

Age Analysis of Body Dissatisfaction Levels in Adolescent Girls Using Instagram Face Filters

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Abstract

Aims: Body dissatisfaction is a problem experienced by many adolescents today. Age can affect how adolescents perceive their body image. This study aimed to determine age differences in body dissatisfaction in adolescent girls who use Instagram face filters.

Methods: The type of research used was descriptive, with a cross-sectional design; the researchers obtained 165 samples using the Slovin formula as respondents using a stratified random sampling technique. The level of body dissatisfaction was measured using the Multidimensional Body-Self Relations Questionnaire-Appearance Scale.

Results: The results of univariate analysis using frequency distribution analysis showed that the majority of respondents had moderate levels of body dissatisfaction (24.2%), while the results of bivariate analysis using ANOVA test p -value = 0.820 ($p > 0.05$) showed no difference between age and the level of body dissatisfaction in adolescent girls.

Conclusion: There is no difference in body dissatisfaction among adolescent girls who use Instagram filters. Each age has different stages of growth and development. Analysis of differences in body dissatisfaction levels for various age groups and analysis of body dissatisfaction levels for gender differences can also be carried out for further research.

Keywords: adolescents, body dissatisfaction, instagram face filter.

Introduction

Body dissatisfaction is a problem experienced by many adolescents today. As many as 48.1% of female adolescents and 44.1% of male adolescents in Malaysia aged 18-25 experienced body dissatisfaction and wanted to be thinner and more muscular than their current body shape and size (Kamaria et al., 2016). Body dissatisfaction can have negative impacts that can be a problem for adolescents in their growth and development stages, including low self-esteem, eating disorders, and depression (Dianovinina, 2018; Syifa & Pusparini, 2018; Widiанти et al., 2021).

Body dissatisfaction is also called negative body image. Body image is a person's perception of the body (Willianto, 2017). Body dissatisfaction is experienced more by adolescent girls than by adolescent boys (Khoiriyah & Rosdiana, 2020). Research shows that 91% of women are unhappy with their bodies (Ariani et al., 2021). Then there is

also research conducted by Levine & Smolak (2004), which states that 40-70% of adolescent girls feel dissatisfaction with two or more parts of their body, especially in the hips, buttocks, abdomen, and thighs. This is because ideal body characteristics are considered to provide a meaning of beauty and become a social standard (Hartati & Novianty, 2021). Many adolescents have role models through social media who are used as role models in terms of appearance; the mismatch between role models and body images can cause body dissatisfaction (Fox & Vendemia, 2016)—based on the initial data collection by (Muhtar et al., 2022) related to body image that was distributed through google form which was filled in by 82 respondents aged 18 to 25 years of female gender, which consists of students in Makassar city. Data show that as many as 67% admitted they did not feel they had an attractive appearance, body shape, and face. 63% agreed that social media can influence perspectives related to the body.

Adolescents will do everything to make up for the shortcomings that make them dissatisfied with their body shape (Diananda, 2019). One of the adolescents' efforts is to use face filters in the Instagram application (Maharani, 2022). Face filters, just like the beauty effects on the Instagram app, are digital photo effects that can make faces more attractive in cyberspace (Maharani, 2022). All informants in the study (Maharani, 2022) used face beauty filters from various filter features provided by social media Instagram. Face beauty filters are digital photo effects that can beautify the face. Facial skin can be made whiter and smoother, the nose can look sharper, the cheeks look thinner, or the eyes can look more prominent. This is in line with research conducted by (Eugeni, 2022). Nowadays, more and more young people, especially adolescent girls, use filters that 'beautify' their appearance and promise them by giving the appearance of models that sharpen, shrink, enhance, and recolour their faces and bodies. Self-satisfaction with body conditions in adolescence can impact the next age level; the perception of body image formed during adolescence will continue into adulthood (Fauziah et al., 2021).

At every stage of individual development, age is a factor in forming body image. Many studies have proven that from an early age, individuals can feel dissatisfaction with their body shape from an early age to adulthood. The results of the study showed that women aged 13 to 20 years had higher dissatisfaction with body image than women aged 30 to 40 years (Sivert & Sinanovic, 2008). When viewed from the age factor, according to Santrock (2011), attention to one's body image is very strong in adolescents aged 12 to 18 years, both female and male adolescents. However, according to Davidson and Davista (2016), they found that the age group in their 30s and 40s is the period most vulnerable to body image compared to other age groups. In the statements made by several figures, there are differences of opinion regarding the body image of adolescents and early adults.

