

The Impact of Posting Selfies and Gaining Feedback ('Likes') on the Self-esteem of Woman Instagram Users

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Abstract: This study aims to see the effect of selfie upload feedback on the self-esteem value of female Instagram users. The research design used is experimental research within and between subject. The population in this study were active students of the Department of Psychology, Padang State University. The sampling technique used random sampling technique with a sample size of 45 people. The data analysis technique used was repeated measure anova. The results showed that there was an effect of feedback on self-esteem. This is evidenced by a significant change in the value of self-esteem in the group that uploaded selfies, whether they did not or get additional "likes" ($p < 0.05$), there was no significant change in self-esteem values in the group that did not upload selfies ($p > 0.05$) and there was an interaction between time and groups during the study ($p < 0.05$).

1 INTRODUCTION

Self-esteem is an assessment made by an individual of himself either positively or negatively, such as accepting and appreciating himself (Desjarlais, 2019; Rosenberg, 1965; Santrock, 2019). Rosenberg (1965) divides self-esteem into two, namely positive/high and negative/low. Individuals with high self-esteem are characterized by individuals considering themselves valuable, valuing themselves for who they are, not admiring themselves or asking others to admire themselves and also individuals with high self-esteem values do not consider themselves more than others, whereas individuals with low self-esteem are characterized by individuals who cannot accept themselves for who they are and consider themselves despised. A healthy form of self-esteem is described in the way the individual considers himself valuable or worthy, does not consider himself better than others nor does he consider himself worse, and knows the boundaries within himself.

Self-esteem owned by individuals is influenced by several factors, one of which is the use of social media. Research conducted by Jan et al. (2017) resulted in that higher the use of social media can lower an individual's self-esteem. Another study conducted by Valkenburg et al. (2006) seen from the use of friendship networking sites revealed that the use of social media seen from feedback (positive or

negative) obtained on their profile photos can affect the self-esteem and well-being of users. Users who get positive feedback can improve self-esteem and well-being, while if they get negative feedback can reduce self-esteem and user well-being.

Social media is often used to take, share and search digital photos to reflect themselves and self-presentation is called selfies (Kozinets et al., 2017; McLean et al., 2019; Shin et al., 2017). One of the social media used to upload selfies is Instagram. Instagram is a social media device that gets a positive value on expressing themselves and the identity of users (Royal Society Public Health & Young Health Movement, 2017). In 2016, there were about 282 million selfies on Instagram (Lister, 2019), and women posted more selfies than men in their teens and early adulthood (Dhir et al., 2016). However, research related to selfie activities and getting feedback with user self-esteem is still relatively small and also at least using experimental research (Coulthard & Ogden, 2018).

Svelander & Wiberg (2015) revealed that selfies are influenced by several factors, one of which is social feedback. Research shows that teens and early adults want "like" feedback on uploaded selfie posts and tend to like posts with a lot of likes compared to posts that have few likes (Chua & Chang, 2016; Mascheroni et al., 2015; Sherman et al., 2016). Likes are also referred to as "online currencies" of numerical representations of social acceptance and as

a supporting factor one compares oneself to others (Rosenthal-von der Pütten et al., 2019) and can produce happy emotions (Chua & Chang, 2016). The number of likes is used to evaluate photos themselves and most of the teens are continuously optimizing profile photos or photo uploads for positive feedback (Li et al., 2018).

Research conducted by Pounders et al. (2016) shows that self-esteem is a major contributing factor to uploading selfies to social media. But the number of likes gained on the uploaded selfie is not in accordance with expectations can reduce self-esteem. Sociometer theory holds that acceptance and rejection from others can affect self-esteem (Leary et al., 1995). Likes are likened to acceptance from others that can increase self-esteem, while there is no likened to a classification from others that negatively impact self-esteem (Coulthard & Ogden, 2018). The number of likes can also affect self-esteem in users, the higher the number of likes the higher the user's self-esteem (Burrow & Rainone, 2017; Shamsu et al., 2020; Wohn et al., 2016).

