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# THE INFLUENCE OF SOCIAL MEDIA USAGE ON BODY IMAGE PERCEPTION AND HEALTH AMONG UNIVERSITY STUDENTS: ROLE OF PEER INFLUENCE AS THE MODERATOR

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#### **Abstract:**

Idealised body image shared by peers on social media platforms has been associated with negative body image perception and a higher risk of disordered eating attitudes among university students. However, there is still a lack of research studies on peer influence on social media usage on body image and health (disordered eating attitudes). This research aimed to investigate the influence of social media usage on body image perception and health (disordered eating attitudes), with the presence of peer influence as the moderating factor. Correlational research was conducted (N=153) using simple random sampling. The results indicated that social media usage has a significant influence on body image perception and health (disordered eating attitudes). However, peer influence does not moderate the relationships suggesting that social media usage still plays a huge role on body image perception and health (disordered eating attitudes) without the presence of peer influence.

### **Keywords:**

Social Media, Body Image, Health, Disordered Eating Attitudes, Appearance-Related Comparison, Peers, University Students

### Introduction

In this new era of globalisation, social media usage has become a massive and meaningful part of our everyday lives and has grown massively (Leong et al., 2019). In Malaysia, especially among university students, social media usage has become a pressing issue. A substantial number of Malaysians, including university students are active users of social media platforms as Malaysia has an average daily time spent on social media of 2 hours 48 minutes reported by, the We Are Social and Hootsuite survey, as of January 2024. This indicates that frequent users may have a higher risk of body image concerns (Ryding & Kuss, 2020) due to the significant role social networks play in young people's lives (Gioia et al., 2020).

It is obvious that heavy internet use has integrated into our current society, changing how people communicate, study, access information, and work (Dahl et al., 2020). Similar to gambling or smoking, the usage of social media can be just as addictive, addressing it as a powerful "new drug". Known as digital addiction (DA), a combination of habit formation and self-control problems results in typical characteristics of addiction (Dresp-Langley & Hutt, 2022). However, unlike other addictions, digital medium provides an instant availability of the content being craved by users, hence, makes it an even complex syndrome without the need of intermediary dealer (Karakose et al., 2022).

Surrounded by the high stigmatisation of body image perception coupled with the daily exposure to media imagery full of flawless men and women, it provides an easy platform for individuals to develop problems in body image. As reported by Fioravanti et al. (2022), social media tells society that attractive people are more desired, reliable, and inspiring. Additionally, social networking sites disproportionately share weight reduction and appearance content which promotes health informally (Fung et al., 2020). Contents focusing on "thinspiration," or "fitspiration" aims at promoting certain behaviours toward health nevertheless, research has suggested that these contents may portray harmful messages around objectification, restrictive eating, and weight loss behaviours (Alberga et al., 2018). Due to that, social media can affect youths' body image.

Moreover, media is constantly evolving at a rapid pace as well. Unlike traditional media such as fashion magazines and television that have fallen out of popularity, social media has been able to combine the usage of traditional media with online peer connection. Due to the easy usage and accessibility of social media via smartphones or laptops, consumers might use the content they see as a source of information on how they can improve their appearance while comparing themselves to celebrities, models, or friends consequently, setting a standard (Rousseau et al., 2017).

University can be considered a crucial place for university students to take their time in developing (Evans et al., 2010). It is where these individuals develop their self-efficacy, their assimilation, and their complex thinking (Farrell et al., 2018). Nowadays, many have started living on campus alone away from their families starting junior high school while some even start during primary school (Shen et al., 2022). It can be said that their lives revolve around the campus hence, they spend most of their time with their peers. Their peers can be considered the main social component thus, communication with their peers may affect their appearance, their formation of ideal body standards, as well as their development of body images (Webb, 2015). Individuals may even adopt behaviours and attitudes that are more prominent among

their peers due to the pressure caused by their peers to have the ideal body image (Tenkorang & Okyere, 2022).

Peers remain connected, and having discussions about body image off campus, which may further influence their focus on appearance, and social body norms creating a peer environment to talk and reinforce appearance-related issues and behaviours. However, peers may have the potential to positively influence individuals' body image (Kenny et al., 2016). By providing support, individuals can feel accepted and well-connected hence, a more positive perception of themselves and their bodies can be achieved (Holsen et al., 2012). Nonetheless, positive comments by peers can also act as a reinforcer for body image concerns. Receiving comments, be it positive comments, can be a reminder that others are constantly judging them on appearance and body image (Franchina & Lo Coco, 2018). The prevalence of body image dissatisfaction and disordered eating attitudes has been increasing over the years not only in the Western but also in the Eastern context leading to higher mental health concerns, calling for more attention regarding this matter. Specifically, Malaysia, with its culturally embedded social structure and importance placed on peers within the society, there is a pressing need for further research to comprehensively understand these issues within the local demographic. Therefore, this research study aims to investigate the influence of social media usage on body image perception and health (disordered eating attitudes), with the presence of peer influence as the moderating factor.

The discussion above raised the following research questions:

- 1. Is there any significant relationship between social media usage and body image perception among university students?
- 2. Is there any significant relationship between social media usage and health (disordered eating attitudes) among university students?
- 3. Is there any significant influence between social media usage and body image perception among university students?
- 4. Is there any significant influence between social media usage and health (disordered eating attitudes among university students?
- 5. Does peer influence moderate the relationship between social media usage and body image perception among university students?
- 6. Does peer influence moderate the relationship between social media usage and health (disordered eating attitudes) among university students?

#### **Literature Review**

# Definition of Social Media

The term social media usually is an umbrella term that encompasses all kinds of online platforms (i.e., Facebook, Instagram, WeChat, TikTok, Xiao Hong Shu). Nevertheless, it is crucial to highlight the appropriate definition of social media that suits the research study (Wu et al., 2019). Without the correct definition applied to the research study would lead to confusion. Hence, highly visual, appearance-focused platforms are what social media is (Rodgers & Melioli, 2016)—for instance, Instagram, Facebook, and X (formerly known as Twitter). Social media use is positively associated with negative body image perception (Vuong et al., 2021) hence, The Social Networking Activity Intensity Scale (SNAIS) will be used to analyse social media usage.

# Definition of Body Image

Body image can be defined as a mental representation of one's body in both static and action aspects. As stated, it consists of both cognitive and affective elements including how the individual perceives, knows, feels, and experiences how the body is (Blom et al., 1970; Kling et al., 2019). Consistent with Cash (1994), perceptions of the appearance of one's body (cognitive or rational), and emotional responses to those perceptions (affection and emotions) are two components of body image (Tiggemann, 1996). However, some researchers examine as one index, body dissatisfaction (Altabe & Thompson, 1992). Hence, the use of the Body Self-Image Questionnaire – Short Form (BSIQ-SF), encompasses what is aimed to be studied in this research, the cognitive and affection evaluation of body appearance by the individuals themselves.

