The Relationship Between Selfie- Editing, Self-Esteem, And Social Appearance Anxiety Among University Students

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ABSTRACT

Existed research had investigated the impact of this new trend of selfie-editing on psychological well-being, but mainly focus on body image issue. However, there were limited study regarding the selfie-editing behaviour in the context of Malaysia, and regarding the relationship between selfie-editing behaviour, self-esteem, and social appearance anxiety. Therefore, this present study intends to widen the field of selfie- editing study by investigating the relationships between selfie-editing before online sharing, self-esteem, and social appearance anxiety in the context of Malaysia. Online survey methods were administered to a total of 253 university students. Three instruments, Photo Manipulation, Rosenberg self-esteem scale (RSES), Social Appearance Anxiety Scale (SAAS) were used to measure the variables in this study. Hypothesis were supported that greater frequency of selfie-editing before online sharing was significantly related to higher level of social appearance anxiety. Meanwhile, this study reported higher frequency of selfie-editing before online sharing was significantly associated to lower level of self-esteem. In addition, selfie-editing before online posting was found to be a significant influence on both self-esteem and social appearance anxiety. Possible explanation for these phenomenon was explored. Lastly, this study advices further research on examine the possible mediator of these relationship as the frequency of selfie-editing behaviour was not the major influence of both self-esteem and social appearance anxiety. And also developing guideline on using selfie-editing that can reduce the risk of adverse psychological well-being.

Keywords:
Selfie-Editing, Social Appearance Anxiety,
Self-Esteem, University Students

1. Introduction

Selfie culture is a global phenomenon which are very popular among social network users. Malaysia was ranked at second in Asia for taking the most Instagram selfie in 2014 [1]. As the world amid coronavirus pandemic in 2020, more people turning to Internet for their work, entertainment, social interaction, and many other [2]. Malaysians had found to be using Internet the most on social networks in 2019 [3], in addition to the period when Malaysia Government implemented the 2020 Movement Control Order, thus it was expected that a great increase in the number of social networks users in Malaysia.

Selfie started to grow popular since the modern selfie trend begin with the appearance of iPhone's front-facing camera in 2010. Furthermore, technology give further impact on selfie that it created another new phenomenon or culture of selfie editing. Digital photo enhancements allowed users to manipulate their selfies into the image they desired. This technology had been implemented on mobile phone that made selfie-editing much more convenient and costless in recent years such as

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build-in editing which enables beauty filtering by just switching the phone camera settings to beauty mode before taking the photo [4] and users can further manipulate the photo taken by using photo editing apps on phone. Social networking sites users can use this tool to improve selfies conveniently and easily in Malaysia.

The selfie-editing behavior mostly had found to be an influence on psychological well-being in an adverse way especially among young people such as young adults and adolescent and it was not just effect on the user but also the audience who view the edited selfie on social networking sites such as Facebook, Twitter, Instagram and others [5-7]. After viewers comparing their appearance with the shared selfies, they might experience low body confidence and having desire to change or hide the imperfections of their physical appearance [5], which encourage more usage of selfie-editing.

Social anxiety is the fear of social situation including evaluation by the social circle [8]. Social appearance anxiety is a type of social anxiety related to appearance, "the fear that one will be negatively evaluated because of one's appearance" [9]. Higher frequency of selfie-editing for online posting were reported to be associated with increasing body-related and eating concerns, greater body shame, appearance anxiety, negative appearance evaluations, negative mood and body dissatisfaction [7, 10-12]. While individual who is very concern or focused on body image issue can attribute to lack of self-esteem, higher social appearance anxiety, and higher fear especially when they felt that they had failed it [13].

Self-esteem is an individual psychological characteristic associate with self-evaluation of thoughts and emotions overall in relation to oneself [14]. Cohen's study [10] reported that selfie editing were negatively related to body satisfaction. Meanwhile, body image is crucial for one's self-esteem as it represents a huge part of one's self-concept [13, 15]. As expected that body image dissatisfaction are found to be strongly associated with low self-esteem [16-17].

Although much research had been studied related to the negative effects of selfie-editing on the users' body image satisafaction and self-esteem, more research need to be studied related to the further effects of selfie-editing on social appearance anxiety, and the self-esteem in the context of Malaysia.