In 2019, Instagram hid the number of likes due to mental health and well-being problems caused by the number of likes gained (Leung, 2019; Macmillan, 2017; Motherland, 2019; Spangler, 2019). The number of likes gained by individuals can also affect several aspects such as anxiety, depression, self-esteem, and body image (Chua & Chang, 2016; Coulthard & Ogden, 2018; Mayasari et al., 2018; Tiggemann et al., 2018). Posts that have likes that are widely used as a standard of beauty and cause low self-esteem of users if they do not display the perfect photo (Chua & Chang, 2016). Research conducted by Chua & Chang (2016) showed that all participants edited photos taken before being uploaded to social media and this activity has become a necessity. This is done to get photos that are "beautiful" and meet beauty standards on social media.

Experimental research conducted by Burrow & Rainone (2017) on Facebook users asked users to take selfies and upload them on mock Facebook sites and manipulate the number of likes gained. After that, researchers measured the user's level of self-esteem. The results of this study showed that users with a high number of likes reported having positive self-esteem than users who had low self-esteem. This is characterized by the likes obtained likened to the acceptance received from others. However, the study was conducted in a laboratory so it did not reflect how "real world" social media is.

Many studies related to selfies and social media feedback use qualitative methods or correlation design and experimental research conducted in the

laboratory so as not to reflect how "real world" social media is. Based on the description, the study will propose a hypothesis as follows:

H1: There is an increase in self-esteem in groups that upload selfies and get additional "likes"

H2: There is a decrease in self-esteem value in groups that upload selfies and do not get additional "likes"

H3: There is no change in the self-esteem value of groups that do not upload selfies.

H4: Interaction between measurement time and group during research.

2 METHOD

Experimental research is research that examines the causation of variables to be studied (Seniati et al., 2005). The experimental research design used was the design of the study between and within subject, because researchers wanted to see the difference in scores from each group and also see the difference in scores in each time of measurement in each group. The experimental research procedure used by researchers is adapted from research conducted by Coulthard & Ogden (2018). Variables between subjects are conditions (not uploading selfies, uploading selfies and not receiving feedback, as well as uploading selfies and getting feedback), variables in the subject are time (T1 at the beginning of the activity, T2 at the end of the activity, and T3 a week after the activity) and the result variable is self-esteem. In this study researchers used "like" feedback as a treatment to be done.

The population in this study is an active student of the Department of Psychology, Padang State University. The sampling technique that will be used in this study is random sampling. The number of samples needed in this study as many as 45 people will be divided into three groups, namely the group does not upload selfies (KK), groups upload selfies and do not get additional "likes" (KE1), and groups upload selfies and get additional "likes" (KE2). Group division is done randomly so that all groups become equal. In the group uploading selfies and getting additional "likes" (KE2) researchers asked permission first to the participants to give additional "likes" to the photo to be uploaded. "Likes" will be added after the subject uploads the first selfie to Instagram.

The study was conducted for 2 weeks. In the first week, subjects in the group uploaded one selfie must upload one selfie per day for seven days. Groups that did not upload selfies were asked not to upload selfies during the study. Before the KE1 and KE2 groups, all subjects were required to fill out questionnaires. The questionnaire was shared at three points of study time,

namely the 1st day before group 1 and KE2 uploaded the selfie to instagram, the 2nd day after all subjects of group KE1 and KE2 uploaded the last selfie to instagram and the 3rd day one week after the last selfie was uploaded. All subjects are required to submit evidence after filling out a questionnaire and upload a selfie as confirmation of having conducted research activities.

In this study the scale used in data retrieval is the self-esteem scale developed by Rosenberg (1965), the Rosenberg Self-Esteem Scale which is a scale that is widely used to measure self-esteem in the last 10 years (Donnellan et al., 2015). This self-esteem scale has been translated into Indonesian by Azwar (2012), which consists of 10 question items using the Likert scale. Alternative answers use the Likert scale with 4 alternative answers, namely strongly agree, agree, disagree and disagree strongly. The self-esteem scale adapted from Azwar (2012) gets a total aitem-correlation value between 0.415 to 0.703 with $n = 71$ on 10 items. While the reliability value of the self-esteem scale is $r_{xx} = 0.8587$ on 10 items.

