

Dissatisfaction about Body Image During Social Networking among University Students

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ABSTRACT

Background: Body image dissatisfaction (BD) is a global problem, particularly among women, leading to health problems such as eating disorders and depression. One of the causes of body image dissatisfaction is exposure to thin ideals media. The emergence of the Internet and social networking sites (SNS) has since indirectly become the source of body image dissatisfaction precipitation, facilitated by social/appearance comparison. **Aim:** This study explores the association of social networking site (SNS) use and body image dissatisfaction among university students. The association of BMI and gender with body image dissatisfaction among them were also investigated. **Methods:** A cross-sectional study was conducted among the Faculty of Health Sciences students, Universiti Teknologi MARA (UiTM), Puncak Alam Campus, using quota sampling with the sample size, $n=311$. Questionnaires containing sections on demographic background, Social Networking Time use Scale (SONTUS) and Body Shape Questionnaire (BSQ) to measure the duration of SNS use and body image dissatisfaction, respectively, were distributed and among them, 309 were returned completely. Data were analysed using IBM-SPSS Statistic (Version 25). **Results:** Most of the participants, 144 (47%), were the average SNS users, while only 13 (4%) were extremely high users. There was an association between the duration of SNS use and body image dissatisfaction ($p<0.05$). Low users of SNS seemed to exhibit lower body image dissatisfaction than average to extremely high SNS users. Females exhibited higher body image dissatisfaction than males ($p<0.05$), consistent with previous findings. There was a significant association between BMI and body image dissatisfaction ($p<0.05$). Higher body image dissatisfaction was found among participants with normal BMI. **Conclusion:** In conclusion, the duration of SNS is average among university students. The longer use of SNS, particularly in photo base activities, was associated with body image dissatisfaction.

Keywords: *Effect of Social Media; Body Image; Body Weight Status; University Students*

INTRODUCTION

Nowadays, the internet era witnesses the growth of a variety of social networking sites (SNS). SNS can be referred to as web-based services that allow individuals to create and build their profiles. SNS also allows individuals to connect or join the public forum that provides them with features such as chatting, blogging, video calling, mobile connectivity and video or photo sharing. In Malaysia, 46% of internet users are adults in their 20's and spent an average of 5 to 12 hours a day on the internet (Malaysian Communications and Multimedia Commission, 2020). The majority of them use the internet to visit social networking, where

Facebook remains the most widely used, followed by Youtube and Instagram.

University students commonly spend more than usual hours on social networking sites to download pictures, scroll through updates, seek entertainment and chat around with friends to keep themselves connected (Ahmad *et al.*, 2018). These sites then cause an addiction to the youth due to their attractive features, which cause them to find it is not easy to concentrate on their work and prefer logging in and search from one site to another. Research that studies how people use Facebook found that females exhibit more interest in checking out pages of the same sex, and spend more time looking at photos

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of others (McAndrew & Jeong, 2012). Related to this, a study that investigates the effects of Facebook feed photographs on female college students' appearance satisfaction suggests that participants who look at photos of attractive people exhibit lower appearance satisfaction (Kim & Park, 2016). The reviewing of these studies raise an important question, "Does spending a specific amount of time on SNS brings about the dissatisfaction of their own body?"

Negative body image perception or body image dissatisfaction is now seemed very synonymy occur in society. The widespread of body image dissatisfaction is considered high in both developed and developing countries (Nikniaz *et al.*, 2016; Prieler, Choi & Lee, 2021; Radwan *et al.*, 2019). It is not surprising because nowadays, attractive physical and body are very important to people. Studies showed contradicting findings in body dissatisfaction between females and males. However, many studies indicate female students feel dissatisfied with their body image (Fallon *et al.*, 2014; Jiotsa *et al.*, 2021a; Yao *et al.*, 2021). People who are considered attractive usually get significant attention from others compared to unattractive people. This is because they believe that attractive people are smarter and look trustworthy than less attractive people (Herman *et al.*, 2017). The 'bias for beauty' seems to commonly occur in almost all social situations today which may lead to body dissatisfaction and cause low self-esteem and depression for those individuals who do not have that attractive physical and body criteria.

The majority of the studies done in Malaysia explores only the instance of body image dissatisfaction and its effect on participant behaviour, such as their dietary pattern, weight management, and eating disorders (Wong & Say, 2013; Yen Eow & Ying Gan, 2018). None have addressed the amount of time spent on SNS and how this, in turn, affect the feeling of body image dissatisfaction among university students. The study aims to identify the prevalence of body image dissatisfaction among the students of the Health Sciences Faculty. In addition, this study is to determine the duration of SNS use among students of Health Sciences Faculty and the relationship between gender and Body Mass Index (BMI), with body image dissatisfaction.

