

ANXIETY AND SOCIAL MEDIA ADDICTION ON EATING BEHAVIOUR AMONG UNIVERSITY STUDENTS

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ABSTRACT

Introduction: University students may encounter a variety of stressful scenarios that may have an impact on their health and well-being as they negotiate the academic and social demands of a better education. Eating disorders are one such difficulty that may have a negative impact on both mental and physical fitness. This is due to the numerous difficulties faced by university students, which have a negative impact on how they eat. There are three types of eating behaviours can be distinguished: restrained, emotional, and external. Anxiety and addiction to social media are two elements that influence unhealthy eating behaviour. Therefore, this study is conducted to identify the relationship among anxiety, social media addiction and eating behaviour among IIUM students. **Methods:** This study used cross sectional design, in which samples were obtained using convenience sampling, with a total sample of 410 students. Data were collected using the General Anxiety Disorder-7 (GAD-7), Social Media Addiction Scale (SMAS) and Dutch Eating Behaviour Questionnaire (DEBQ). **Results:** The

study reported that 53.1% experienced mild anxiety of the students. Furthermore, there is a significant association between anxiety and restrained ($r= 0.165, p < 0.05$), and emotional ($r= 0.113, p < 0.05$). However, there is no significant association between anxiety and external eating behaviour. Other than that, 64.9% of students reported that they developed a little addiction to social media. Thus, there is a significant association between social media addiction towards emotional eating behaviour ($r= 0.231, p < 0.05$) and external eating behaviour ($r= 0.201, p < 0.05$), meanwhile there is no significant association between social media addiction and restrained eating. **Conclusion:** Emotional eating behaviour has a weak correlation with anxiety and social media addiction.

Keywords: Anxiety, Social Media Addiction, Eating Behaviour, Students

INTRODUCTION

Eating behaviour is a complex and multifaceted phenomenon that includes social, cultural, and environmental elements in addition to physiological needs (Mohammedi et al., 2017). The physiological side of eating involves the body's physiological signals for hunger, satiety, and nutrient deficiency as well as how to deal with these sensations. These cues are controlled by hormones that tell the brain when to eat or stop eating, such as ghrelin and leptin (Gómez-Apo et al., 2021). However, eating habits are not just influenced by physiological needs; psychological considerations also come into consideration. A person's food choices and intake can be influenced by psychological elements such as stress, emotions, mood, and dietary preferences (Medina-Vera et al., 2019). Environmental elements including food accessibility and availability, marketing and social media influences, and economic position can all affect on how people eat.

Anxiety is one of the elements that can influence eating behaviour. Anxiety is a widespread mental health problem that impacts many people worldwide. Fear, concern, and nervousness are typical symptoms of the psychological disorder known as anxiety (Dunki & Vuleti, 2021; Medina-Vera et al., 2019). Anxious individuals may modify how they behave when they are eating. These alterations may appear in various ways, including increased or decreased appetite, binge eating and/or restricting food intake. The fight-or-flight reaction is triggered when a person feels anxious, which raises their cortisol and adrenaline levels. Depending on how a person reacts to anxiety, these hormones can both enhance and reduce appetite (Ans et al., 2018). Since fear suppresses hunger hormones in some people, this can result in decreased appetite (Rising et al., 2021). Over time, this may result in malnutrition and weight loss (Raikou, 2015).

Besides that, social media addiction also affects eating behaviour (Thakur & Varmani, 2015; Lahiry, 2022). First of all, social media can have a beneficial impact on eating behaviour by allowing users to find and share healthy recipes, connect with others who share their commitment to healthy eating, and get support and motivation in their quest to make better food choices (Chung et al., 2021). However, social media addiction can also lead to watching videos and images of unhealthy meals on social media which can make people crave them impulsively (Mason et al., 2020; Virmond et al., 2020). Furthermore, social media can promote disordered eating habits such as preoccupation with appearance and weight, obsession with healthy eating or bad diets, and comparison to the exaggerated body images presented on the internet (Shaw et al., 2018).

To sum up, social media and anxiety greatly influence on eating behaviour. There are negative impacts that might result in disordered eating habits. The results of the study will help to understand better how social media addiction and anxiety influence IUM students and how they are related to unhealthy eating behaviours. The results can identify the level of anxiety and social media addiction, enabling the development of specific treatments. Students' health has suffered as a result of the concern that comes with being a young adult, particularly in terms of their eating habits and the quality of the food they consume. They must maintain good health by careful dietary choices to prevent long-term health effects and chronic diseases (Sprake et al., 2018).

MATERIALS AND METHOD

Subjects

This study involved 410 students of IIUM from Gambang, Kuantan, Gombak and Pagoh campuses from various courses and level of studies were selected to be the participants of this research.