Data obtained from the subject through questionnaires that have been shared is then changed in the form of quantitative numbers, so that the data obtained can be analyzed using statistics. The normality test is done before the hypothesis test. In this study, data analysis used repeated measures ANOVA. Repeated Measures ANOVA is a data analysis used to see the difference in scores obtained by subjects with two or more measurement times (Frey, 2018). Test the significance of Fhitung and Fteoritik. If $F_{hitung} \geq F_{teoritik}$ is interpreted as the difference between the variables tested, while $F_{hitung} \leq F_{teoritik}$ is interpreted as the absence of differences between the variables tested (Winarsunu, 2002). The ANOVA Repeated Measures test was conducted using the SPSS program.

Before looking for differences between the three research groups, normality tests were conducted on the data obtained. The normality test is a test used to find out whether the data obtained is normal or not (Nuryadi et al., 2017). In this study, researchers used the Shapiro-Wilk normality test using SPSS. In decision making, the data obtained is said to be normal distribution when $p > 0.05$, while the data obtained is said to be not normal distribution when $p < 0.05$.

Table 1 : Normality Test.

No selfies			Selfies without any additional "likes"			Selfies and get extra likes		
K1	K2	K3	K1	K2	K3	K1	K2	K3
.47	.22	.08	.15	.59	.64	.79	.11	.31
.05	.05	.05	.05	.05	.05	.05	.05	.05

In table 1, there is a normality test in each group at three points in the study. Judging from the table above, it can be concluded that the data obtained in each group at three points of the study's time is normal distribution. This is due to the significance value obtained > 0.05 .

3 RESULTS

To find out the results of this study, the results of the data analysis test were conducted. In this study, researchers used a data analysis technique called Repeated Measures ANOVA.

Table 2 : Repeated Measures ANOVA.

	Group		
	KK	KE ₁	KE ₂
Sig. Sphericity	0.316	0.730	0.533
Sig	0.157	0.026	0.007
Average			
Time1	31.33	33.73	30.93
Time2	33.80	30.67	34.80
Time3	33.13	32.73	34.00

Judging from table 2, the significance of Sphericity obtained by the three subject groups > 0.05 , meaning that decision making can be seen from the level of significance of Sphericity Assumed. The level of significance obtained by KK amounted to $0.157 > 0.05$, meaning there was no significant change to the value of self-esteem in the three research time groups. While in KE1 and KE2 the level of significance obtained < 0.05 , meaning that the interaction showed that changes in self-esteem value in the three study time groups differed significantly.

From the table above it can be found that KE1 and KE2 show that there is an interaction of changes in self-esteem value in the three measurement time groups significantly. Furthermore, there was no significant influence seen from time and condition on the subject's self-esteem but the effect of significant selfie upload feedback on the subject's self-esteem as seen from the condition by the time interaction on the subject's self-esteem. Groups that have a significance value of < 0.05 , will then be tested pairwise comparisons to see the difference in average and significance value obtained.

Table 3 : Pairwise Comparisons

	Time (I)	Time (J)	Mean Differences (I-J)	Sig.	95% Confidence Interval for Difference	
					Lower	Upper
KE ₁	1	2	3.07	0.05	0.04	6.1
	1	3	1.00	0.95	-1.61	3.61
	2	3	-2.07	0.29	-5.22	1.09
KE ₂	1	2	-3.87	0.03	-7.54	-0.19
	1	3	-3.07	0.04	-6.04	-0.1
	2	3	0.80	1.00	-2.16	3.76

Table 3 is the result of Pairwise Comparisons using SPSS. On KE1 the average at times 1-2 is down by 3.07 with a significance level of 0.05, meaning there is a difference in average KE1 self-esteem at times 1-2, with the average below 0.04 and the upper average of 6.1 at a confidence level of 95%. Furthermore, at the time of 1-3 there was an average decrease in self-esteem of 1.00 with a significance level of 0.95. That is, there was no significant change in average self-esteem at times 1-3, with an average below -1.61 and an upper average of 3.61 at a 95% confidence level. At a time of 2-3 the average value rose by 2.07 with a significance level of 0.29. That means there was a significant change in average self-esteem at 2-3, with an average below -5.22 and an upper average of 1.09 at a 95% confidence level.