Based on a preliminary study at Husada Pratama Health Vocational School, it was found that 238 (99.12%) adolescent girls aged 15-18 years felt more attractive when using Instagram face filters. The data was supported by the results of interviews submitted by six adolescent girls as representatives of each generation. They explained that photos/videos on social media are always taken with Instagram face filters to make them look more attractive. Applying filters can make your face and skin look brighter and smoother without even using makeup. Appearance through photos and videos uploaded using filters to get good results makes some adolescents expect praise from others (Margaretha & Soetjiginisih, 2022). However, this creates the reality of self-distrust in users because their original form does not match the shape in the Instagram

filter or has an impact on self-distrust in everyday life (Sari & Susilawati, 2022). Research conducted by the Royal Society for Public Health (RSPH) in England also stated that Instagram is considered a social media platform that often has a negative impact on the mental condition of young people aged 14-25 years (Martanatasha & Primadini, 2019). Mental disorders caused by social media, especially Instagram, such as anxiety disorders, eating disorders, addiction, self-confidence disorders, and body image disorders (Martanatasha & Primadini, 2019). However, no research has analyzed the age of students at Husada Pratama Health Vocational School and the body dissatisfaction they experience. This needs to be researched further to prevent adolescents' developmental tasks from not being fulfilled, one of which is accepting their physical condition. (Singgih D, 2014). Achieving adolescent developmental tasks will determine the achievement of developmental tasks in the next phase (Davista, 2016). The aim of current study to analyze age differences on the level of body dissatisfaction of adolescent girls who use Instagram filters at Husada Pratama Health Vocational School.

Methods

The type of research used was descriptive, with a cross-sectional design to determine age differences in levels of body dissatisfaction. This research involved all female students at Husada Pratama Health Vocational School, which has a total population of 240 adolescent girls. This research focuses on adolescent girls, referring to the results of previous research, which proves that Body dissatisfaction is experienced more by adolescent girls than by adolescent boys (Khoiriyah & Rosdiana, 2020). Next, the researchers obtained 165 samples using the Slovin formula as respondents and an additional 10% of the total sample to prevent sample drop out and using a stratified random sampling technique to obtain samples that can describe each class evenly. From 10 classes, each class sends 10-11 representatives to become respondents selected, referring to the inclusion criteria: (1) female adolescents at Husada Pratama Health Vocational School aged 15-18 years, and (2) use the Instagram face filter feature. Meanwhile, the exclusion criteria in this study were: (1) not present when data collection was carried out, and (2) not having an Instagram account. Furthermore, adolescents who met the inclusion and exclusion criteria were given an explanation and willingness to participate in the research (informed consent). Adolescents who are willing and have filled out the willingness form become research respondents.

Data collection was carried out in August 2023 using a demographic data questionnaire. The level of body dissatisfaction was measured using a questionnaire adapted from the Multidimensional Body-Self Relations Questionnaire-Appearance Scale (MBSRQ-AS) developed by Cash & Pruzinsky (2002) and has been adapted by Nindita (2018) by translating back-to-back or translated from the original language of the measuring instrument is translated into Indonesian and then translated back into the original language. This scale consists of 34 statement items; after being adapted and testing the measuring instrument in 2 rounds, 11 items were dropped until there were 23 items, with the resulting *r* value (Corrected item-Total Correlation) above the table *r* value ($r = 0.2907$) and a Cronbach Alpha reliability coefficient of 0.866.

The data collected was analyzed using univariate and bivariate. Univariate analysis was used to analyze the characteristics of research respondents, which included classes including continuous data, as well as age, length of use of facial filters, frequency of use

of facial filters, and type of facial filter used by respondents, which were dichotomous data. Bivariate analysis uses a difference test of more than two means, ANOVA, to analyze age differences in adolescents' body dissatisfaction levels using Instagram face filters. Significant results are obtained if the p-value is <0.05 . The ANOVA test was used based on the type of research variable, namely categorical for the age variable and numerical for the level of body dissatisfaction variable. Besides that, the ANOVA test was used because the normality test results were normally distributed. Analysis was carried out with SPSS 27.0 for Windows.

This research has received Ethical Approval from the Research Ethics Commission of the Faculty of Health Sciences, National Development University "Veteran" Jakarta, with letter number 341/VIII/2023/KEPK.

Results

Table 1 explains that the education level (class) of respondents is dominated by class XI (40.6%) and XII (40.0%). Most respondents in this study were 17 years old (39.4%), with the highest number of years of using facial filters on Instagram, namely 1 to < 3 years (41.8%). Judging from the frequency, more than half of the respondents in this study used face filters on Instagram less than eight times a week (58.8%). Respondents' types of face filters varied; the type of filter most often used is Beautify by 126 people (76.4%).

The data normality test is carried out as a parametric testing condition before data analysis. The normality test in this study uses Kolmogorov-Smirnov (1-Sample-K-S). Table 3 shows that with a sample size of 165 people, the significance value of 0.200 ($p > 0.05$) indicates that the residual value is normally distributed; based on these results, the hypothesis test carried out is the ANOVA parametric analysis test.

Based on the results of the study, it can be seen that all respondents have an average body dissatisfaction score ranging from 58.82 - 63.00. Respondents 18 years of age have a higher average score than other age groups, scoring 63.00 (SD = 12.193). The results of statistical analysis using the ANOVA test obtained the p-value of each variable is 0.874 ($p > 0.05$) and a calculated F value of 0.232, so it can be interpreted that there is no difference between age and the level of body dissatisfaction of adolescent girls (Table 2).