METHODOLOGY

Study Design, Location and Sampling

The study used the cross-sectional study design. The

population was the undergraduate Health Sciences students of UiTM Selangor Puncak Alam Campus. UiTM Selangor Puncak Alam Campus is located approximately 35 kilometres from Shah Alam City. The Faculty of Health Sciences consists of eight programmes, and the total number of students is 1508. The sample size was calculated by Raosoft Sample Size Calculator, using the confidence level of 95%, the response distribution of 50% and the margin error of 5%, giving out the recommended sample size of 307. Quota sampling was used to identify participants who meet the inclusion criteria: the full-time Faculty of Health Sciences students at UiTM Selangor Puncak Alam Campus, active social media users such as Facebook, Instagram. The study received approval from UiTM Research Ethics Committee with reference number 600-IRMI (5/1/16) on 6 March 2018. During data collection, the participants were informed that the research was completely voluntary and their data would be kept confidential and anonymous.

Research Instrument

The study used a structured questionnaire that consists of 3 sections. Section A is demographic data, including the weight and height participant. Section B is questionnaire adopted from (Olufadi, 2016) Social Networking Time use Scale (SONTUS). The section of this questionnaire was to determine how often social media networking such as Facebook, Instagram, WhatsApp, Twitter, Myspace, Pinterest, and others had been used during the past week in some situation and places. This section consists of 29 items with the closed-ended question that need to be rated by using 11-point scale ranging from 1- Not applicable to me during the past week to 11- I used it more than 3 times during the past week but spent more than 30 min each time. Section C is The Body Shape Questionnaire adopted from (Rosen *et al.*, 1996). This section aims to determine the participant perception regarding their body shape, which influences their body dissatisfaction. This questionnaire consists of 34 closed-ended questions based on 6 point Likert scale (1-Never, 2-Rarely, 3-Sometimes, 4-Often, 5-Very Often, 6-Always). The pilot study was conducted using the original English version of SONTUS and The Body Shape Questionnaire, the Cronbach's alpha was 0.9 and 0.89, respectively.

Statistical Analysis

Data were analysed using the IBM Statistical Package

for Social Sciences Version 25.0. The sociodemographic data were described with descriptive analysis. At the same time, BMI was obtained from the data of weight and height from the questionnaire that has been calculated by SPSS using the formula (weight)/(height)x2. The numerical data of BMI was transformed into categorical data that are underweight, normal, or overweight. The duration of SNS use and body image dissatisfaction was analysed using the Chi-Square test. The level of significance was set at $p < 0.05$.

Data Analysis and Results

The total number of participants is 309, of which 264 (85.4%) were female while 45 (14.6%) were male. 225 (72.8%) participants had normal BMI, 54 (17.5%) participants were under the category overweight, while 30 (9.7%) of them were underweight. The majority (20.7%) of the participants are in the physiotherapy programme, followed this in the nursing programme 15.9%, and least is from the optometry program (7.1%), as shown in Table 1.

Table 1: Demographic Characteristics

Variables	Frequency (n)	Percentage (%)
Gender		
Male	45	14.6
Female	264	85.4
BMI		
Underweight	30	9.7
Normal	225	72.8
Overweight	54	17.5
Programme		
Nursing	49	15.9
Dietetics	28	9.1
Physiotherapy	64	20.7
Optometry	22	7.1
Medical Imaging	38	12.3
Environmental Health	33	10.7
Medical Lab Technology	30	9.7
Occupational Therapy	45	14.6

Notes: N=309

Type of Social Networking Site (SNS) used by the Faculty of Health Sciences Students

Based on Figure 4-1 shown below, Whatsapp was the most popular SNS since all 309 participants used the site, followed by Instagram with 272 users. 260 participants use Facebook while 191 participants use Twitter. Wechat had 31 users among the participants, Pinterest had 28 users then Tumblr with 21 users. Myspace had the least number of users among the participants with only 6 users out of 309 participants.