# Definition of Health

Eating disorders (EDs) are mental illnesses that are characterised by irregular eating habits and abnormal concerns about body weight and shape (Brownell & Walsh, 2017; Rodgers et al., 2018; Galmiche et al., 2019). However, disordered eating attitudes (DEA) are not limited to those diagnosed with eating disorders. Many individuals who possess distorted eating habits, beliefs, and feelings towards food might be unaware that they are manifesting these "abnormal" attitudes (Alvarenga et al., 2010) and there seems to be a high prevalence among young people (Wilksch et al., 2019; Hallit et al., 2021). With the widespread usage of social media, it becomes a major arena for social comparison where contribution towards the maintenance of DEA occurs through the sharing of social media profiles or thin individuals' images therefore, the Disordered Eating Attitude Scale (DEAS) by Alvarenga et al. (2010) will be used to evaluate disordered eating attitudes.

# Definition of Peer Influence

Peer plays an important role in the socialisation of a person, and peer influence has been studied with particular interest when it comes to individuals' behaviours (Burnett et al., 2011). Peer influence can be defined as when an individual chooses to behave or act differently compared to how they would normally do due to needing a sense of belonging and acceptance by their peers. An individual who is influenced by a peer may tend to do something against the norms to be accepted by the peer (Laursen & Veenstra, 2021). However, peer influence can also influence positive behaviours, for instance, in learning and prosocial behaviours (van Hoorn et al., 2016). The Resistance to Peer Influence Questionnaire (RPIQ) (Steinberg & Monahan, 2007) will be utilised to measure susceptibility towards peer influence.

#### Past Research

One forum through which appearance-related content is present is social media platforms. Based on the Malaysian Communications and Multimedia Commission Internet Users Survey (2018) reported that 24.6 million Malaysians used social media, with Facebook, Instagram, and YouTube being the most popular. Concerning the role of social media as a form of easy and fast way of distributing information and communication, these social media platforms tend to provide content that is heavily edited and unrealistic (Rodgers & Melioli, 2016). Hence, with the increased frequency of photo sharing, peer interactions, and mobile accessibility among consumers, they may be a source of young people's conceptualisation of physical beauty, make-up, fashion, and dietary advice or topics (Jiotsa et al., 2021). Moreover, as reported by BERNAMA (2023), Malaysians are easily hooked onto social media trends and easily swayed by social media likes, views, and compliments which act as a sign of social approval.

With social media being the focal point of people's lives, it becomes easy for individuals to access whatever content they want, wherever they are, and whenever they want it. In addition, the hunger for human connectedness, adventure, and information is linked with social media hence, it becomes a natural fascination to individuals (Giedd, 2022). As stated by Fardouly & Vartanian (2015), the average time spent on social media is approximately 2 hours per day as compared to 45 minutes per day almost a decade ago (Tiggemann & Miller, 2010). This can be considered a global concern due to the serious consequences such as impairments in social life or emotional impairment (Karakose et al., 2022).

Moreover, social media platforms are constantly changing. Recently, with the rise of TikTok featuring short-form, vertical-oriented videos from 3 to 60 seconds and appearance-based viral trends and challenges, body image perception may be affected (Gurtala & Fardouly, 2023). Distinctive features such as having short-form, vertical-oriented videos ranging from 3 to 60 seconds in length (Malik, 2022), viral trends and challenges, and being music and dance-oriented, may increase viewers awareness (Gurtala & Fardouly, 2023). Besides, Instagram, Facebook, and YouTube have also started incorporating the video format into their platforms demonstrating their appeal on social media (McLachlan, 2023). This may make them more preferable due to the shorter videos being deemed as more convenient and more appealing to individuals who have shorter attention span (Vaterlaus & Winter, 2021). Hence, combined with the already appearance-focused content, this creates an environment where users are given more opportunities to internalise appearance ideals, self-objectify and make upwards comparisons with other users.

In addition, one of the most common aspects when it comes to disordered eating attitudes is the evaluation of negative body image perception. Despite the proliferation of research looking into the correlation between social media usage and body image-related constructs, research is still limited (Wilksch et al., 2019). Most studies done on social media and disordered eating attitudes have been focused more on traditional media platforms such as television and magazines. Hence, given that body image perception, and disordered eating attitudes have been shown to be related, it is reasonable to assume that there is a connection between social media usage and disordered eating attitudes (Smith et al., 2013). As reported by systematic review by Holland and Tiggemann (2016) and Saiphoo and Vahedi (2019), exposure to social networking sites was correlated with negative body image perception and disordered eating attitudes among children, pre-adolescents, adolescents, and the young adult populations in community, school, and college settings. Regular exposure to images and videos presented on social media platforms provides users with many situations where appearance comparison with other users is increased (Fardouly & Vartanian, 2016) hence, may influence the development of disordered eating attitudes. Due to the human nature to participate in social comparison behaviours, users are more likely to develop disordered eating attitudes (Zhang et al., 2021).

Peer influence can be considered to be one of the most proximal risk factors for substance use and linkage between usage of alcohol, tobacco, and drug use if well documented (Hawkins et al., 1992). Individuals are more likely to experiment with drugs, alcohol, and cigarettes with friends rather than when they are alone (Giletta et al., 2021). This influence can be translated to engaging in online behaviours that match the social norms of certain desired groups, receiving social rewards in the peer hierarchy, while being able to foster positive self-identity (Prinstein & Giletta, 2016). Moreover, with peers being the main social subjects among university students, they remain connected on and off campus, communicating on appearance,

forming ideal body shape standards (Shen et al., 2022), and modelling risky dieting habits (Smith et al., 2013). This is given ample support by the findings of Chung et al. (2020) who found that social media facilitates peer-to-peer connections better than traditional networks which in return, causes peer influence on eating beliefs, attitudes, and norms to increase at a drastic pace. Besides, as stated by Scully et al. (2020), individuals who compare between themselves and idealised images of their peers may have increased perceived discrepancy between their ideal and actual appearance, resulting in negative body image perception.

