compared to adolescents who have low self-esteem, they are more easily anxious, depressed, lonely, do not have a stance and have negative feelings (Zhai, 2015). Based on the above explanation, this research takes the variable body image and self-esteem. This study aims to determine and obtain data to prove the influence of body image and self-esteem on subjective well-being in adolescents. So adolescents can find out more about the effects that can cause low subjective well-being. Therefore, researchers are interested in re-examining whether there is an influence of body image and self-esteem on subjective well-being in adolescents.
Method

A. Type, location, and time of research
In this study, using research with quantitative methods with the type of ex-post facto. This research was carried out in three Vocational High Schools especially adolescent girls in Nanggulan, Kulonprogo, Yogyakarta in the even semester of the 2019/2020 academic year. Researchers chose the city of Yogyakarta as a place of research because the Central Statistics Agency (BPS) data showed that the level of subjective well-being of adolescents in women was relatively low.

B. Research Population and Samples
The population in this study were teenagers of Vocational High Schools (SMK) especially female adolescents aged 15-18 years with a total of 1,490 students. The technique used in this study using purposive sampling and stratified sampling to determine which classes will be sampled. Based on the formula of Robert V. Krejcie and Daryle W. Morgan (1970), a sample of 306 adolescents was obtained from a population of 1,490 adolescent girls.

C. Data Collection Techniques and Instruments
The technique in this study uses three questionnaires in the form of a scale that is about subjective well-being using seven answer choices while body image and self-esteem use a Likert scale with five answer choices. This study consists of 3 variables, namely the subjective well-being variable which measures the level of life satisfaction of adolescents using a scale adapted from Diener, Emmons, Larsen, & Griffin (1985) and Watson, Clark, & Tellegen (1988) consisting of two aspects namely cognitive and affective. Variable Body Image to measure a person's assessment of his physical appearance using a scale adapted from Cash T. F (2000) The Multidimensional Body Self Relations Questionnaire (MBSRQ) consists of 5 aspects, namely evaluation of appearance, appearance orientation, satisfaction with body parts, anxiety becoming fat, and categorizing body size. While the Self-Esteem variable to measure one's assessment of feelings of worth on him by using a scale adapted from Coopersmith (1967) which consists of 4 aspects namely power, meaningfulness, virtue, and ability.

D. Instrument Validity and Reliability
In this study, the validity used is content validity, which is that the results of the assessment are validated using the Gregory formula. The validity of Gregory is calculated from 0.8-1 which shows that the validity is very high and means that the items in the scale show very good categories and if the criteria is 0.00-0.19 which indicates that the validity is very low and means that the items in the scale shows a very bad category. In analyzing the data the researcher used Exploratory Factor Analysis (EFA) to identify question items that were considered valid if they had values > 0.05.

Reliability criteria are said to have a high level of reliability if the results of the study can be measured and trusted. The magnitude of the reliability coefficient is around 0.00-1.00 meaning that if the reliability coefficient reaches 1.00 then the level of reliability is reached. To find out the validity and reliability of the test carried out to find out how many items are valid and invalid on the scale of subjective well-being, body image, and self-esteem by looking at the Cronbach Alpha coefficient using the SPSS program.

E. Data Analysis Technique
In this study, the first analytical technique is to use statistical descriptive analysis which has the aim to describe a data from very high, high, medium, low and very low categories. In addition, to test the hypothesis the method used is a multiple regression analysis method by calculating the correlation between variables that is the dependent variable of body image and self-esteem to the independent variable, subjective well-being.
Then the coefficient of determination (R) test is performed to find out how much the contribution made by the independent variable to the dependent variable. If R has a small value, then the independent variable on the dependent variable is of little value and indicates that there are other factors of the dependent variable. Conversely, if R has a large value, then the independent variable on the dependent variable is of large value and indicates that there are no other factors.

**Results and Discussion**

**A. Research Results**

1. **Descriptive Statistics**

Research data obtained using the SPSS program was carried out to obtain a picture of subjective well-being, body image, and self-esteem in 306 adolescent girls with an age range of 15-18 years. Presentation of this data description includes the mean value, maximum value, minimum value, and standard deviation. The statistical data can be seen in the following table:

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>The mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective Well-Being</td>
<td>306</td>
<td>76</td>
<td>149</td>
<td>121.19</td>
<td>13.035</td>
</tr>
<tr>
<td>Body image</td>
<td>306</td>
<td>78</td>
<td>140</td>
<td>112.54</td>
<td>11.681</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>306</td>
<td>120</td>
<td>234</td>
<td>188.60</td>
<td>18.619</td>
</tr>
</tbody>
</table>

a. **Subjective Well-Being**

Based on Table 1, the data shows that from 25 items of questionnaire statements with a sample size of 306 respondents, the average value for the subjective well-being variable was obtained with a minimum value = 76, a maximum value = 149, average = 121.19 and a standard deviation of 13.035.

b. **Body image**

Based on Table 1, the data shows that from 34 items of questionnaire statements with a sample size of 306 respondents, the average value for the body image variable was obtained with a minimum value = 78, a maximum value = 140, average = 112.54 and a standard deviation of 11.681.

c. **Self-Esteem**

Based on Table 1, the data shows that from 58 items of questionnaire statements with a sample size of 306 respondents, the average value for the self-esteem variable was obtained with a minimum value = 120, a maximum value = 234, average = 188.60 and a standard deviation of 18.619.