Furthermore, on KE2, the average at times 1-2 increased by 3.87 with a significance level of 0.03. This means that at measurement times 1-2 there was a significant change in the subject's average self-esteem with a lower average of -7.54 and an upper average of -0.19 at a 95% confidence level. At measurement time 1-3, the subject's average self-esteem increased by 3.07 with a significance level of 0.04. This means that at measurement time 1-3 there was a significant change in the average self-esteem of the subject with a lower average of -6.04 and an upper average of -0.1 at a 95% confidence level. The average self-esteem at the time of measurement 2-3 decreased by 0.80 with a significance level of 1.00. This meant there was no significant change in the subject's average self-esteem with a lower average of -2.16 and an upper average of 3.76 at a 95% confidence level.

From table 3 it can be concluded that the average self-esteem of KE1 at the time of measurement 1-2 decreased significantly, while at the time of measurement 2-3 experienced a significant increase. Furthermore, the average self-esteem of KE2 at the time of measurement 1-2 experienced a significant increase, but at the time of measurement 2-3 decreased but not significant.

Table 4. Within-Subjects Effects.

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
time	Sphericity Assumed	43.304	2	21.652	2.052	.135	.047
	Greenhouse-Geisser	43.304	1.847	23.444	2.052	.139	.047
	Huynh-Feldt	43.304	2.000	21.652	2.052	.135	.047
	Lower-bound	43.304	1.000	43.304	2.052	.159	.047
time * condition	Sphericity Assumed	203.896	4	50.974	4.832	.001	.187
	Greenhouse-Geisser	203.896	3.694	55.192	4.832	.002	.187
	Huynh-Feldt	203.896	4.000	50.974	4.832	.001	.187
	Lower-bound	203.896	2.000	101.948	4.832	.013	.187
Error (time)	Sphericity Assumed	886.133	84	10.549			
	Greenhouse-Geisser	886.133	77.58	11.422			
	Huynh-Feldt	886.133	84.00	10.549			
	Lower-bound	886.133	42.00	21.098			

In table 4 on the time line, it can be seen that there is no significant change due to the value of significance gained > 0.05. But there was a significant interaction between the condition and the study time because it got a significance value of 0.001. This interaction shows that there is a significant change in the price value of T1, T2 and T3 in all three groups (Widhiarso, 2011).

Table 5. Tests of Between-Subjects Effects.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	145172.807	1	145172.807	1.220 E4	.000	.997
Condition	16.993	2	8.496	.714	.496	.033
Error	499.867	42	11.902			

In the significant column in table 5 as seen from the condition row there is a significant value of 0.496. This means that there is no significant change between the feedback of selfie uploads on the value of self-esteem seen from the condition, because the significant value obtained > 0.05.

Based on the results of the analysis test that has been conducted seen from table 3 it can be concluded

that the group that uploaded selfies and gained additional "likes" experienced a significant increase in self-esteem during the study. This is evidenced by the increase in the average self-esteem value obtained in the experimental group 2 as seen from table 3 of 3.87 with significance of 0.04. So H1 which states that there is an increase in self-esteem value in groups that upload selfies and get additional "likes", is accepted. The group that uploaded the selfie and did not get any additional "likes", experienced a significant decrease in average self-esteem value at 1-2 by 3.07 and experienced an insignificant increase at a time of 2-3 of 2.07. So H2 which states that there is a decrease in the value of self-esteem in groups that upload selfies and do not get additional "likes", is accepted. The acceptance of H1 and H2 shows that the influence of like feedback on the self-esteem of women instagram users.

Furthermore, based on the results of the analysis test also obtained the results that the group that did not upload selfies did not experience a significant change in average self-esteem value during the study seen from table 2. This means that H3, which states that there is no change in the self-esteem value of groups that do not upload selfies, is accepted. Based on the results of the data analysis test seen in table 4 of the cond x time row, the significance value of 0.001 is interpreted as a significant interaction between the research time and the research group. So that H4, which states the interaction between research time and research groups, is accepted.