Theoretical perspectives that are related to social media usage, body image perception, health (disordered eating attitudes) and peer influence are social comparison theory and social learning theory. Self-understanding is obtained by comparing oneself to others as well as by gaining factual evidence. It is found that the more an individual wants to be like the comparison target, the more pressure they feel to adopt its traits (Festinger, 1954). Hence, social media usage might be an underlying mechanism that influences body image perception and attitudes due to social comparison as evident by Tiggemann et al. (2018). This is not only applicable to women, but men are also prone to negative body image perception due to comparisons. Although research on men's body image is still relatively new, it can be considered a growing subject of interest (Radwan et al., 2019). The omnipresence of idealised imagery portraying size zero women (Fardouly & Holland, 2018) and strong and slim figure for men (Saiphoo & Vahedi, 2019) as appearance ideals are evidence of this phenomena.

On the other hand, behaviours, beliefs, and attitudes can be influenced by the social environment the individual is in (Bandura, 1971). Hence, the behaviours of posting, commenting, and likes, or the behaviours portrayed such as engaging in appearance changing behaviours are modelled by others which influences their social media related behaviours. Social media platforms create an environment where individuals learn about peer norms regarding social media use and appearance (Fardouly & Vartanian, 2016) while likes and comments can either be punishing or rewarding adding to their sense of belonging through social validation (Tiggemann et al., 2020). However, peer influence is still poorly understood in terms of the moderating effect it has on the relationship between social media, body image perception, and health (disordered eating attitudes).

# **Methods**

# **Participants**

153 respondents from University Malaysia Sarawak (UNIMAS) were recruited to participate in this study via simple random sampling. Participants were provided with informed consent detailing the purpose of the study, potential risks, and benefits associated with their involvement in the study, and their right to withdraw at any time without penalty. Access to the research is only accessible by the research team to ensure confidentiality and data storage protocols are also implemented. Respondents also remain anonymous with no personally identifiable information linked to the study outcomes.

# Design

This research study has adopted a correlational research design to investigate the relationship between variables. Hence, the relationship between social media usage, body image perception, and health can be investigated. Additionally, with the presence of peer influence as the moderation factor, the strength of the relationship between the variables can be studied in a

more detailed manner. The research was quantitative, and the data collection was done through the form of questionnaires.

#### **Instruments**

Four (4) inventories were used in this study: 1) Social Networking Activity Intensity Scale (SNAIS), 2) Body Self-Image Questionnaire – Short Form (BSIQ-SF), 3) Disordered Eating Attitude Scale – Short Version (DEAS-s), and 4) Resistance to Peer Influence Questionnaire (RPIQ).

The Social Networking Activity Intensity Scale (SNAIS) developed by Li et al. (2016) was utilised to quantify the participants' frequency of numerous online social networking activities on multiple platforms. Social networking site (SNS) engagement in three areas namely: 1) self-presentation, 2) action and participation, and 3) usage and activity counts will be measured in the SNAIS. The scale consists of 14 items that are rated by the respondents on a 5-point Likert scale (0 = never, 1 = few, 2 = sometimes, 3 = often, 4 = always). The Cronbach alpha ( $\alpha$ ) for SNAIS is 0.89 (Li et al., 2016; Sigerson & Cheng, 2018).

The Body Self-Image Questionnaire – Short Form (BSIQ-SF) developed by Rowe et al. (1999) was adopted in this research study to measure respondents' body image dissatisfaction. BSIQ – SF consists of nine sections: 1) Overall Appearance Evaluation (OAE), 2) Health Fitness Influence (HFI), 3) Investment in Ideals (II), 4) Health–Fitness Evaluation (HFE), 5) Attention to Grooming (AG), 6) Health Dissatisfaction (HD), 7) Fatness Evaluation (FE), 8) Negative Affect (NA), and 9) Social Dependence (SD). The scale consists of 27 items, 3 items in each section, that are rated by the participants on a 5-point Likert scale (1 = Not at all true to myself, 2 = Slightly true to myself, 3 = About halfway true to myself, 4 = Mostly true to myself, 5 = Completely true to myself). BSIQ-SF has a Cronbach alpha value ( $\alpha$ ) of 0.797 to 0.850 (Rowe et al., 1999; Lim et al., 2018).

Disordered Eating Attitude Scale – Short Version (DEAS-s) developed by Alvarenga et al. (2020) was used to evaluate eating attitudes. DEAS-s is a unidimensional scale with higher scores representing more dysfunctional eating attitudes. Other instruments that have been utilised in measuring disordered eating attitudes have been either multidimensional or biased towards a higher disordered eating attitudes level. Hence, the DEAS-s that measures disordered feelings, beliefs, behaviours, and food relationships unidimensionally would give a more accurate assessment and describe eating-disordered attitudes across the continuum. The scale consists of 17 items that are rated on a 5-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Disagree). The Cronbach alpha value ( $\alpha$ ) for DEAS-s is 0.88 (Alvarenga et al., 2020).

Steinberg and Monahan (2007) developed The Resistance to Peer Influence Questionnaire (RPIQ) which was utilised in this research study to assess participants' tendency/ability to resist peer influence. The questionnaire consists of 10 pairs of opposite statements about interindividual interactions which respondents rate based on a 4-point Likert scale. Respondents will be required to choose which option best describes the group of people they belong to followed by indicating the degree they feel they belong in the group ("Really true" vs "Sort of true"). The option for the less peer-resistant statement is coded as 1 and 2 whereas the option for the more peer-resistant statement is coded as 3 and 4. Cronbach alpha value ( $\alpha$ ) for RPIQ is 0.73 (Steinberg & Monahan, 2007).

#### **Procedure**

A pilot study involving 30 respondents was conducted prior to the main study. The data collected from 30 respondents was used to determine the internal consistency of the instruments used to measure the variables in a sense, checking the correctness of the developed questionnaires. The pilot study shows good Cronbach alpha for each instrument namely 0.856 (SNAIS), 0.842 (BSIQ-SF), 0.908 (DEAS-s), and 0.862 (RPIQ). Therefore, the selected instruments are deemed suitable for further data collection.

Respondents were recruited using simple random sampling. The data for this research study were collected through a questionnaire survey using Google Forms through social media platforms such as WhatsApp and Telegram. Respondents of this research study were approached by the researcher through networking. All participants were informed that the questionnaire survey was anonymous, and that participation was voluntary. Collected data were used for scientific research with strict confidentiality.

The gathered data was analysed using the SPSS v.27 for Windows following the data collection process. Inferential statistics, including Pearson correlation, Linear regression, and Multiple regression were employed. Pearson Correlation analyses were used to calculate the relationship between the dependent variables (social media usage) and the independent variables [body image perception and health (disordered eating attitudes)]. Linear regression analyses were performed to examine whether the independent variable (social media usage) influences the two (2) dependent variables body image perception and health (disordered eating attitudes)]. Moreover, the moderator (peer influence) influence on the relationship between the independent variable and dependent variables was also investigated using multiple regression.