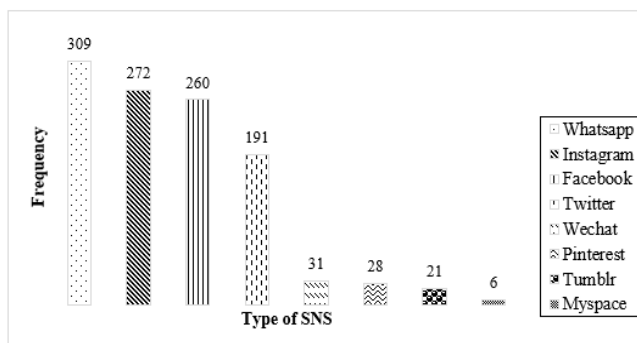


Figure 1: Type of SNS used by the Faculty of Health Sciences Students

The Duration of Social Networking Site (SNS) Used

The duration of SNS use among the participants was classified into four categories that showed how frequent they used the site, from low user of SNS, average user, to high and extremely high user of SNS. From Table 2, it was shown that most of the participants (47%) were the average users of SNS, while only 13 (4%) were extremely high users.

Table 2: Duration of Social Networking Uses

Duration	Frequency (n)	Percentage (%)
Low users	85	27
Average users	144	47
High users	67	22
Extremely high users	13	4

Notes: N=309

Body Image Dissatisfaction among Students

Generally, it has been found that 174 (56.3%) of the participants were having dissatisfaction with their body image, as shown in Table 3 below, with 118 (38.2%) participants were having mild concern about their body shape. However, the result indicates 134 (43.6%) of the participants were not bothered by their body shape.

Table 3: The Occurrence of Body Image Dissatisfaction among Students

Body Image Dissatisfaction	n (%)
Present	
Mild concern about body shape	118 (38.2%)
Moderate concern about body shape	42 (13.6%)
Marked concern about body shape	15 (4.9%)
Absent	
No concern about body shape	134 (43.6%)

* $p < 0.05$ was statistically significant

The Duration of Social Networking Site (SNS) Used and Body Image Dissatisfaction

Table 4 shows that low users of SNS had no feelings

of dissatisfaction towards their body image 47 (36.9%) out of the total 85 participants. Another trend noticed in the result was body image dissatisfaction higher among average to high SNS users. Therefore, there was a significant difference between the duration of SNS use and body image dissatisfaction $X^2(3)=8.025, p=0.046$.

Table 4: Duration of SNS and Body Image Dissatisfaction

Variable	Body Image Dissatisfaction, n(%)		X ² (df)	p value
	Yes	No		
Duration of SNS			9.054 (3)	0.028
Low user	38 (48.1%)	47 (36.7%)		
Average user	83 (81.6%)	61 (62.4%)		
High user	46 (37.9%)	21 (29.6%)		
Extremely high user	8 (7.4%)	5 (5.6%)		

* $p<0.05$ was statistically significant

Association between Gender, BMI and Body Image Dissatisfaction

When the difference was compared by gender, females exhibited more tendencies to have body image dissatisfaction ($n=159, 60.2%$) than males ($n=16, 36.5%$). Thus, there was a significant association between gender and body image dissatisfaction $X^2(1)=9.52, p=0.002$. It was discovered that most of the participants had BMI within the normal range. However, ($n=159, 60.2%$) of these participants thought to have the ideal weight developed body image dissatisfaction. Among those who were underweight ($n=45, 83.3%$) feel body image dissatisfaction. Hence, there is an association between BMI and body image dissatisfaction $X^2(2)=25.08, p=0.00$ (Table 5).

Table 5: Gender, BMI and Body Image Dissatisfaction

Variable	Body Image Dissatisfaction, n (%)		X ² (df)	p value
	Yes	No		
Gender			9.52 (1)	0.002
Male	16 (35.6)	29 (64.4)		
Female	159 (60.2)	105 (39.8)		
BMI			25.08 (2)	0.00
Underweight	9 (30.0)	21 (70.0)		
Normal	121 (53.7)	104 (46.3)		
Overweight	45 (83.3)	9 (16.7)		

DISCUSSION

Throughout this study, it has been shown that there was an occurrence of body image dissatisfaction among university students. From a total of 309 participants, it has been found that most of the participants, 174 (56.3%) were having body image dissatisfaction. The prevalence of body image dissatisfaction in the local

study is high (76.4%) among University Putra students (Yen Eow & Ying Gan, 2018). The result was similar to university students in the United Arab Emirates, with 81% of them dissatisfied with their body image (al Saud *et al.*, 2019). It can be concluded that body image dissatisfaction is a common problem among university students. These findings indicate that body image dissatisfaction is a common problem among university students and needs to be addressed to prevent an associated problem such as an eating disorder.