1.2 Research Objectives

The present study proposed to investigate the relationship between selfie editing behaviour and self-esteem, and the relationship between selfie-editing behaviour and social appearance anxiety. Besides that, this study aims to examine the influence of selfie-editing behaviour before online posting on self-esteem and social appearance anxiety.

1. To investigate the relationship between the selfie-editing behaviour prior to posting, and social appearance anxiety among university students.

2. To investigate the relationship between the selfie-editing behaviour prior to posting, and self-esteem among university students.

3. To study the influence of selfie-editing behaviour towards social appearance anxiety among university students.

4. To study the influence of selfie-editing behaviour towards self-esteem among university students.

2. Methodology

2.1 Study Design

The sample of this quantitative study consisted of 253 university students. This research study using purposive sampling, a type of non-probability sampling where university student in a public university in Malaysia were selected. Online questionnaire was used in the present study to gather data through the internet as one of the way to adhere the Standard Operating Procedure (SOP) operated by the Malaysia government. The method to administer the measures or questionnaire was by using the WhatsApp platform or email to distribute the Google Forms. Online survey was administered at the period between the date of 25 October 2020 and 28 November 2020. The survey included of an informed consent form, demographic information form, Social Appearance Anxiety Scale, Photo Manipulation, and Rosenberg Self-Esteem Scale.

2.2 Instrument

Photo Manipulation is a subscale of Photo Activities scale [11]. This section consisted of 10 items used to measure the frequency of photo editing prior to posting [18]. It is a unidimensional scale. Example items were "Make yourself look skinnier", "Edit to hide blemishes like pimples", and "Make specific parts of your body look larger or look smaller". Photo manipulation using five point Likert-type scale ranging from 1 (never) to 5 (always) with higher score indicated more frequent photo editing [11]. The internal consistency reported was 0.83 which showed good reliability of the subscale.

Rosenberg (1965) created Rosenberg self-esteem scale (RSES) which is a unidimensional scale that consisted of 10 items on a Likert scale of 1 (Strongly Disagree) to 4 (Strongly Agree). This instrument measures the level of self-esteem [14]. The score range of the scale is between 10 and 40, that higher scores indicated higher level of self-esteem. The half of the items were positive items (items 1, 3, 4, 7, 10) while another half of them were negative items (Items 2, 5, 6, 8, 9). An example of the positive item is "On the whole, I am satisfied with myself" and one of the negative items is "At times I think I am no good at all". This scale showed good reliability that this study reported Cronbach's alpha 0.87.

Social Appearance Anxiety Scale (SAAS) [9] was developed to assess anxiety due to negative evaluation by others typically about one's general physical appearance [19]. SAAS were obtained from social anxiety, body image satisfaction, and body dysmorphic disorder [19]. It is a unidimensional scale that composed of 16 items which using a five point Likert-type scale ranging from 1 (not at all) to 5 (extremely) [9]. The score range of the scale is between 16 and 80, that higher scores indicated higher level of social appearance anxiety. Example of items including "I worry people will judge the way I look negatively", "I worry that my appearance will make life more difficult for me.", and "I worry that others talk about flaws in my appearance when I am not around." This research reported good reliability of the scale where the Cronbach's alpha of SAAS was 0.96.

2.3 Data Analysis

The present study use SPSS version 22 to analyze the data collected. Descriptive statistics analysis was used for analyzing the demographic information including age, gender, race, and program. Pearson correlation analysis was used to examine the both relationship between selfie-editing and social appearance anxiety, and relationship between selfie-editing and self-esteem. Regression analysis will be done to study the influence of selfie-editing on both social appearance anxiety and self-esteem.

3. Results and Discussion

3.1 Descriptive Analysis

Table 1 shows that there were 77.9% (197) of the samples was female, 22.1% (56) were male. Most of samples, 58.5% (148) were Bumiputera. Next, 35.6% (90) of the samples were Chinese students, 20.6% 8 samples' age, 68% (172), was between 21 and 25 years old. It was followed by the 12.6% (32) of the samples which were below 21 years old, 11.9% (30) of the samples that were above 30 years old, and 7.5% (19) of the samples which were between 26 and 30 years old.

