

ASSOCIATION BETWEEN SOCIAL MEDIA PRESSURE ON BODY IMAGE AND EATING ATTITUDE AMONG IIUM FEMALE STUDENTS

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Abstract

Introduction: This paper aims to determine the association between social media pressure on body image and the eating attitude of IIUM female students. **Methods:** 167 Female undergraduate students of International Islamic University, Malaysia (IIUM) were chosen to participate in this study. A set of questionnaires on students' sociodemographic, anthropometric, social media pressure (SATAQ-3) and eating attitude (EAT-26) were distributed to them. **Results:** The majority of the respondents (57.5%) had high social media pressure that affected their body image. The rest reported experiencing moderate and low social media pressure, with 31.7% and 10.8%, respectively. For eating attitude, 64.7% of respondents had a normal eating attitude, whereas 35.3% had an at-risk eating attitude problem. There was a significant correlation between social media pressure on body image and eating attitude of IIUM female students; the p-value was less than 0.001, r-value was 0.486. **Conclusions:** This study proved that social media triggers pressure through its contents and users that overly-favour on lean body image rather than a thick body image. Other than that, an individual's eating attitude is influenced by internal and external factors such as cognitive thinking, social media contents, body mass index (BMI), and field of study. Lastly, since there was a positive correlation between social media pressure on body image and eating attitude, this means that the higher the social media pressure, the higher the tendency to develop an abnormal eating attitude.

Keywords: Social Media Pressure, Body Image, Eating Attitude

Introduction

Social media is a useful platform with advanced features that allow unlimited communication and exchange of information among virtual communities from all around the globe (Siddhartha et al., 2022). This special artificial technology has attracted many users of different ages, from kids to adults. In the context of social media use in Malaysia, its usage is dominated by the youth aged 13 to 34 years old, with its percentage being 80.3% of the total social media population (Ahmad, Ismail and Nasir, 2015). It was also revealed that the penetration rate of Youtube in Malaysia is 94%, Facebook at 89%, and Instagram at 75% (Muller, 2021).

Social media pressure is related to eating attitude problems due to several factors for instance a constant comparison between one's own life and other people's life. According to Helfert and Warshburger (2013), the more a person uses social media, the more they will compare themselves with others, causing them to fear social approval and seek validation from the public. The effect of constant comparison is worrying because it makes people lose their self-confidence and alter their eating attitude when they compare their body image with those on social media.

Eating attitude is defined as people's beliefs, thoughts, feelings and relationships with food that can be influenced by internal and external factors (Grzelak, Dutkiewicz, Paszynska, 2017). Internal factors involve body physiology, brain psychology, and genetic hereditary. These three components play a role in determining meal time, food preference, and food choice and can also directly influence eating behaviour. For external factors influencing eating attitude, exposure to social media content is one of the examples that may negatively impact a person's eating attitude. For instance, looking at thin body photos can increase body dissatisfaction levels, contributing to altered eating attitudes. Based on Aparico-Martinez et al. (2019), social media plays a huge role in a women's body dissatisfaction. It changes people's perception of their body image by visualizing an unattainable beauty standard. The consequence of this issue is that it pressures people to have a bad relationship with food.

The relationship between social media pressure on body image and eating attitude can be seen through excessive social media postings related to daily caloric count and the use of manipulated body image photos. Aberg, Koivula and Kukkonen (2020) stated that social media platform such as Instagram has allowed people to show their clear preference towards a lean body look which makes users feel bad about their body image and become obsessed with losing weight, despite having a normal BMI. Instagram also permits individuals to share their daily caloric count, which may disadvantage some users struggling to lose weight.

Although posting the daily caloric count being shared online motivates people, some users perceive it negatively and feel pressure when they cannot achieve the same caloric count. The same effect can happen on other platforms such as YouTube, Facebook and Twitter. Even though other platforms do not focus on photo sharing, negative appearance-related comments or daily calorie count posts can still be seen on the platforms. The effects of the negative comment and sharing of daily dietary intake are that people will lose their own self-esteem and increase tendency to restrict their food intake. This study aims to determine the

association between social media pressure on body image and the eating attitude of IIUM female students.

Methods

Subjects

A total of 167 undergraduate female students of International Islamic University Malaysia (IIUM) from 3 different campuses, IIUM Gombak, IIUM Kuantan and IIUM Pagoh, were recruited to participate in the study. The sample chosen was based on a convenient sampling method. Consent of participation was obtained from the respondents prior to answering the sets of questionnaires distributed. The study protocol was approved by Kuliyyah Postgraduate and Research Committee (KPGRC) and International Islamic University Malaysia Research Ethical Committee (IREC), ID number KAHS 54/22.

Sociodemographic Questionnaire

The first part of the questions involved asking about respondents' gender, race, and year of study.

Anthropometric Questionnaire

Respondents' height (cm) and weight (kg) were obtained. The BMI of each respondent was calculated using the formula $\text{weight (kg)} / \text{height squared (m}^2\text{)}$.