4 DISCUSSION

The value of self-esteem in each individual tends to be different from each other. This is because self-esteem is a subjective assessment made by individuals on themselves that are positive or negative (Desjarlais, 2019; Neff, 2011; Rosenberg, 1965). The value of self-esteem possessed by individuals can be changed by several factors, one of which is the "likes" feedback obtained on social media. According to sociometer theory, acceptance or rejection given by others is one of the factors that can affect self-esteem (Leary et al., 1995). Getting likes is like accepting from others, while not getting likes is likened to rejection from others (Coulthard & Ogden, 2018). Research conducted by Pounders et al. (2016) shows that self-esteem is a major contributing factor to uploading selfies to social media. But the number of likes gained on the uploaded selfie is not in accordance with expectations can reduce self-esteem. This theory is in line with the results of research obtained which showed that there was a significant change in the self-esteem value of the experimental

group, no significant change in the self-esteem value of the control group and the interaction between time and group during the study.

The results also showed that the experimental group that gained additional "likes" significantly increased in self-esteem value, while the experimental group that did not get additional "likes" significantly decreased in the study. The results of this study are in line with the results of a study conducted by Burrow & Rainone (2017) which showed that individuals who had a high number of "likes" significantly had high self-esteem compared to individuals with low or average "likes". Research shows that teens and early adults want "like" feedback on uploaded selfie posts and tend to like posts with a lot of likes compared to posts that have few likes (Chua & Chang, 2016; Mascheroni et al., 2015; Sherman et al., 2016).

No significant change in self-esteem in the group that did not post a selfie showed that using social media or getting likes could affect self-esteem. This is supported by research results that show that the higher the intensity of social media use can reduce self-esteem (Jan et al., 2017), the use of social media seen from the feedback obtained can affect self-esteem and well-being (Valkenburg et al., 2006) and the statement of Adam Mosseri, instagram boss, who said that likes obtained can affect mental health (Leung, 2019; Spangler, 2019).

Research conducted by Coulthard and Ogden (2018) obtained results that contradicted the results of research obtained by researchers, namely there was no influence of uploading selfies and getting feedback on self-esteem. This is because during the study, participants experienced dropouts and were afraid of feeling exposed on social media because they uploaded too many selfies than usual. And also the likes that participants get raise the question of whether there is an additional influence of "likes" (unknown people) that are obtained the same as the likes that participants get before getting additional "likes" (known people).

From the results of data analysis tests and hypothesis tests, it can be concluded that the influence of selfie feedback on the self-esteem of women instagram users. This is evidenced by the acceptance of H1, H2 and H4, which showed the self-esteem value of the group that posted selfies and earned additional "likes" was higher than the group that did not get additional "likes" and the interaction of time and research groups during the study. And the effect of the use of social media on the value of self-esteem as evidenced by the acceptance of H3 shows no significant change in self-esteem value in groups that do not upload selfies.

5 CONCLUSIONS

Based on the results of research from hypothesis tests obtained by researchers regarding the influence of selfie upload feedback on the self-esteem of women instagram users, it can be concluded that:

1. There was a change in self-esteem value in groups that uploaded selfies and got additional "likes" and groups that posted selfies and did not get additional "likes".
2. There was a significant increase in self-esteem in the group that uploaded the selfie and got an additional "like"
3. There was a significant decrease in self-esteem in the group that posted selfies and did not get additional "likes".
4. There was no significant change in self-esteem in the group that did not upload the selfie.
5. There is an interaction of time and research groups during research.

Based on the results of research obtained by researchers, there are several suggestions that can be considered for related parties, namely:

1. For Women Instagram Users, the advice that researchers give women instagram users is to see the impact, either positive or negative, in using social media and wise in using social media. Thus allowing the value of self-esteem to be stable over time..
2. Share the Next Research, research activities in this study are less conducive because it takes place during pandemic conditions, so the activities are carried out online. For further research is expected when conducting research activities, researchers conduct assistance to ensure the subject performs activities in accordance with the instructions of activities that have been established.

For further researchers who use the same topic to increase the sample size in each group in order to expand the results of the study.

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