

The Impact of COVID-19 Lockdown Towards Social Media Usage and Body-Esteem among Adolescents in Kuantan, Pahang

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ABSTRACT

Introduction: Social media usage among children and adolescents has increased significantly especially when COVID-19 struck where prolong stay at home increase free time and feeling of boredom. Despite having remote learning, adolescents exposed to social media that commonly have images-related content that led to appearance comparisons. Research on social media usage among adolescents and the impact on their body-esteem is sparse.

Objective: This study aimed to determine the impact of the COVID-19 lockdown on social media usage and body-esteem and the association between social media usage and body-esteem among adolescents in Kuantan, Pahang.

Methods: A quantitative cross-sectional study was conducted among 347 adolescents in Kuantan, Pahang from April to June 2022 through a convenience sampling method. Data were collected by using a Google Forms survey and printed questionnaire that was available in bilingual. Descriptive statistics and Pearson's correlation test was used for the data analysis using SPSS version 27.

Results: About 37.8% of adolescents stated that they spent more than four hours a day before lockdown and it increases to 48.1% for current use. This indicates a slight increase in social media usage before and after the COVID-19 lockdown. There is no significant association between social media usage and the body-esteem evaluation among adolescents post pandemic.

Conclusion: The adolescents in this study seem to have moderate usage of social media and it does not impact on their body-esteem. This indicates the social media usage insufficiently affect adolescents concerned with their personal appearance and beauty.

Keywords: COVID-19; Lockdown; Social media; Body image; Adolescents.

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INTRODUCTION

On 11 February 2020, the World Health Organisation (WHO) announced that the disease was caused by the SARS-CoV-2 virus named COVID-19. The disease has spread worldwide and was declared by WHO as a global pandemic in March 2020 considering the levels of spread and severity(1). The COVID-19 pandemic has had a devastating impact on human life particularly children and adolescents. The Malaysian government implemented a Movement Control Order (MCO) and prohibited any social, cultural, and religious mass gatherings nationwide to curb the spread of the disease(2). The MCO includes the closure of schools and all public and private institutions of higher learning and skills training institutions.

Due to restrictions on movement during COVID-19, staying at home throughout the day would affect the adolescents' routine activities. The need for remote teaching and learning has demanded that adolescent's use technological devices almost all the time(3). Most adolescents have their own mobile phones and no longer share them with their parents. This situation has allowed adolescents to have their own "social freedom"(4). Apart from attending learning sessions, adolescents are also free to use technological devices for other purposes such as watching videos and surfing social media(5). Among the social media platforms that are popular among adolescents nowadays are Instagram, Snapchat, TikTok, Facebook, YouTube, WhatsApp, and Twitter.

Not many of the parents had utilized parental control to monitor their children's internet usage. Unsupervised use of social media would bring risks to the health and well-being of an adolescent such as exposure to sexual exploitation and grooming. The usage of social media by children and adolescents is dominated by visual communication, which includes posting and commenting on images and videos of themselves and others (6). The beauty standard in the social media increased as technology has advanced towards beautification of visual images and the existence of an audience of peers who provide reinforcing feedback, social media sites may lead to worsen the physical appearance concerns among adolescents (7). The debates on the consequences of using social media are never-ending discussions and still raise

concerns for the parents and the community. Therefore, this study aims to determine the impact of the COVID-19 lockdown on social media usage and body esteem and the association between social media usage and evaluation on body esteem among adolescents in Kuantan, Pahang.

METHODS

This is a quantitative cross-sectional study conveniently sampled 347 adolescents aged between 13 and 27 lived in Kuantan, Pahang. These adolescents were able to understand English or Malay and were willing to participate voluntarily and complete the questionnaire. The data were collected using both self-reported Google Forms surveys and printed questionnaires since participants were hard to reach due to the school closure. The link for Google Forms was disseminated through researcher contacts using WhatsApp, Instagram and Facebook while printed questionnaires were distributed to the participants at the recreational park and outside school time with the permission of the participants' parents. The data were collected between April 2022 and June 2022.