In this study, Whatsapp was the most popular social networking site used by participants, followed by Instagram, Facebook, and Twitter, which dominate many users among participants. This is supported by an internet user survey report in Malaysia; WhatsApp is the most preferable for communication, and Facebook is the most widely used social media site (Malaysian Communications and Multimedia Commission, 2020). However, Instagram remains the most popular platform among the younger generation. SNS usage varies among different countries worldwide; globally, the trend of Facebook are decline and replaced with Instagram and Tiktok (Geysler, 2021). Visual-based platforms are still the most widely used by university students; consequently, higher ideal image exposure may negatively influence their body image perception.

In terms of social networking use, 47% were average users of SNS, while only 4% of them were extremely high users. The previous study conducted among University Putra Malaysia found that most students spend more than 2 hours per day on social media use and consider as average user (Yen Eow & Ying Gan, 2018). This finding differs from the study conducted by (Ahmad *et al.*, 2018), who found that most students would spend three to four hours (37.1%) daily accessing their social media account, while the other 30% stated that they spend more than 5 hours daily on social media. Nowadays, social networking sites play a crucial part in a person's life as it acts as the main alternative to communicate and socialise (Malaysian Communications and Multimedia Commission, 2020). Furthermore, students of the university may use the SNS for the update of the latest information, keep updated about the class schedule, and a source to relieve stress. In this study, 27.5% of participants recorded as low SNS users compared to the high users which is 21.7% participants. Low users also persisted in university students because of the limitation of using the SNS willingly since they need to focus and busy with their study (Ahmed *et al.*, 2019). However, the reason for

low used of SNS among university students should be explored further in the qualitative research.

Female participants exhibit more tendencies toward body image dissatisfaction than males. This finding was similar to the previous study conducted by Aparicio-Martínez *et al.*, (2017) which had found that both men and women were affected by body image dissatisfaction, but the feeling of dissatisfaction was more likely to be affected by women. When interacting with other people, most people, without realising, will start comparing body image. Time spent interacting with other people regarding physical appearance may develop negative feelings toward body image in both males and females (Jiotsa *et al.*, 2021b). Being exposed to pictures of thin and stunning people may cause the changing of women's mood and perception of body image (Tiggemann & Slater, 2017). However, Virk & Singh, (2020) reported male medical students had higher dissatisfaction with body image than females, and negative body image can adversely affect an individual's self-esteem. Both genders show that they were affected by negative body image perception, especially when talking about physical appearance. It can be concluded that men and women were aware and feeling anxious about their appearance.

There is a significant association between BMI and body dissatisfaction in this study. The higher the BMI, the greater student dissatisfaction with body image (Radwan *et al.*, 2019). However, this study found that almost half of the students 57% still feel dissatisfied with their bodies image even though the BMI were within the normal range. These results were approximately the same as in a research conducted by Nikniaz *et al.*, (2016) that almost 50% of the participants were within normal weight, but 70% of subjects were identified to develop body image dissatisfaction. The rate of dissatisfaction among overweight and obesity was relatively high, 94.9% and 91.1%. Women with normal body weight are dissatisfied with their body

because influence to be thin by family, peer and mass media (Prieler, Choi & Lee, 2021; Tiggemann & Slater, 2017; Yao *et al.*, 2021) Those who feel dissatisfied with their body size prone to be at risk of developing an eating disorder (Yen Eow & Ying Gan, 2018). In addition, the result from this study shows that both men and women, regardless of their level of BMI, have the possibility to develop the feeling of dissatisfaction toward their body image. Therefore, an awareness program regarding body image should implement in university to prevent body image dissatisfaction among students.

CONCLUSION

In conclusion, there is an occurrence of body image dissatisfaction among university students. Students of Health Sciences Faculty mostly spent most of their time using SNS and engaged in SNS such as Facebook and Instagram, exposing them to body image dissatisfaction. In addition, there is a significant association between gender, BMI and body dissatisfaction. Therefore, further action in the future, such as health promotion regarding healthy lifestyle and self-esteem among university students, is essential to develop self-confidence and reduce body image dissatisfaction. The study's limitations are a low number of male participants and the inability to determine factors leading to dissatisfaction. Thus, further study is recommended to explore why normal BMI students are still dissatisfied with their body image.

Conflict of Interests

The authors declare that there are no conflict of interests.

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