#### **Results**

Table 1 presents the respondents' demographic information. The respondents (N=153) in this research study consist of 30.1 percent males (N=46) and 69.9 percent females (N=107). Among 153 participants, respondents aged 22 formed most of the respondents (N=36, 23.5%) followed by age 23 (N=30, 19.6%), then age 21 (N=25, 16.3%), age 19 (N=19, 12.4%), age 18 (N=16, 10.5%), age 24(N=10, 6.5%) and lastly, age 25 (N=5, 3.3%).

Table 1. Frequency and Percent of Participants' Gender and Age.

Demographic	Categories	Frequency (n)	Percentage (%)
Variables			
Gender	Male	46	30.1
	Female	107	69.9
	Total	153	100.00
Age	18	16	10.6
	19	19	12.4
	20	12	7.8
	21	25	16.3
	22	36	23.5
	23	30	19.6
	24	10	6.5
	25	5	3.3
	Total	153	100.00

Table 2 presents the different social media platforms such as Instagram, Facebook, TikTok, Twitter, YouTube, and Pinterest. Respondents were more likely to report using Instagram (92.2%), followed by YouTube (88.,2%), TikTok (69.9%), Facebook (65.4%), Pinterest (44.4%), and lastly, Twitter/X (37.9%).

Table 2. Frequency and Percent of Social Media Platform Usage.

Social Media Platforms	n	%
Instagram	141	92.2
Facebook	100	65.4
Twitter	58	37.9
TikTok	107	69.9
YouTube	135	88.2
Pinterest	68	44.4

A Pearson Product-Moment Correlation Coefficient was conducted to investigate the

Table 3. Correlations between Variables.

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				Health	
		Social Media	<b>Body Image</b>	(Disordered	Peer
		Usage	Perception	Eating	Influence
				Attitudes)	
	Pearson	1	.298**	.235**	.052
Social Media	Correlation				
Usage	Sig. (2-tailed)		.000	.003	.524
	N	153	153	153	153
	Pearson	.298**	1	.525**	.202*
Body Image	Correlation				
Perception	Sig. (2-tailed)	.000		.000	.012
	N	153	153	153	153
Health	Pearson	.235**	.525**	1	.107
(Disordered	Correlation				
Eating	Sig. (2-tailed)	.003	.000		.188
Attitudes)	N	153	153	153	153
	Pearson	.052	.202*	.107	1
D I Cl	Correlation				
Peer Influence	Sig. (2-tailed)	.524	.012	.188	
	N	153	153	153	153
	•	·	•	•	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

relationship between social media usage and body image perception among university students.

Table 3 depicts the results, revealing a weak, positive correlation between social media usage and body image perception, with a Pearson correlation coefficient of r = 0.298, p < 0.05. Since p < 0.05, there is a statistically significant relationship between social media usage and body image perception among university students.

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

A Pearson Product-Moment Correlation Coefficient was conducted to investigate the relationship between social media usage and health (disordered eating attitudes) among university students. Table 3 depicts the results, revealing a weak, positive correlation between social media usage and health (disordered eating attitudes), with a Pearson correlation coefficient of r = 0.235, p < 0.05. Since p < 0.05, there is a statistically significant relationship between social media usage and health (disordered eating attitudes) among university students.

Table 4 shows the linear regression analysis results to determine social media influence on body image perception among university students. Based on Table 5, there is a significant model, F(1, 151) = 14.664, p < .001, adjusted R2 = .089. Social media usage explains 8.9% of university students' body image perception variability. Therefore, this shows that social media usage significantly predicts body image perception.

**Table 4. Results of Linear Regression Analysis.** 

			95% CI				
Model	Variables	Beta	SE	LL	UL	β	P
1	(Constant)	1.344E	.077	153	.153		1.000
		-16					
	Social Media Usage	.298	.078	.144	.451	.298	<.001

a. Dependent Variable: Body Image Perception *Note.*  $R^2 = .082$ , F(1, 151) = 14.664, p < .001

Table 5 shows the linear regression analysis results to determine social media influence on health (disordered eating attitudes) among university students. Based on Table 6, there is a significant model, F(1, 151) = 8.854, p = .003, adjusted R2 = .055. Social media usage explains 5.5% of university students' body image perception variability. Therefore, it shows that social media usage significantly predicts health (disordered eating attitudes).

**Table 5. Results of Linear Regression Analysis.** 

		95% CI			_		
Model	Variables	Beta	SE	LL	UL	β	P
1	(Constant)	1.261E-	.079	156	.156		1.000
		15					
	Social Media Usage	.288	.079	.079	.392	.235	.003

a. Dependent Variable: Health (Disordered Eating Attitudes)

Note.  $R^2 = .055$ , F(1, 151) = 8.854, p = .003

Table 6 depicts that social media usage was significantly related to body image perception and that peer influence does not moderate the relationship between the variables. Moreover, as illustrated, indicates peer influence (B = -.044, SE = .089, p = .623) that peer influence does not moderate the interaction between social media usage and body image perception among university students.

**Table 6. Results of Multiple Regression Analysis.** 

		95% CI			_		
Model	Variables	Beta	SE	LL	UL	β	P
1	(Constant)	4.866E-	.076	151	.151		1.000
		16					
	Social Media Usage	.288	.077	.137	.439	.288	.000
	Peer Influence	.187	.077	.036	.338	.187	.016
	(Constant)	.002	.077	149	.153		.976
	Social Media Usage	.293	.078	.140	.446	.293	.000
	Peer Influence	.194	.078	.040	.347	.194	.014
	Body Image Perception*Peer	044	.089	220	.132	039	.623
	Influence						

a. Dependent Variable: Body Image Perception

Table 7 depicts that social media usage was significantly related to health (disordered eating attitudes) however, peer influence does not moderate the relationship. Moreover, as illustrated, indicates peer influence (B = .020, SE = .092, p = .825) that peer influence does not moderate the interaction between social media usage and health (disordered eating attitudes) among university students.

Table 7. Results of Multiple Regression Analysis.