A questionnaire consisted of four parts. Part A consisted of sociodemographic backgrounds such as age, gender, race, living arrangements and type of Internet connection used by the adolescents. Part B comprised two questions on the frequency of social media usage before lockdown and the type of social media used. Before lockdown in this study refers to before MCO was declared on 18th March 2020 in Malaysia while after lockdown means after Malaysia entered the 'Transition to Endemic' phase on 1st of April 2022. Part C assessed the preferred devices to use social media, the number of active social media accounts, the number of times a social media account is checked per day, the time spent on social medias in hours and time of increased use from morning to night and membership of social media by years. The last question assessed the frequency of social media use of Facebook, Twitter, WhatsApp, Instagram, Snapchat, WeChat, TikTok and YouTube with a 5-points Likert scale from 0 to 4 (Never=0, Rarely=1, Sometimes=2, Frequent=3, Always=4). The participants were given the option to tick one. The range of total scores is 0 to 32. Low usage of social media is recorded when the total mean

score is below than 50th percentile while high usage of social media is recorded when the total mean score is higher than the 75th percentile (Table 1). The questions in this part were adopted from research by Ali, et al. (8) entitled "Social Networking Sites Usage & Needs Scale (SNSUN): a new instrument for measuring social networking sites' usage patterns and needs".

Table 1: Scoring of social media usage

Percentiles	Total Score	Frequency of social media usage
< 50 th	< 16	Low
50 th to 75 th	17-24	Moderate
> 75 th	>24	High

Part D consist of 23 items that required participants to evaluate their body esteem using a 5-points Likert scale ranging from 0 to 4 (Never=0, Rarely=1, Sometimes=2, Frequent=3, Always=4). The questions in this part are adopted from a previous study entitled "Body-Esteem Scale for Adolescents and Adults" by Mendelson, et al.(9) This scale covers three aspects of body esteem in adolescents which are general feelings about appearance, weight satisfaction, and others' evaluations about one's body and appearance. The possible range of total scores is 0 to 92. Low body esteem refers to a total mean score that is below than 50th percentile while high body esteem is when the total mean score is higher than the 75th percentile (Table 2). Permission to use the questionnaires was obtained and approved via email.

Table 2: Scoring of body esteem evaluation

Percentiles	Total Score	Frequency of social media usage
< 50 th	< 46	Low
50 th to 75 th	47-69	Moderate
> 75 th	>70	High

Modifications of items were made according to the relevance of the study and to suit the targeted participants. The questionnaire has

Current social media usage

been translated and checked by the English teacher and the researcher team. A pilot study was performed among 30 adolescents to obtain the reliability value using Cronbach's Alpha of the instruments. The Cronbach's alpha for the pilot study is 0.868 which considered as acceptable and its sufficient measure of reliability of an instrument.

DATA ANALYSIS

The data collected were analysed using Statistical Package for Social Science (SPSS) version 27. Descriptive statistics were used to measure the frequency and percentage of variables. The normality test was performed prior to the data analysis. A Pearson correlation test was used to identify the association between social media usage and body-esteem among adolescents in Kuantan, Pahang which both the independent variable and dependent variable are in numerical data. A significant level was set with p-value less than 0.05 and a 95% Confidence Interval (CI).

RESULTS

Descriptive statistics were used to describe the characteristics of participants as presented in Table 3. Among 347 participants, 57.9% were female. 98.3% of the participants were Malay followed by Indian (0.9%), Chinese (0.6%) and 0.3% from another race which is Melanau. It is expected that most of the participants were Malay as dissemination of messages about the study was done through researcher contacts. About 97.1% of participants were living with their family followed by 2.3% living with single parents. Another 0.6% reported that they were living with their grandmother and at the hostel. Other than that, just over half of the participants (52.2%) were using mobile data for their Internet connection.

Social media usage before the COVID-19 lockdown

The results showed that 38% of the adolescents spent one to four hours per day followed by 37.8% who spent more than four hours per day before the lockdown. Only 36.3% were following appearance-focused accounts on their social media.