Social Media Pressure Questionnaire

The first part of the questionnaires required respondents to state the duration of time spent scrolling social media daily. This was followed by a set of questionnaires regarding social media pressure on body image taken from a study by Amaral, Ribeiro, Conti, Ferreira and Ferreira (2013) named 30-item Sociocultural Attitudes Towards Appearance. Questionnaire-3 (SATA-3) consists of 4 subtopics with a total of 30 items altogether. All of these items were answered according to the 5-point Likert Scales, where the range starts from the first point, "definitely disagree", to the fifth point, "definitely agree". From the total point, (<77 = small influence of social media, 78-94 points = moderate influence, > 95 points = high influence) (Uchôa et.al., 2019).

Eating Attitude Questionnaire

Eating Attitude Test-26 (EAT-26), which consisted of 26-item questionnaires, was taken from a study by Kayano, Yoshiuchi, Al-Adawi, Viernes and Kumaho et al. (2008). It was used to assess respondents' eating attitudes due to body image and desire to have a thin body. According to the authors, EAT-26 comprises three subscales with a 6-point scale ranging from "always", "usually", "often", "sometimes", "rarely", and "never". For scoring of items 1 to 25, (3 points = always, 2 points = usually, 1 point = often, and 0 point = sometimes, rarely, and

never). Whereas for scoring of item 26, (0 point =always, usually, often, 1 point = sometimes, 2 points = rarely, and 3 points = never). Respondents who achieved more than 20 scores were considered at risk of eating attitude problems, while below 20 may be normal.

Statistical analysis

The data collected from this study were analysed using Statistical Package for The Social Sciences (SPSS) version 25.0 for windows. Firstly, the prevalence of social media pressure on body image among IIUM female students was determined using a descriptive test. Secondly, the level of eating attitude among IIUM female students was also determined using a descriptive test. Thirdly, the association between social media pressure on body image and eating attitude of IIUM female students was determined using correlation analysis, and lastly, the cause and effects of social media pressure on eating attitude of IIUM female students were determined using a regression analysis

Results

Sociodemographic Data

The total number of respondents was 167 female students from 3 different campuses of IIUM. Malay respondents were the highest compared to Chinese, Indian, and other races, with 98.8% (n = 165) of the total respondents. The age of respondents was in the range of 19 to 26 years old. In terms of campus, the IIUM Kuantan campus scored 107 (64.1%) in the number of respondents, whereas Gombak and Pagoh only scored 37 (22.2%) and 23 (13.8%), respectively. Then, year 1 had the least number of respondents with only 11.4%, followed by year 4 (13.2%), year 2 (16.2%) and year 3 (59.3%). Lastly, this study consisted of 108 respondents with normal BMI, 25 with underweight BMI, 19 with an overweight BMI and 15 with an obese BMI.

Table 1: Descriptive Analysis of Respondents' Sociodemographic Data

Demographic	Category	Frequency	Percentage (%)
Gender	Female	167	100
Race	Malay	165	98.8
	Chinese	1	0.6
	Indian	0	0
	Others	0	0
Age	19-20	16	9.6
	21-22	108	64.7
	23-24	36	21.6
	25-26	7	4.2
Campus	Gombak	37	22.2

	Kuantan	107	64.1
	Pagoh	23	13.8
Year of Study	1	19	11.4
	2	27	16.2
	3	99	59.3
	4	22	13.2
BMI Category	Underweight	25	15.0
	Normal	108	64.7
	Overweight	19	11.4
	Obese	15	9.0

Social Media Pressure on Body Image

Table 2 implied that the category ‘High’ had the greatest number of respondents, with 96 respondents (57.5%) out of the total 167 respondents. The category ‘Moderate’ only had 53 respondents (31.7%), and the category ‘Low’ had 18 respondents (10.8%).

Table 2: Descriptive Analysis of Respondents’ Social Media Pressure Level

Social Media Pressure Level	Frequency	Percentage (%)
Low (≤ 77)	18	10.8 31.7
Moderate (78-94)	53	57.5
High (≥ 95)	96	

Eating Attitude

According to Table 3, most respondents had a normal eating attitude rather than at risk. This can be seen with the data that showed the percentage of respondents with a normal eating attitude was 64.7%, almost doubled the percentage of respondents with an at-risk eating attitude problem (35.3%).

Table 3: Descriptive Analysis of Respondents’ Eating Attitude

Eating Attitude	Frequency	Percentage (%)
Normal (< 20)	108	64.7
At-risk of eating attitude problem (≥ 20)	59	35.3

Social Media Pressure on Body Image and Eating Attitude

Table 4 showed a significant association between social media pressure and eating attitude, in which the p-value < 0.001. The result revealed a fair correlation between social media pressure level and eating attitude (r = 0.486).