			8	95% CI			
Model	Variables	Beta	SE	LL	UL	β	P
1	(Constant)	1.440E-	.079	156	.156		1.000
		15					
	Social Media Usage	.230	.079	.074	.387	.230	.004
	Peer Influence	.095	.079	061	.251	.095	.231
	(Constant)	001	.079	157	.155		.989
	Social Media Usage	.228	.080	.070	.386	.228	.005
	Peer Influence	.092	.080	067	.251	.092	.255
	Body Image Perception*Peer	.020	.092	162	.202	.018	.825
	Influence						

a. Dependent Variable: Health (Disordered Eating Attitudes)

#### **Discussion**

Findings indicate a positive relationship and significant influence between social media usage and body image perception consistent with patterns observed by Rodgers et al. (2020). Respondents were active users of appearance-focused platforms with constant engagement and comparison with peers and favourite celebrities causing heightened feelings of self-judgment and body dissatisfaction due to the comparison of physical and lifestyle attributes (Cohen et al., 2021) and feeling that they do not measure up to the online ideals (Fardouly & Holland, 2018). Due to this, users may appear to be pressurised to present an ideal image of themselves online. For instance, photo angles emphasise thinness or muscular/lean bodies, especially their arms, waists and gaps between their thighs (Brickacek et al., 2018). Moreover, likes and comments feature may serve as a motivator for users to selectively present themselves by posting edited photos which provides incentive in the form of likes and feedback (Kim, 2020). Essentially, it is a cycle where greater appearance comparison pressures future editing and posting behaviours and vice versa.

Besides that, findings illustrate that there is a positive relationship and a significant influence between the two variables, social media usage and health (disordered eating attitudes) as supported past research (Rodgers et al., 2020). Constant exposure to social media has been linked to stereotypes and lower self-esteem which can contribute to a higher risk of developing disordered eating attitudes (Abbasi & Drouin, 2019). In addition, contents regarding dieting/restricting food are poorly regulated due to the involvement of companies with their marketing tactics that sell the illusion of health and beauty through the involvement of peer ambassadors and celebrity endorsements. Consequently, constant exposure to such contents is highly associated with unhealthy food choices, dieting/restricting food or overeating (Rounsefell et al., 2019).

On the other hand, findings suggest that peer influence does not moderate the relationship between the variables, social media usage, body image perception, and health (disordered eating attitudes) among university students. Most past research studies involve peer influence as the mediating factor (Fardouly & Varanian, 2015; Pedalino & Camerini, 2022) hence, suggests that peer influence may not positively influence body image perception and disordered eating habits, but rather support the adverse effects of social media usage. In a collectivistic society, people tend to define themselves as one with the society (Markus & Kitayama, 1991) hence, individuals tend to be more motivated to follow group norms and are easily influenced by peers (Hofstede, 2011). This encourages appearance comparison to conform to beauty norms internalised by edited photos seen online manifesting negative body image perception and disordered eating attitudes. Besides, individuals may encounter information about their peers during face-to-face interactions, however, are constantly bombarded with social media accounts anywhere at any time completed with photographic evidence.

Moreover, social media helps build peer social support which offers a safe space for individuals to share emotional vulnerability, where they can relate to and confide in peers. Online discussion forums also act as a platform for them to achieve mental health support (Chung et al., 2020). However, many images and stories online are posted by peers. Hence, individuals are prone to present an ideal image of themselves online leading to a stronger desire to conform to societal ideals essentially, engagement. Comments and likes individuals see on their peers' photos would further encourage them to engage indicating that social media platforms are an environment where images are like "commodities" essentially, acquiring social acceptance through likes and comments (Chatzopoulou et al., 2019). Hence, it is highlighted that peer influence is an important socialising agent that may set a standard for users which can mediate negative body image perception and disordered eating attitudes by contributing to feelings of inadequacy, lowering self-esteem and worsening mood.

### Limitations and Future Research

Like many studies, this study is not exempt from limitations. Since this study is correlational in design, causation cannot be implied as the results obtained may be influenced by other variables that are not being controlled. Moreover, peer influence as a moderating or mediating factor, as stated by Brown & Tiggemann (2016) can either be in the offline context or the online context essentially, inconsistent. Therefore, the first suggestion for future research would be to consider experimental or longitudinal designs. Besides, this study has focused on both genders however, failed to acquire an equal number of respondents in terms of gender. Male participants remain underrepresented amongst studies in this field, hence, remains unknown whether the outcomes that affect the female participants can also be found in male participants.

Thus, it would be warranted for future research to have an equal number of gender proportions for better exploration related to this field. Furthermore, body-positive content aiming to challenge beauty ideals are popular nowadays. Hence, future research can be carried out as the effect body positive content has on body image perception is still heterogeneous.

# **Implications**

This study's results open new avenues for researchers and clinicians to explore social media usage and the effects on body image perception and health (disordered eating attitudes). Social media usage especially among university students, plays a vital role in body image perception and health (disordered eating attitudes). Moreover, although the social comparison theory (Festinger, 1954) has been widely used in the field of body image, it mostly focuses on the Western context. Therefore, by examining the theory in Malaysia (Eastern context), a more comprehensive application of the theory can be utilised. Besides, with how social media has become commercialised, peers and celebrities may play a role in the misappropriation of content, it may be viable to explore social media usage among university students. This could contribute to increasing awareness in society and the development of prevention programs or therapies that can help in reducing disordered eating attitudes or increasing self-esteem.

When considering the general population and how prevalent it is for companies and celebrities to promote their brand, and to maintain the community of customers they have successfully attracted through their contents online, calls for stricter regulations related to advertising with more focus on empowerment, education, and encouragement. Artificial Intelligence (AI) creates photos that are vibrant and attractive easily and combined with the constant sharing by companies, celebrities, and peers may have adverse effects. Therefore, it seems relevant to tell people that body types that they see online may not be real and try to achieve them might be detrimental to their health.

Since most research focuses on the Western context, this study highlights the need for recent research in the Eastern context as well. With the prevalence of body image dissatisfaction and eating disorders in the Eastern context, combined with the vast evolution of social media platforms and the influence it has, it would be of great importance for research to be constantly conducted to understand the social media impact of body image, eating attitudes, and mental health. This will open pathways for better development of interventions and educational programs to prevent or decrease the negative effects social media has on individuals.

#### Conclusion

Conclusively, findings suggest that social media usage influences body image perception and health (disordered eating attitudes) among university students. Moreover, the influence of social media on body image perception and health (disordered eating attitudes) may also be influenced by peers or celebrities which is made easier through social networking sites. Hence, it would be vital to understand the intricate relationship between the variables so a better, positive social media experience can be achieved by users. Moreover, by addressing these limitations and incorporating improvements in future research, more light can be shed on this crucial issue and a comprehensive understanding can be achieved.