Discussion

This study's results show no difference in body dissatisfaction among adolescent girls who use Instagram filters. Based on the research results in Table 2, it can be seen that all respondents with an age range of 15-18 years have an average body dissatisfaction score ranging from 58.82 - 63.00, which is included in the moderate to high-level body dissatisfaction category (Nindita, 2018). Other analysis results conducted by (Fauziah et al., 2021) show that most adolescents aged 15-18 years have a negative body image perception (57.7%), and the remaining (42.3%) have a positive body image perception. Different results were shown by other studies, where most of the adolescents studied with similar age groups had a positive body image (80.6%), and only (19.4%) had negative body image perceptions (Yusintha & Adriyanto, 2018). This can occur due to differences in the domicile of respondents from each study; domicile is included in sociocultural factors that can be related to the level of adolescent body image. The prevailing culture or sub-culture around where adolescents live has norms about what is considered beautiful and how important it is to have a specific body shape. Norms

about good body shape can be spread through media, such as television, radio, magazines, movies, and the Internet (Aristantya & Helmi, 2019).

Table 1. Demographic Characteristics of Research Respondents

Characteristics	Category	Frequency	Percentage (%)
Grade	X	32	19.4
	XI	67	40.6
	XII	66	40.0
Age	Amount	165	100
	15 years old	37	22.4
	16 years old	56	33.9
	17 years old	65	39.4
	18 years old	7	4.2
	Amount	165	100
	< 1 years	39	23.6
Length of face filter usage	1 to < 3 years	69	41.8
	3 to < 6 years	37	22.4
	> 6 years	20	12.1
	Amount	165	100
Frequency of face filter usage	< 8 times a week	97	58.8
	8 – 14 times a week	42	25.5
	15 – 21 times a week	15	9.1
	22 – 28 times a week	3	1.8
	> 28 times a week	8	4.8
Types of face filters used	Amount	165	100
	Colour adjustment	20	12.1
	Beautifying	126	76.4
	Random	4	2.4
	Game	11	6.7
	Quiz	3	1.8
	Immersive	1	0.6
Amount	165	100	

Table 2. Analysis of Age on Adolescent Body Dissatisfaction Score

Age (years)	Mean	SD	F	P-Value
15	59.00	11.835	0.232	0.874
16	58.82	13.365		
17	59.69	13.791		
18	63.00	12.193		

The results of the analysis between age and the level of body dissatisfaction of adolescents aged 15-18 years at Husada Pratama Health Vocational School using the ANOVA analysis test obtained a significance of 0.874 ($p > 0.05$) so that it was statistically proven that there was no difference between age and the level of body dissatisfaction of Instagram users at Husada Pratama Health Vocational School. This is in line with research conducted by (Davista, 2016) based on the results of research on differences in body image in terms of age differences in adolescents in Banyumanik Village, Banyumanik District, Semarang City, using the 2-way Anova test showed a p (significance) value of 0.56 ($p > 0.05$) which means there is no significant difference in

body image in terms of age differences. (Aristantya & Helmi, 2019) Also researched adolescents with similar age groups who live in the Special Region of Yogyakarta, DKI Jakarta, Bandung, and Surabaya, using the ANOVA analysis test, obtained a significance result of 0.811 ($p > 0.05$), which showed no difference in body image-based on age differences. The age range of the subjects in this study was between 15-18 years old. The age range is still in the adolescent category. Santrock (2011) states that attention to body image is highest during adolescence. This happens because adolescents experience significant body changes, known as puberty (Santrock, 2011). Therefore, the absence of differences in body image based on age is caused by research subjects who are still in one category, namely adolescents, so no subjects have different stages of development (Aristantya & Helmi, 2019).

The level of body dissatisfaction is influenced by several factors: skin colour, nose shape, breast size, weight, and so on (Siswoaribowo et al., 2020). Another factor that causes body dissatisfaction is the presence of biological factors that cause physical changes (Putri et al., 2021). The gap between beauty standards is often misinterpreted, which impacts a person's psychology and makes individuals feel insecure about their bodies (Putri et al., 2021).

Limitations

There are several limitations to this research process. The number of respondents, only 165 adolescents aged 15-18 years, is certainly not enough to describe the situation of adolescents in general and can affect the generalization of conclusions. In addition, researchers have not considered the frequency of use of Instagram face filters for each respondent, which is related to the level of body dissatisfaction, potential bias may arise due to differences in exposure to Instagram face filters for each respondent.

Contribution to global nursing practice

The results of this research can be a basis for community nurses to determine the type of intervention that can be given to young women who use Instagram face filters because the level of body dissatisfaction at various ages is relatively the same. Health education can be given to adolescents who use Instagram face filters to reduce body dissatisfaction. Apart from that, the results of this research can also be used as a reference for further research by considering the limitations of the research in this study.

Conclusion

There is no difference in body dissatisfaction among adolescent girls who use Instagram filters. Each age has different stages of growth and development. The stage of growth and development is a factor that influences the way adolescents think, feel, and behave towards their bodies. Analysis of differences in body dissatisfaction levels for various age groups and analysis of body dissatisfaction levels for gender differences can also be carried out for further research.

Author Contribution

All authors have accepted responsibility for the entire content of this manuscript and approved its submission.

Conflict of interest

The authors state no conflict of interest.

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