Table 1
Frequency Distribution of Samples' Gender, Race, Education Status and Age

Variable	Frequency (n)	Percent (%)
Gender		
Male	56	22.1
Female	197	77.9
Race		
Bumiputera	148	58.5
Chinese	90	35.6
Indian	11	4.3
Others	4	1.6
Education Status		
Diploma	12	4.7
Undergraduate	204	80.7
Postgraduate	37	14.6
Age		
Below 21 years old	32	12.6
Between 21 and 25 years old	172	68
Between 26 and 30 years old	19	7.5
Above 30 years old	30	11.9

3.2 Pearson Correlation

Table 2 showed that the correlation between the Photo Manipulation scale (M = 19.36, SD = 6.28) and self-esteem (M = 27.89, SD = 4.32) was significant and can be interpreted as weak and negative correlation, r (251) = -.26, $p < .001$. Meanwhile, Photo Manipulated scale was significantly and positively correlated with social appearance anxiety (M =40.47, SD = 14.54), $r(251) = .37$, $p < .001$. However, it was considered as weak correlation. Rosernberg Self-Esteem Scale was reported having significant and negative correlation with the total score of Social Appearance Anxiety Scale, r (251) = -.49, $p < .001$. This correlation was interpreted as moderate correlation.

Table 2
Correlation Analysis of Photo Manipulation, Rosenberg Self-Esteem Scale, and Social Appearance Anxiety
Scale

Variables	Mean	Standard Deviation	1	2	3
1. PM	19.36	6.28	-		
2. RSES	27.89	4.32	-.26**	-	
3. SAAS	40.47	14.54	.37**	-.49**	-

Note. M indicates mean. *SD* represents standard deviation. PM = Photo Manipulation; RSES = Rosenberg Self-Esteem Scale; SAAS = Social
Appearance Anxiety Scale.

**Correlation is significant at the 0.01 level (2-tailed)

3.3 Regression Analysis

According to Table 3, selfie-editing prior to online posting reported to have a significant influence on social appearance anxiety, $p < .05$. There are 5.5% of the social appearance anxiety influenced by selfie-editing prior to online posting. When increasing the frequency of selfie-editing will leads to 1.952 times more likelihood to experiences high social appearance anxiety.

Table 3
Regression Analysis Summary for Selfie-Editing Prior to Online Posting Influence on Social Appearance Anxiety
95% C.I. for EXP(B)

Factor	R^2	B	Wald	p	Exp(B)	Lower	Upper
PM	.055	.669	10.006	.002	1.952	1.290	2.955
Constant		-1.432	11.120	.001	.239		

Note. PM indicated Photo Manipulation.

According to Table 4, selfie-editing prior to online posting reported to have a significant influence on self-esteem, $p < .05$. There are 2.9% of the self-esteem influenced by selfie-editing prior to online posting. When increasing the frequency of selfie-editing will lead to 3.8 times more likelihood to experiences low self-esteem.

Table 4
Regression Analysis Summary for Selfie-Editing Prior to Online Posting Influence on Self-Esteem
95% C.I. for EXP(B)

Factor	R^2	B	Wald	p	Exp(B)	Lower	Upper
PM	.029	-.479	5.399	.020	.620	.414	.928
Constant		1.112	6.994	.008	3.039		

Note. PM indicated Photo Manipulation.

3.4 Selfie-editing and Social Appearance Anxiety

The results is inconsistent with the past experiment that suggested those who had retake and manipulated their selfies before sharing it to social media will experience lower in social anxiety compared to those who did not edit their selfie before they post it [20]. This may be due to the difference in frequency of selfie-editing before posting it where Shome's study [20] showed immediate effect of selfie-editing behavior while this study tends to focus on the long- term effect of selfie-editing behavior. The greater frequency of selfie-editing behavior before posting will results in more exposure of flawless appearance. These exposures caused higher attention on body image and gradually increase the desire to achieve these unrealistic appearance [5, 21]. Selfie- editing created these discrepancies between actual self and real self as it can only change the appearance virtually, thus increase negative emotion [22]. Turan [13] explained further that the thoughts of failing to achieve these social media standard eventually leads to higher social appearance anxiety. This is compatible with the past literature suggested that there was a long-term effect of selfie-editing behavior on developing negative body image such as appearance anxiety and body image dissatisfaction [7], which can result in greater social appearance anxiety [9, 23].