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#### References

- Abbasi, I., & Drouin, M. (2019). Neuroticism and Facebook Addiction: How Social Media can Affect Mood? *The American Journal of Family Therapy*, 47(4), 199–215. https://doi.org/10.1080/01926187.2019.1624223
- Alberga, A. S., Withnell, S. J., & Von Ranson, K. M. (2018). Fitspiration and thinspiration: a comparison across three social networking sites. *Journal of Eating Disorders*, 6(1), 1–10. https://doi.org/10.1186/s40337-018-0227-x
- Altabe, M., & Thompson, J. K. (1992). Size estimation versus figural ratings of body image disturbance: Relation to body dissatisfaction and eating dysfunction. International *Journal of Eating Disorders*, 11(4), 397–402. https://doi.org/10.1002/1098-108X(199205)11:4<397::AID-EAT2260110414>3.0.CO;2-6
- Alvarenga, M. dos S., Santos, T. S. S., & Andrade, D. (2020). Item Response Theory-based validation of a short form of the Disordered Eating Attitude Scale (DEAS-s) to a Brazilian sample. *Cadernos de Saúde Pública*, 36(2), 1–12. https://doi.org/10.1590/0102-311x00169919
- Alvarenga, M. dos S., Scagliusi, F. B., & Philippi, S. T. (2010). Development and validity of the Disordered Eating Attitude Scale (DEAS). *Perceptual and Motor Skills*, *110*(2), 379–395. https://doi.org/10.2466/PMS.110.2.379-395
- Bandura, A. (1971). Social Learning Theory. General Learning Press, New York.
- BERNAMA (2023). *Social Media and The Internet Dominate The Lives of Malaysians*. https://www.bernama.com/en/news.php?id=2226188
- Blom, G. E., Farley, G. K., & Guthals, C. (1970). The Concept of Body Image and the Remediation of Body Image Disorders. *Journal of Learning Disabilities*, *3*(9), 440–447. https://doi.org/10.1177/002221947000300903
- Brichacek, A., Neill, J., & Murray, K. (2018). The effect of basic psychological needs and exposure to idealised Facebook images on university students' body satisfaction. Cyberpsychology: *Journal of Psychosocial Research on Cyberspace*, *12*(3), 1–10. https://doi.org/10.5817/cp2018-3-2
- Brown, Z., & Tiggemann, M. (2016). Attractive celebrity and peer images on Instagram: Effect on women's mood and body image. *Body Image*, *19*(19), 37–43. https://doi.org/10.1016/j.bodyim.2016.08.007
- Brown, Z., & Tiggemann, M. (2020). A picture is worth a thousand words: The effect of viewing celebrity Instagram images with disclaimer and body-positive captions on women's body image. *Body Image*, *33*(33), 190–198. https://doi.org/10.1016/j.bodyim.2020.03.003
- Brownell, K. D., & Walsh, B. T. (Eds.). (2017). Eating disorders and obesity: A comprehensive handbook. Guilford Publications.
- Burnett, S., Sebastian, C., Cohen Kadosh, K., & Blakemore, S.-J. (2011). The social brain in adolescence: Evidence from functional magnetic resonance imaging and behavioural studies. *Neuroscience & Biobehavioral Reviews*, 35(8), 1654–1664. doi:10.1016/j.neubiorev.2010.10.011
- Cash, T. F. (1994). Body-Image Attitudes: Evaluation, Investment, and Affect. *Perceptual and Motor Skills*, 78(3\_suppl), 1168–1170. https://doi.org/10.2466/pms.1994.78.3c.1168

- Chatzopoulou, E., Fillieri, R., & Dogruyol, S., A. (2020). Instagram and body image: Motivation to conform to the "Instabod" and consequences on young male wellbeing. *Journal of Consumers Affairs*, 54(4), 1270–1297. https://doi.org/10.1111/joca.12329
- Chung, A., Vieira, D., Donley, T., Tan, N., Jean-Louis, G., Kiely Gouley, K., & Seixas, A. (2020). Adolescent peer influence via social media on eating behaviors: A scoping review. *Journal of Medical Internet Research*, 23(6), 1–12. https://doi.org/10.2196/19697
- Cohen, R., Newton-John, T., & Slater, A. (2017). The relationship between Facebook and Instagram appearance-focused activities and body image concerns in young women. *Body Image*, 23(1), 183–187. https://doi.org/10.1016/j.bodyim.2017.10.002
- Cohen, R., Newton-John, T., & Slater, A. (2021). The case for body positivity on social media: Perspectives on current advances and future directions. *Journal of Health Psychology*, 26(13), 2365–2373. https://doi.org/10.1177/1359105320912450
- Dahl, D., & Bergmark, K. H. (2020). Persistence in Problematic Internet Use—A Systematic Review and Meta-Analysis. *Frontiers in Sociology*, 5, 1–13. https://doi.org/10.3389/fsoc.2020.00030
- Dresp-Langley, B., & Hutt, A. (2022). Digital Addiction and Sleep. *International Journal of Environmental Research and Public Health*, 19, 1–19. https://doi.org/10.3390/ijerph19116910
- Evans, N. J., Forney, D. S., Renne, K., Patton, L., & Guido, F. (2010). *Student development in college: theory, research, and practice* (2nd ed.). San Francisco: Jossey-Bass Publishers.
- Fardouly, J., & Holland, E. (2018). Social media is not real life: The effect of attaching disclaimer-type labels to idealized social media images on women's body image and mood. *New Media & Society*, 20(11), 4311–4328. https://doi.org/10.1177/1461444818771083
- Fardouly, J., & Vartanian, L. R. (2016). Social media and body image concerns: Current research and future directions. *Current Opinion in Psychology*, 9, 1–5. https://doi.org/10.1016/j.copsyc.2015.09.005
- Fardouly, J., & Vartanian, L. R. (2015). Negative Comparisons about one's appearance Mediate the relationship between Facebook Usage and body Image concerns. *Body Image*, *12*(1), 82–88. https://doi.org/10.1016/j.bodyim.2014.10.004
- Fardouly, J., Willburger, B. K., & Vartanian, L. R. (2018). Instagram Use and Young Women's Body Image Concerns and self-objectification: Testing Mediational Pathways. *New Media & Society*, 20(4), 1380–1395. https://doi.org/10.1177/1461444817694499
- Farrell, L. C., Jorgenson, D., Fudge, J., & Pritchard, A. (2018). College Connectedness: The Student Perspective. *Journal of the Scholarship of Teaching and Learning*, 18(1), 75–95. https://doi.org/10.14434/josotl.v18i1.22371
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7(2), 117–140. https://doi.org/10.1177/001872675400700202
- Fioravanti, G., Bocci Benucci, S., Ceragioli, G. & Casale, S. (2022). How the Exposure to Beauty Ideals on Social Networking Sites Influences Body Image: A Systematic Review of Experimental Studies. *Adolescent Research Review*, 7, 419–458. https://doi.org/10.1007/s40894-022-00179-4
- Fung, I. C., Blankenship, E. B., Ahweyevu, J. O., Cooper, L. K., Duke, C. H., Carswell, S. L.,
  Jackson, A. M., Jenkins, J. C., 3rd, Duncan, E. A., Liang, H., Fu, K. W., & Tse, Z. T.
  H. (2020). Public Health Implications of Image-Based Social Media: A Systematic