**B. Results of Pre-Requisite Testing**

After conducting a descriptive statistical assessment, the tests that will be carried out next are the normality test, the heterokedasticity test, and the multicollinearity test.

a. **Normality Testing**

Normality test is performed to determine whether the data obtained is normally distributed or not on each variable used. It is said that the residual value is normally distributed if it has a good regression. The normality test in this study uses *Kolmogorov-Smirnov* with the help of the SPSS program. Data can be said to be normally distributed if it has a significant value > 0.05 and vice versa if the data is said to be not normally distributed if <0.05 (p
The Effect of Body Images and Self-Esteem on Subjective Well-Being in Adolescents

Following the results of normality tests of subjective well-being variables, body image variables, and self-esteem variables show a significant value of 0.200, meaning that the value (p > 0.05) it can be concluded that the data is normally distributed. Thus, the normality test can be fulfilled.

b. Heterokedasticity Testing

Heterokedastisitas test is done to test whether in the regression model there is a similarity in variance from one observer's residual to another observer. Therefore, if the variable shows a significance value > 0.05 (p > 0.05), it can be said that variance does not have a heterokedasticity problem and vice versa if the variable shows a significance value < 0.05 (p < 0.05), then it can be said that variance has a heterokedasticity problem. Following the results of the heterokedasticity test the body image variable is 0.031 and the self-esteem variable is 0.164, meaning that the value (p > 0.05) can be concluded that the data does not occur heterokedasticity.

Table 2. Heterocedasticity Testing Results

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>α</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body image</td>
<td>0.031</td>
<td>No heterokedasticity occurs</td>
</tr>
<tr>
<td>2</td>
<td>Self-Esteem</td>
<td>.164</td>
<td>No heterokedasticity occurs</td>
</tr>
</tbody>
</table>

c. Multicollinearity Testing

Multicollinearity test is performed to determine whether there is a strong relationship between the dependent variables by looking at the results of tolerance and Variance Inflation Factor (VIF). The multicollinearity test in this study was used with the help of the SPSS program. Data is said to not occur multicorrelation if the value of VIF < 10 (VIF < 10, 00) and Tolerance value > 0.1 (T > 0.1). Following the results of the multicorrelation test of body image variables and self-esteem tolerance variables of 0.510 and VIF of 1.963, meaning that the tolerance value is greater than 0.1 while the VIF value is less than 10.00, it can be concluded that the data does not occur multicollinearity.

Table 3. Multicollinearity Testing Results

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>α</th>
<th>Tolerance</th>
<th>VIF</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Body image</td>
<td>0.031</td>
<td>0.510</td>
<td>1.963</td>
<td>There is no multicollinearity</td>
</tr>
<tr>
<td>2</td>
<td>Self-Esteem</td>
<td>.164</td>
<td>0.510</td>
<td>1.963</td>
<td>There is no multicollinearity</td>
</tr>
</tbody>
</table>

C. Hypothesis Testing Results

Analysis of the data used in hypothesis testing uses multiple regression analysis with the help of the SPSS program. This analysis is used to determine whether there is an influence of body image and
self-esteem on the subjective well-being of adolescents. The following results of the regression analysis can be seen in Table 4 as follows:

Table 4. Results of Multiple Regression Analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squar</th>
<th>Df</th>
<th>Mean Squar</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>17318,535</td>
<td>2</td>
<td>8659,268</td>
<td>76,040</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>34505,089</td>
<td>303</td>
<td>113,878</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>51823,624</td>
<td>305</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 4, it can be seen from the results of the multiple regression analysis showing the strong influence of body image and self-esteem variables on subjective well-being with Sig. 0.000 (p < 0.05), it can be concluded that an accepted hypothesis or body image and self-esteem can affect subjective well-being in adolescents.

D. Equation of Multiple Regression Line

Based on Table 5, it can be seen from the results of the regression equation body image variables and self-esteem towards subjective well-being with the help of the SPSS program as follows:

Table 5. Correlation Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>41,073</td>
<td>6,589</td>
<td></td>
<td>6.234</td>
</tr>
<tr>
<td>Body image</td>
<td>.415</td>
<td>.73</td>
<td>.372</td>
<td>5.661</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>.177</td>
<td>.046</td>
<td>.253</td>
<td>3.856</td>
</tr>
</tbody>
</table>

Based on the above data it can be concluded that the results of data analysis are obtained with a constant value of 41,073, body image variable at 0.415 and self-esteem variable at 0.177 so the regression equation can be written as follows:

\[ Y = a + b_1 X_1 + b_2 X_2 \]

\[ Y = 41,073 + 0.415X_1 + 0.177X_2 \]

E. Determination coefficient (R²)

The coefficient of determination (Rsquare) indicates that there is an influence of body image and self-esteem variables on subjective well-being shown in Table 6 as follows:

Table 6. Determination coefficient

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Squar</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.578</td>
<td>.334</td>
<td>.330</td>
<td>10,671</td>
</tr>
</tbody>
</table>
Based on Table 6 explains that the $R\text{ Square}$ value of 0.334 means that there is a contribution made by the variable body image and self-esteem to subjective well-being in adolescents by 33.4% and 66.6% is the contribution of the influence of other variables that have not been examined in this study.