3.5 Selfie-editing and Self-esteem

Hypothesis proposed that there is a negative correlation between selfie-editing prior to online posting and self-esteem among university students had been supported by the results. In addition, selfie-editing prior to online posting had been proven to be a predictor of self-esteem. The outcome is consistent with past literature that selfie-editing before posting on social media leads to decrease in self-esteem [20]. As aforementioned, long-term selfie-editing behavior will increase the concerns towards body image and thus developed into negative body image. Negative body image was related with low self-esteem especially among those who think they failed to achieve the ideal standard [13]. Appearance is the major factor of self-esteem [24].

4. Conclusion

There were negative consequences of selfie-editing behaviour on psychological well-being such as social appearance anxiety and low self-esteem. These pursuing beauty thoughts is still occupying young people nowadays. Problematic selfie behaviour may manifest these thoughts and lead to other mental health issue. Therefore, this issue should be taken concern and was suggested that to use selfie-editing in an appropriate method to avoid mental health issue. Counselor, psychologist, students and community should take cautious of this issue. Lastly, a future study in taking samples from various university in Malaysia is recommended to have a more accurate conclusion of the causal relationship among university students in Malaysia. Furthermore, the study may include other research design such as mixed-methods of qualitative and quantitative to collect more data such as students' experience and also provide a more comprehensive understand about selfie- editing behaviour.

References

[1] Magdirila, P. 2014. *Philippines and Malaysia took the most Instagram selfies in Asia.* Tech in Asia. https://www.techinasia.com/philippines-malaysia- instagram-selfies-asia.
[2] Koeze, E. and N. Popper. 2020. *The Virus Changed the Way We Internet.* The New York Times. https://www.nytimes.com/interactive/2020/04/07/technology/coronavirus- internet-use.html.

[3]   Malaysia. Department of Statistics Malaysia, Strategic Communication and International Division. 2020. *ICT Use and Access By Individuals and Households Survey Report 2019.* https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=SFRacTRUMEV RUFo1Ulc4Y1JlLzBqUT09.

[4]   Ghosh, S. 2017. *How popular smartphones make your skin look 'whiter' in selfies.* Inside. https://www.insider.com/samsung-huawei-smartphone-beauty- filters-whiten-your-skin-2017-8

[5]   Kleemans, M., S. Daalmans, I. Carbaat, and D. Anschütz. 2016. "Picture Perfect: The Direct Effect of Manipulated Instagram Photos on Body Image in Adolescent Girls." *Media Psychology* 21, no. 1 (December): 93–110. https://doi.org/10.1080/15213269.2016.1257392

[6]   Mills, J. S., S. Musto, L. Williams, and M. Tiggemann. 2018. "'Selfie' harm: Effects on mood and body image in young women." *Body Image* 27, (December): 86–92. https://doi.org/10.1016/j.bodyim.2018.08.007

[7]   Terán, L., K. Yan, and J. S. Aubrey. 2019. "'But first let me take a selfie': U.S. adolescent girls' selfie activities, self-objectification, imaginary audience beliefs, and appearance concerns." *Journal of Children and Media* 14, no. 3 (November): 1– 18. https://doi.org/10.1080/17482798.2019.1697319

[8]   American Psychiatric Association. 2013. *Diagnostic and statistical manual of mental disorders.* 5th ed. Arlington, VA: Author.

[9]   Hart, T. A., D. B. Mora, S. A. Palyo, D. M. Fresco, C. Holle, and R. G. Heimberg. 2008. Development and examination of the social appearance anxiety scale. *Assessment* 15, no. 1 (December): 48–59. https://files.eric.ed.gov/fulltext/ED559714.pdf

[10]   Cohen, R., T. Newton-John, and A. Slater. 2018. "'Selfie'-objectification: The role of selfies in self objectification and disordered eating in young women." *Computers in Human Behavior* 79, (Febraury): 68–74. https://doi.org/10.1016/j.chb.2017.10.027

[11]   McLean, S. A., S. J. Paxton, E. H. Wertheim, and J. Masters. 2015. "Photoshopping the selfie: Self photo editing and photo investment are associated with body dissatisfaction in adolescent girls." *International Journal of Eating Disorders* 48, no. 8 (August): 1132–1140. https://doi.org/10.1002/eat.22449