Table 4: Simple Linear Correlation Analysis Between Respondent’s Social Media Pressure and Eating Attitude

Variables	r -value	p-value
Social Media Pressure and Eating Attitude	0.486**	0.001

*p < 0.001

Table 5 showed the R = 0.486, p-value < 0.001, which proved a positive regression analysis. Meanwhile, R2 = 0.236, meaning that 23.6% of the variation in eating attitude can be explained by the model containing only social media pressure.

Table 5: Simple Regression Analysis Between Respondents’ Social Media Pressure and Eating Attitude

Model	R	R Square	Adjusted R Square	Std Error of Estimate
1	.486 ^a	.236	.231	8.54691

a. Predictors: (Constant), Social Media Pressure

Table 6 showed p-value < 0.001. This value means there was a positive correlation between social media pressure and eating attitude, with R = 0.486 and p-value < 0.001. The higher the social media pressure, the higher the tendency for eating attitude problems.

Table 6: Annova Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3717.309	1	3717.309	50.887	.000 ^b
Residual	12053.206	165	73.050		
Total	15770.515	166			

a. Dependent Variable: Eating Attitude Score

b. Predictors : (Constant), Social Media Pressure

In Table 7, p -value < 0.001 for social media pressure, unstandardized coefficients beta of constant was -11.412, and the unstandardized coefficients Beta value for social media pressure was 0.288. This table will give an equation of $y = -11.412 + 0.288x$. This means that for every increased social media pressure level by 1, the eating attitude level increased by 0.288.

Table 7: Coefficients^a

	Unstandardized Coefficients Beta	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	-11.412	4.030		-2.832	.005
Social Media Pressure	.288	.040	.486	7.134	.000

Dependent Variable: Eating Attitude Score

Discussion

The prevalence of social media pressure on body image in this study is higher due to the inclusion of females only as participants as compared to the study by Berryman, Ferguson and Negy (2018) that included females and males together. According to data by Verma, Balhara and Gupta (2011), women are prone to stress due to the dissimilarity in hormone production between men and women, and due to the women's cognitive thinking that is always surrounded by the thought of being 'afraid of social approval' and 'in-need for self-control'. A high prevalence of social media pressure in this study was believed to occur because of the high screen time on social media and multiple social media accounts owned by respondents, consistent with findings by Rodlund (2020). These two evidence give a sign of social media addiction which eventually leads to a high score of pressure. Based on Kuss and Griffiths (2011), addiction to social media is not different than addiction to drugs as it can modify one's mood, salience, patience, and interpersonal relationship. To relate between social media addiction and social media pressure in this current study, a high-pressure level found may be due to the respondents' being addicted to social media and at the same time obsessive about achieving a thin body shape as what is portrayed on the platform.

Besides that, for eating attitudes, the difference in the study region made the frequency of abnormal eating attitudes in this study to be lower than in a study by Musaiger et.al. (2016). It was found that the respondents in Musaiger et.al's study were from West Asian countries therefore, there was a strong Western influence on thin body shape. This influence leads to higher body dissatisfaction, hence affecting one's eating attitude. Apart from that, respondents' BMI played a significant role in determining their eating attitude. The higher the BMI, the more a person will be prone to have an abnormal eating attitude (Abdalla et.al, 2020). Next, the frequency of abnormal eating attitudes in this current study was higher than in a study by Abdalla et.al (2020) with 35.3% and 6% respectively. The reason for this to happen was because of the distinct respondents' study fields. In this current study, the respondents' academic background were from various courses; however, in the previous

study, the majority of the respondents were from sciences-based courses. Barzegari et. al. (2011) mentioned that high knowledge on nutrition has a positive correlation with healthy eating habits. Lastly, genders also give a significant impact on eating attitudes. Research done by Schaefer et.al. (2019) found that the prevalence of disturbed eating attitudes was higher in women than in men. Studies had suggested that issues on femininity in the our society forces women to have a perfect outer appearance and most importantly a perfect body shape (Sue and Wan, 2012).

For the correlation between social media pressure on body image and eating attitude, results obtained was consistent with the findings by Aparicio-Martinez et.al. (2019) and Qutteina, Nasrallah, Kimmel, and Khaled (2019). A similar association among our studies took place because of the same focus related to observing the effects of social media use that contains a wide share of lean body photos towards eating attitudes. The age of respondents also plays a role in determining the outcomes of the study. Individuals within the age of 18 to 26 years old are considered young adults who live in the phase of life that is burdened with more challenges as compared to the adolescence phase. This can be proven by the respondents in this current study that reported feeling bad about their body image because of the pressure from social media. The effects of being pressured with social media will cause individuals to restrict their food intake as it was seen as the only way to achieve the desired body image.

Conclusion

Most respondents had a high prevalence of social media pressure on body image due to the contents on social media that triggers their body dissatisfaction level. Other than that, a person's eating attitude can be influenced by various internal and external factors such as cognitive thinking, content on social media, BMI, and the field of education. A positive correlation between social media pressure and eating attitude among IIUM female students was identified in this study. This suggests that the higher the social media pressure, the higher the tendency for a person to practice an abnormal eating attitude.

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