Study Design

This quantitative research was conducted using cross sectional design involving all students of IIUM and a series of questionnaires was created by adopting and adapting previous studies with some modifications. Ethical approval was obtained from the Kulliyah Postgraduate and Research Committee (KPGRC) and International Islamic University Malaysia Research Ethical Committee (IREC) before the study was conducted (KAHS 7/23). A set of questionnaires was prepared and distributed to the selected respondents via Google Form. Informed consent was also included and filled in by the participants before they answered the questions.

Sampling method

A convenient sampling method was used to select the study respondents. After the respondents agree to the terms of the agreement, participants have the right to withdraw if they change their minds and do not want to participate.

Instruments

A set of questionnaires comprises of three part were distributed to the respondents through online platform. The first part of the questionnaire involve information regarding the sociodemographic background of the respondents such as gender, age group, race, campus of study, Kulliyah, year of study and living status (eg: on campus, off campus, living with family). The second part was to assess the anxiety level using General Anxiety Disorder-7 (GAD-7) scale consisting of 7 questions on a 5-point Likert scale with a reliability index of 0.917 on Cronbach alpha. The scores of anxiety levels were classified into minimal, mild, moderate and severe. Next, the third part assessed the social media addiction level using The Social Media Addiction Scale (SMAS) that consists of 29 questions on a 5-point Likert scale with a realibility index of 0.918 on Cronbach alpha. The scores of social media addiction levels were classified into not addicted, little addicted, medium addicted and highly addicted. Lastly, Dutch Eating Behaviour Questionnaire (DEBQ) consisting of 33 questions on a 5-point Likert scale was used to assess the eating behaviour status of the students. It is a multidimensional questionnaire which consists of restrained eating (items 1-10), emotional eating (items 11-23) and external eating (items 24-33). The realibility index for restrained eating, emotional eating and external eating were 0.194, 0.927, 0.844 on Cronbach's alpha respectively.

Statistical Analysis

The data collected was analyzed using the SPSS version 29 software. The percentage, mean, and standard deviation (SD) of the sociodemographic data, level of anxiety and social media addiction level were measured by descriptive analysis. Pearson correlation was used to analyze the relationship between anxiety, social media addiction and eating behaviour (restrained, emotional and external) among IIUM students.

RESULTS AND DISCUSSIONS

Demographic Data

Descriptive analysis showed that 81% of the respondents were female. Most of the respondents were at the age group of 20-21 years old (50.2 %), followed by 22-23 (39.8 %), 18-19 years old (6.3%), 24-25 year old (2.9 %) and > 25 years old (0.8 %). Malay race was dominating among the respondents shown by 100%. The respondents included the students of foundation (5.1%), postgraduate (0.5%) and undergraduate (94.4 %) which comprises 21.7% from year 1, 21.5% year 2, 40% year 3, 10.2% were year 4 and 1.5% were year 5. In addition, students from Kuantan (61%) and Gombak (25.9%) were the main contributors of the response, followed by the students from Pagoh campus (8%) and Gambang campus

(5.1%). Majority of the students were from Kulliyyah of Allied Health Sciences which contributes 47.6% from the respondents. There was also a huge difference between the living situation of the students in which the majority of them were already on-campus (97.6%) while 2.4% were off-campus. Details of the socio-economic characteristics of the respondents was summarized in the Table 1.

Table 1 Socio-economic characteristic of the respondents

Demographic Factor	Categories	Frequency (n)	Percentage (%)
Gender	Male	78	19
	Female	332	81
Age	18-19	26	6.3
	20-21	206	50.2
	22-23	163	39.8
	24-25	12	2.9
	25 above	3	0.8
Race	Malay	410	100
Campus	CFS Gambang	21	5.1
	Kuantan	250	61
	Gombak	106	25.9
	Pagoh	33	8.0
Year of study	CFS	21	5.1
	Year 1	89	21.7
	Year 2	88	21.5
	Year 3	164	40
	Year 4	42	10.2
	Year 5	6	1.5
Academic level	Foundation	21	5.1
	Undergraduate	387	94.4
	Postgraduate	2	0.5
Living Campus	On Campus	400	97.6
	Off Campus	7	1.7
	Stay with Family	3	0.7
Kulliyyah	KAHS	195	47.6
	KAED	6	1.5
	KOD	4	1.0
	KENMS	18	4.4
	KOED	12	2.9
	KOE	8	2.0
	KICT	7	1.7
	KIRKHS	49	12.0
	KLM	19	4.5
	AIKOL	3	0.7
	KOM	13	3.2
	KON	18	4.4
	KOP	12	2.9
	KOS	46	11.2

Anxiety level

A descriptive analysis was done to identify the prevalence of anxiety among IIUM students. Based on the Table 2, it was reported that most of the students were on mild level of anxiety with a prevalence of 53.1%, followed by minimal level (25.4%), moderate level (21.2%) and severe anxiety level (0.3%).