[12]   Tiggemann, M., I. Anderberg, and Z. Brown. 2020. "Uploading your best self: Selfie editing and body dissatisfaction." *Body Image* 33, (June): 175–182. https://doi.org/10.1016/j.bodyim.2020.03.002

[13]   Turan, N., G. Özdemir Aydın, H. Kaya, G. Aksel, and A. Yılmaz. 2019. "Male Nursing Students' Social Appearance Anxiety and Their Coping Attitudes." *American Journal of Men's Health* 13, no. 1 (February): 155798831982592. https://doi.org/10.1177/1557988319825922

[14]   Park, J. Y. and E. Y. Park. 2019. "The Rasch Analysis of Rosenberg Self-Esteem Scale in Individuals With Intellectual Disabilities." *Front. Psychol*. 10, no. 1992 (September). https://doi.org/10.3389/fpsyg.2019.01992

[15]   O'Dea, J. A. 2012. "Body image and self-esteem". In *Encyclopedia of body image and human appearance*, Ed., edited by T. F. Cash, 141–147. Waltham, Mass: Elsevier Academic Press. https://psycnet.apa.org/record/2012-14627-021

[16]   Tiwari, G. K. 2014. "Body Image Satisfaction Enhances Self-Esteem". *Vaichariki* 4, no. 4 (December): 7- 11. https://www.researchgate.net/publication/271708907_Body_Image_Satisfaction_Enhances_Self-Esteem

[17]   Van den Berg, P. A., J. Mond, M. Eisenberg, D. Ackard, and D. Neumark-Sztainer. 2010. "The Link Between Body Dissatisfaction and Self-Esteem in Adolescents: Similarities Across Gender, Age, Weight Status, Race/Ethnicity, and Socioeconomic Status." *Journal of Adolescent Health* 47, no. 3 (May): 290–296. https://doi.org/10.1016/j.jadohealth.2010.02.004

[18]   Mingoia, J., A. D. Hutchinson, D. H. Gleaves, and C. Wilson. 2019. "The Relationship Between Posting and Photo Manipulation Activities on Social Networking Sites and Internalization of a Tanned Ideal Among Australian Adolescents and Young Adults." *Social Media + Society* 5, no. 1 (January): 205630511882041. https://doi.org/10.1177/2056305118820419

[19]   Kadir, N.B., R. M. Rahman, and A. Desa. 2013. "Reliable and Validated Social Appearance Anxiety Self-Report Measure Among University Students." *Malays J Psychol* 27, 41–53. http://spaj.ukm.my/ppppm/jpm/article/view/97/80

[20]   Shome, D., S. Vadera, S. R. Male, and R. Kapoor. 2019. "Does taking selfies lead to increased desire to undergo cosmetic surgery." *Journal of Cosmetic Dermatology* 19, no. 8 (August): 2025-2032. https://doi.org/10.1111/jocd.13267

[21]   Verrastro, V., L. Fontanesi, F. Liga, F. Cuzzocrea, and M. C. Gugliandolo. 2020. "Fear the Instagram: Beauty Stereotypes, Body Image and Instagram use in a sample of male and female adolescents." *QWERTY* 15(1): 31+. https://doi.org/10.30557/QW000021

[22]   Higgins, E. T. 1987. "Self-discrepancy: A theory relating self and affect." *Psychological Review* 94, no. 3 (July): 319–340. https://doi.org/10.1037/0033-295X.94.3.319

[23]   Blasi, M. D., P. Cavani, L. Pavia, R. L. Baido, S. L. Grutta and A. Schimmenti. 2015. "The relationship between self-Image and social anxiety in adolescence." *Child and Adolescent Mental Health* 20, no. 2 (January): 74- 80. https://doi.org/10.1177/0033294118823178

[24] Baudson, T, G., K. E. Weber and P. A. Freund. 2016. "More Than Only Skin Deep: Appearance Self-Concept Predicts Most of Secondary School Students' Self- Esteem." *Front. Psychol* 7, no. 1568 (October). https://doi.org/10.3389/fpsyg.2016.01568