**Discussion**

In this study it was found that there is a correlation between body image variables and self-esteem on subjective well-being with a significance value of $F = 76.040 \ a = 0.00 \ (p <0.05)$, it can be concluded that body image and self-esteem can affect subjective well-being, because teenagers are still in the process of forming an identity in themselves. Therefore adolescents need supervision from the surrounding environment to further develop positive feelings that will have an impact on their subjective well-being.

One of the factors that influence subjective well-being in adolescents is body image which is formed gradually starting from birth, which depends on the family environment, the environment and peers that can affect social status, self-confidence and family relationships (Ofra & Vered, 2017: 921; Cong, Rebecca & May, 2013). This is supported by Firdevs, Sevil, (2016) ; Cristiana, (2017) which proves that there is an influence between body image and self-esteem on subjective well-being in adolescents. Teenagers who have their positive body image will satisfy with his body shape, having confidence and being able to appreciate his body shape more (Wulan, 2014). For example, adolescents who have high self-confidence, accept themselves and are satisfied with their body shape will experience high subjective well-being, while adolescents who have a negative body image, experiencing depression will have an impact on low subjective well-being (Ofra, 2018: 415; Rombe, 2014).

Adolescents who have problems with discomfort in body parts such as body weight and height that are less than ideal will have an impact on subjective well-being (Viren, Ulrich, Stefan and Martin, 2015). The impact of negative body image is that adolescents tend to have negative personality types, whereas adolescents who have positive body image adolescents will tend to have positive personality types too (Cash and Pruzinsky, 2002). Therefore, one of the efforts to improve subjective well-being in adolescents is by developing a positive body image. Teenagers who have a positive body image will respect and accept their own appearance, so that it will affect the formation of their good identity.

Lin, Quanlei, Qiuying, Yafei & Jianwen (2019) stated that self-esteem can affect subjective well-being, because self-esteem is influenced by the family and the environment around which individuals can recognize their personality and show others their achievements (Weisman et.all, 2015 ). Furthermore, Minev (2018) explains that the surrounding environment can influence the development of adolescent skills in social relations abilities. Therefore, when adolescents are accepted in the environment or in a group, then they will have high self-esteem, have a sense of security and self-confidence, thus adolescents will be more satisfied with their lives. Conversely, when adolescents are denied the environment around or in a group, they are will feel low self-esteem, depressed, have anxiety and are not satisfied with their lives (Kavanagh & Scrutton, 2015).

In line with research conducted by Yuan, Jijun and Chengting (2015) revealed that adolescents who have high self-esteem have greater subjective well-being compared to adolescents who have low self-esteem. Odaci (2013) also revealed that adolescents who rated themselves negatively, they would experience anxiety more, not be happier and have low subjective well-being, conversely adolescents who rated themselves positively, then they could reduce anxiety, be happier and have high subjective well-being. A teenager who has high self-esteem is able to overcome various problems, can control positive and negative emotions because teens who have high self-esteem will see themselves as superior to others.
Based on the facts, self-esteem and subjective well-being are variables related to the current phenomenon, namely where the development period of adolescents, especially in social relations requires special attention from several parties, such as parents, the surrounding environment and the school environment.

From the results of the research and explanation above, it can be concluded that body image and self-esteem have a strong influence on subjective well-being in adolescents and it can be said that these two variables are predictors of subjective well-being in adolescents.

**Research Limitation**

The limitation of this research during the research was that when the research questionnaire was distributed to respondents, the time was along with the end of the Semester Final Examination (UAS) and several schools of class XII students were on vacation to prepare for the exam, so researchers could only disseminate questionnaires to class X students and XI only. Therefore, generalizations in this study are limited to classes in the research location.

**Conclusion**

There is a significant influence of body image variables and self-esteem variables together on subjective well-being of young women in SMK Nanggulan District. Seen from the results of multiple regression analysis \( \alpha = 0.000 \) (\( p <0.05 \)), which means that there is an effective contribution of body image variables and self-esteem to subjective well-being of 33.4% and another 66.6% is a contribution by other factors not examined in this research.

**Implication**

The implications of the results of body image and self-esteem research on subjective well-being in adolescents, namely that adolescent body image and self-esteem can be used as a reference to implement and provide appropriate interventions in solving problems related to subjective well-being of adolescents. In addition, several factors that cause low subjective well-being can provide information for parents and teachers to find solutions in preventing teenagers from having high subjective well-being.

**Reference**


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