Table 2 Anxiety level

Anxiety level	Frequency (n)	Percentage (%)
Minimal	104	25.4
Mild	218	53.1
Moderate	87	21.2
Severe	1	0.3

The majority of students in the study have low levels of anxiety, according to score information on anxiety among IIUM students. Similar results are reported in Simegn et al. (2021) study of generalised anxiety disorder in Ethiopian university students, which reveals that 70% of the students experience only mild anxiety. Moreover, Islam et al. (2020) conducted a study on depression and anxiety in Bangladeshi first-year university students and discovered that the majority of the students had moderate anxiety. The study also revealed that 13% of the students had severe anxiety. The study by Islam et al. (2022) differs from the present study in its emphasis on first-year university students, while the present study primarily focused on IIUM students. The majority of IIUM students do not exhibit any signs of anxiety, and those who do can still manage their feelings and symptoms. This leads us to the conclusion that IIUM students have low anxiety levels.

Social Media Addiction Level

A descriptive analysis was done to identify the prevalence of social media addiction among IIUM students. Based on the Table 3, it was reported that most of the students were little addicted to social media with a prevalence of 64.9%, followed by medium addicted (19.3%), not addicted (14.9%) and highly addicted (0.9%).

Table 3 Social Media Addiction Level

Social Media Addiction level	Frequency (n)	Percentage (%)
Not Addicted	61	14.9
Little Addicted	266	64.9
Medium Addicted	79	19.3
Highly Addicted	4	0.90

Most IIUM students, according to the results, experience moderate social media addiction. Similarly, Iranian medical students, reported a moderate rate of social media addiction (Azizi et al., 2019). The prevalence of social networking addiction among students was also found to be 29.5% and 36.9%, respectively, in Singapore and India (Ramesh et al., 2018; Catherine So-kum Tang & Woen, 2017). The authors contend that students who don't learn to limit their time on social media will suffer serious personal and societal consequences. According to a 2016 study by Yamikani Ndasauka et al. people who spend too much time on social media experience a decline in their social life. Furthermore, lower levels of self-esteem are linked to higher levels of social media addiction as reported in a research by Hawi and Samaha (2016). As a conclusion, most IIUM students develop moderate addiction towards social media as social networks are a necessity for many students due to the abundance of academic and professional opportunities they offer.

Correlation between anxiety, social media addiction and eating behaviour (Restrained, Emotional and External)

Pearson correlation test was done to investigate the relationship between the independent variable (anxiety, social media addiction) and eating behaviour among IIUM students. Based on the results anxiety have a significant relationship between restrained ($r = 0.165, p < 0.01$), and emotional eating ($r = 0.113, p < 0.01$), meanwhile anxiety does not have a significant relationship with external eating behaviour ($r = 0.083, p > 0.05$) since $p > 0.05$. Next, based on the results social media addiction have a significant relationship with emotional ($r = 0.231, p < 0.05$) and external ($r = 0.201, p < 0.01$), meanwhile social media addiction does not have a significant relationship with restrained eating behaviour ($r = 0.092, p > 0.05$). The results was shown on Table 4.

Table 4 Correlation among variables

Variables	Restrained eating	Emotional eating	External eating
Anxiety	0.165**	0.113**	0.083
SocialMedia Addiction	0.092	0.231**	0.201**

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

We can infer from the findings of the present study that social media addiction and anxiety are connected to eating behaviours. Some eating behaviours, however, do not correlate with the variables. First, based on the findings, we can deduce that anxiety and emotional and restrained eating are significantly related. According to Aucoin et al. (2021), students with anxiety issues are more likely to limit their dietary intake. In order to feel more in control of their physical appearance, students who are experiencing anxiety and stress related to their studies and their daily lives may turn to dieting. The relationship between anxiety and external eating behaviour is, however, insignificant, these results were contrary to research from Ergun et al. (2013). This is because numerous studies have demonstrated a close relationship between anxiety and external eating behaviours.

Secondly, one of the elements influencing eating behaviours among IIUM students is social media addiction. The present study shows a significant connection between social media addiction towards emotional and external eating behaviour. This is because social media addiction is connected to more obvious eating patterns that can lead to emotional eating behaviour as claimed by Gao et al. (2020). Similarly, research found that individuals with higher propensities for social media addiction also had higher likelihoods of engaging in external eating behaviour. However, addiction to social media does not significantly correlate with restricted eating behaviour. These results were contradicted with other research as the author's claim that social media has been shown to affect people's perceptions of their appearance and lead to restrictive eating behaviour (Perloff, 2014; Handford et al., 2018).

CONCLUSION

In conclusion, social media and anxiety have a weak relationship with eating behaviour among IIUM students. According to the findings, majority of students have mild anxiety and little addiction to social media since they are still able to manage their symptoms. However, social media use and anxiety both have a negative effect on people's commitment to practising healthy eating habits. This study also shows the necessity for intervention programmes that target anxiety and addiction management, techniques and encourage healthy eating habits among university students. Universities need to take proactive measures to address these issues and provide a supportive and safe environment for its students.

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