- Review of Instagram, Pinterest, Tumblr, and Flickr. *The Permanente journal*, 24(18), 307–317. https://doi.org/10.7812/TPP/18.307
- Galmiche, M., Déchelotte, P., Lambert, G., & Tavolacci, M. P. (2019). Prevalence of eating disorders over the 2000–2018 period: a systematic literature review. The American *Journal of Clinical Nutrition*, 109(5), 1402–1413. https://doi.org/10.1093/ajcn/nqy342
- Giedd, J., N. (2020). Adolescent brain and the natural allure of digital media. *Dialogues in Clinical Neuroscience*, 22 (2), 127–133. https://doi.org/10.31887/DCNS.2020.22.2/jgiedd
- Giletta, M., Choukas-Bradley, S., Maes, M., Linthicum, K. P., Card, N. A., & Prinstein, M. J. (2021). A meta-analysis of longitudinal peer influence effects in childhood and adolescence. *Psychological Bulletin*, 147(7), 719–747. https://doi.org/10.1037/bul0000329
- Gioia, F., Griffiths, M. D., & Boursier, V. (2020). Adolescents'body shame and social networking sites: The mediating effect of body image control in photos. *Sex Roles*, 83(11), 773–785. https://doi.org/10.1007/s11199-020-01142-0
- Gurtala, J. C., & Fardouly, J. (2023). Does medium matter? Investigating the impact of viewing ideal image or short-form video content on young women's body image, mood, and self-objectification. *Body Image*, 46, 190–201. https://doi.org/10.1016/j.bodyim.2023.06.005
- Hallit, S., Brytek-Matera, A., & Obeid, S. (2021). Orthorexia nervosa and disordered eating attitudes among Lebanese adults: Assessing psychometric proprieties of the ORTO-R in a population-based sample. *PLOS ONE*, *16*(8), 1–12. https://doi.org/10.1371/journal.pone.0254948
- Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. Online *Readings in Psychology and Culture*, 2(1), 1–26. https://doi.org/10.9707/2307-0919.1014
- Holland, G., & Tiggeman, M. (2016). A systematic review of the impact of the use of social networking sites on body image and disordered eating outcomes. *Body Image*, *17*(17), 100–110. https://doi.org/10.1016/j.bodyim.2016.02.008
- Holsen, I., Jones, D. C., & Birkeland, M. S. (2012). Body image satisfaction among Norwegian adolescents and young adults: A longitudinal study of the influence of interpersonal relationships and BMI. *Body Image*, 9(2), 201–208. https://doi.org/10.1016/j.bodyim.2012.01.006
- Jiotsa, B., Naccache, B., Duval, M., Rocher, B., & Grall-Bronnec, M. (2021). Social Media Use and Body Image disorders: Association between Frequency of Comparing One's Own Physical Appearance to That of People Being Followed on Social Media and Body Dissatisfaction and Drive for Thinness. *International Journal of Environmental Research and Public Health*, 18(6), 2880–2894. https://doi.org/10.3390/ijerph18062880
- Karakose, T., Tülübaş, T., & Papadakis, S. (2022). Revealing the Intellectual Structure and Evolution of Digital Addiction Research: An Integrated Bibliometric and Science Mapping Approach. *International Journal of Environmental Research and Public Health*, 19(22), 1–27. https://doi.org/10.3390/ijerph192214883
- Kenny, U., O'Malley-Keighran, M.-P., Molcho, M., & Kelly, C. (2016). Peer Influences on Adolescent Body Image: Friends or Foes? *Journal of Adolescent Research*, 32(6), 768–799. https://doi.org/10.1177/0743558416665478

- Kim, H. M. (2020). What do others' reactions to body posting on Instagram tell us? The effects of social media comments on viewers' body image perception. *New Media & Society*, 23(12), 3448–3465. https://doi.org/10.1177/1461444820956368
- Kling, J., Kwakkenbos, L., Diedrichs, P. C., Rumsey, N., Frisén, A., Brandão, M. P., Silva, A. G., Dooley, B., Rodgers, R. F., & Fitzgerald, A. (2019). Systematic review of body image measures. *Body Image*, *30*, 170–211. https://doi.org/10.1016/j.bodyim.2019.06.006
- Laursen, B., & Veenstra, R. (2021). Toward understanding the functions of peer influence: A summary and synthesis of recent empirical research. *Journal Of Research On Adolescence*, 31(4), 889–907. https://doi.org/10.1111/jora.12606
- Leong, L.-Y., Hew, T.-S., Ooi, K.-B., Lee, V.-H., & Hew, J.-J. (2019). A hybrid SEM-neural network analysis of social media addiction. *Expert Systems with Applications*, *133*, 296–316. https://doi.org/10.1016/j.eswa.2019.05.024
- Li, J., Lau, J. T. F., Mo, P. K. H., Su, X., Wu, A. M. S., Tang, J., & Qin, Z. (2016). Validation of the Social Networking Activity Intensity Scale among Junior Middle School Students in China. *PLOS ONE*, *11*(10), 1–14. https://doi.org/10.1371/journal.pone.0165695
- Malaysian Communications and Multimedia Commission (MCMC). *Internet Users Survey* 2018. https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/Internet-Users-Survey-2018.pdf
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224–253. https://doi.org/10.1037/0033-295X.98.2.224
- McLachlan, S. (2023, April 13). 50+ Important TikTok Stats Marketers Need to Know in 2023. Hootsuite Social Media Management. https://blog.hootsuite.com/tiktok-stats/
- Pedalino, F., & Camerini, A.-L. (2022). Instagram Use and Body Dissatisfaction: The Mediating Role of Upward Social Comparison with Peers and Influencers among Young Females. *International Journal of Environmental Research and Public Health*, 19(3), 1543–1555. https://doi.org/10.3390/ijerph19031543
- Prinstein, M. J., & Giletta, M. (2016). Peer relations and developmental psychopathology. In D. Chicchetti (Ed.), Developmental psychopathology (3rd ed., Vol. 1, pp. 527-579). Wiley.
- Radwan, H., Hasan, H. A., Ismat, H., Hakim, H., Khalid, H., Al-Fityani, L., Mohammed, R., & Ayman, A. (2019). Body Mass Index Perception, Body Image Dissatisfaction and Their Relations with Weight-Related Behaviors among University Students. *International Journal of Environmental Research and Public Health*, 16(9), 1541–1552. https://doi.org/10.3390/ijerph16091541
- Rodgers, R. F., DuBois, R., Frumkin, M. R., & Robinaugh, D. J. (2018). A network approach to eating disorder symptomatology: Do desire for thinness and fear of gaining weight play unique roles in the network? *Body Image*, 27, 1–9. https://doi.org/10.1016/j.bodyim.2018.07.004
- Rodgers, R. F., Slater, A., Gordon, C. S., McLean, S. A., Jarman, H. K., & Paxton, S. J. (2020). A biopsychosocial model of social media use and body image concerns, disordered eating, and muscle-building behaviors among adolescent girls and boys. *Journal of Youth and Adolescence*, 49(2), 399–409. https://doi.org/10.1007/s10964-019-01190-0
- Rodgers, R., F., Melioli (2016), T. The Relationship Between Body Image Concerns, Eating Disorders and Internet Use, Part I: A Review of Empirical Support. *Adolescent Research Review*, 1, 95–119. https://doi.org/10.1007/s40894-015-0016-6

- Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T., A. (2019). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition & Dietetics*, 77(1), 19-40. https://doi.org/10.1111/1747-0080.12581
- Rousseau, A., Eggermont, S., & Frison, E. (2017). The reciprocal and indirect relationships between passive Facebook use, comparison on Facebook, and adolescents' body dissatisfaction. *Computers in Human Behavior*, 73, 336–344. https://doi.org/10.1016/j.chb.2017.03.056
- Rowe, D. A., Benson, J., & Baumgartner, T. A. (1999). Development of the Body Self-Image Questionnaire. *Measurement in Physical Education and Exercise Science*, *3*(4), 223–247. https://doi.org/10.1207/s15327841mpee0304\_4
- Ryding, F. C., & Kuss, D. J. (2020). The use of social networking sites, body image dissatisfaction, and body dysmorphic disorder: A systematic review of psychological research. *Psychology of Popular Media*, *9*(4), 412–435. https://doi.org/10.1037/ppm0000264
- Saiphoo, A. N., & Vahedi, Z. (2019). A meta-analytic review of the relationship between social media use and body image disturbance. *Computers in Human Behavior*, 101, 259–275. https://doi.org/10.1016/j.chb.2019.07.028
- Shen, J., Chen, J., Tang, X., & Bao, S. (2022). The effects of media and peers on negative body image among Chinese college students: a chained indirect influence model of appearance comparison and internalization of the thin ideal. *Journal of Eating Disorders*, 10(1), 1–9. https://doi.org/10.1186/s40337-022-00575-0
- Sigerson, L., & Cheng, C. (2018). Scales for measuring user engagement with social network sites: A systematic review of psychometric properties. *Computers in Human Behavior*, 83, 87–105. https://doi.org/10.1016/j.chb.2018.01.023
- Smith, A. R., Hames, J. L., & Joiner, T. E., Jr (2013). Status update: maladaptive Facebook usage predicts increases in body dissatisfaction and bulimic symptoms. *Journal of Affective Disorders*, 149(1-3), 235–240. https://doi.org/10.1016/j.jad.2013.01.032
- Steinberg, L., & Monahan, K. C. (2007). Age differences in resistance to peer influence. *Developmental Psychology*, 43(6), 1531–1543. https://doi.org/10.1037/0012-1649.43.6.1531
- Tenkorang, S., & Okyere, C., O. (2022). Factors Influencing Body Image Perception of University Students in Ghana. *Technium Social Sciences Journal*, 27, 492–501. https://doi.org/10.47577/tssj.v27i1.5522
- Tiggemann, M. (1996). "Thinking" Versus "Feeling" Fat: Correlates of Two Indices of Body Image Dissatisfaction. *Australian Journal of Psychology*, 48(1), 21–25. https://doi.org/10.1080/00049539608259501
- Tiggemann, M., & Miller, J. (2010). The internet and adolescent girls' weight satisfaction and drive for thinness. Sex Roles, 63(1), 79-90. http://dx.doi.org/10.1007/s11199-010-9789-z
- Tiggemann, M., Hayden, S., Brown, Z., & Veldhuis, J. (2018). The effect of Instagram "likes" on women's social comparison and body dissatisfaction. *Body image*, 26, 90–97. https://doi.org/10.1016/j.bodyim.2018.07.002
- Tiggemann, M., Anderberg, I., & Brown, Z. (2020). #Loveyourbody: The effect of body positive Instagram captions on women's body image. *Body Image*, *33*, 129–136. https://doi.org/10.1016/j.bodyim.2020.02.015

- Vaterlaus, J. M., & Winter, M. (2021). TikTok: An exploratory study of young adults' uses and gratifications. *The Social Science Journal*, 1–20. https://doi.org/10.1080/03623319.2021.1969882
- van Hoorn, J., Fuligni, A. J., Crone, E. A., & Galván, A. (2016). Peer influence effects on risk-taking and prosocial decision-making in adolescence: Insights from neuroimaging studies. *Current Opinion in Behavioral Sciences*, 10, 59–64. https://doi.org/10.1016/j.cobeha.2016.05.007
- Vuong, A. T., Jarman, H. K., Doley, J. R., & McLean, S. A. (2021). Social Media Use and Body Dissatisfaction in Adolescents: The Moderating Role of Thin- and Muscular-Ideal Internalisation. *International Journal Of Environmental Research And Public Health*, 18(24), 1–14. https://doi.org/10.3390/ijerph182413222
- Webb, H. J., & Zimmer-Gembeck, M. J. (2014). Body Image and Body Change Strategies Within Friendship Dyads and Groups: Implications for Adolescent Appearance-based Rejection Sensitivity. *Social Development*, 24(1), 1–19. https://doi.org/10.1111/sode.12081
- Wilksch, S. M., O'Shea, A., Ho, P., Byrne, S., & Wade, T. D. (2019). The relationship between social media use and disordered eating in young adolescents. *The International Journal Of Eating Disorders*, 53(1), 96–106. https://doi.org/10.1002/eat.23198
- Wu, L., Morstatter, F., Carley, K. M., & Liu, H. (2019). Misinformation in Social Media. *ACM SIGKDD Explorations Newsletter*, 21(2), 80–90. https://doi.org/10.1145/3373464.3373475
- Zhang, J., Wang, Y., Li, Q., & Wu, C. (2021). The Relationship Between SNS Usage and Disordered Eating Behaviors: A Meta-Analysis. *Frontiers in Psychology*, 12, 1–16. https://doi.org/10.3389/fpsyg.2021.641919