A significant proportion of participants (89.6%) preferred a mobile phone as a device to use

social media. COVID-19 lockdown may be the reason the parents provided their children with gadgets as it becomes a need for their teaching and learning sessions. However, it might expand to the use of social media(10). Fifty-nine percent were reported to use one to three social networking sites actively.

About 34.9% of the participants reported that they spent three to four hours while 27.4% spent five to six hours on social media per day. The time range is in accordance with the use of social media outside of school time. The

participants use social media during night time (38.6%) and weekends (35.4%) time in social media usage. This is relevant to the reported time spent on social media each day. However, the answer choices for the increased time in social media usage which is day time and evening have overlapped and may have led to confusion for the adolescents. About 26.2% stated that they have use social media one to two years ago which may be due to the demand for teaching and learning during the pandemic, while just over a third of the participants (36%) used social media three to four years ago.

Table 3: Sociodemographic backgrounds of the participants

Characteristics	Variables	Frequency (n=347)	Percentage (%)
Age	13 years old	59	17.0
	14 years old	80	23.1
	15 years old	87	25.1
	16 years old	62	17.9
	17 years old	59	17.0
Gender	Male	146	42.1
	Female	201	57.9
Race	Malay	341	98.3
	Non-Malay	6	1.7
Living arrangements	Living with family	337	97.1
	Living with single parent	8	2.3
	Others	2	0.6
Type of Internet connection	Wi-Fi	166	47.9
	Mobile data	181	52.2

Table 4: Social media usage before the COVID-19 lockdown

		Frequency (n=347)	Percentage (%)
Social media usage before lockdown	I do not have an account	23	6.6
	Less than one hour per day	61	17.6
	One to four hours per day	132	38.0
	More than four hours per day	131	37.8
Type of account followed on social media before lockdown	Following appearance focused accounts (fitness, diet, fashion, clothing)	126	36.3
	Not following appearance focused account	221	63.7

Table 5: Current social media usage of the participants

Characteristics	Variables	Frequency (n=347)	Percentage (%)
Social media usage	Yes	347	100
	No	-	-
Preferred device to use social media	Desktop computer	8	2.3
	Laptop	25	7.2
	Mobile phone	311	89.6
	Others	3	0.9
Number of Social Networking Site used actively	One	41	11.8
	Two	76	21.9
	Three	89	25.6
	Four	50	14.4
	Five	40	11.5
	More than five	51	14.7
Checking social media accounts per day	On every notification beep	46	13.3
	1-2 times per day	53	15.3
	3-4 times per day	86	24.8
	5-6 times per day	63	18.2
	7-8 times per day	32	9.2
	More than 9 times per day	67	19.3
Time spent on social media per day	1-2 hours	59	17.0
	3-4 hours	121	34.9
	5-6 hours	95	27.4
	7-8 hours	31	8.9
	9 hours and more	41	11.8
Increase time in social media usage	Day time	50	14.4
	Evening	40	11.5
	Night	134	38.6
	Weekends	123	35.4
Duration of using social media	Less than 1 year ago	25	7.2
	1-2 years ago	91	26.2
	3-4 years ago	125	36.0
	5-6 years ago	63	18.2
	7-8 years ago	18	5.2
	9-10 years ago	12	3.5
	More than 10 years ago	13	3.7

Referring to the scoring of social media usage (Table I), the adolescents have moderate usage of social media. Most adolescents never or rarely use Facebook as their Social Networking Sites. Most of the participants have never used Twitter (51.6%), Snapchat (74.9%) and WeChat (96.5%). Meanwhile WhatsApp, Instagram, TikTok and YouTube were the most frequently used social media by participants.

Body esteem evaluation

The adolescents reported having low body esteem as the total mean score (46.89) of body esteem evaluation. About 29.1% of participants always feel that they are preoccupied with trying to change their body weight. 34% always feel that there are lots of things they would

change about their looks. Just over half of the participants (51.6%) always wish that they looked better. However, the participants reported that they never felt that their looks upset them, their weight themselves were depressing and their weight makes them unhappy.

The impact of COVID-19 lockdown on social media usage

There is a slight increase in social media usage before (37.8%) and after (48.1%) the COVID-19 lockdown.

Table 6: Social media usage before and after the COVID-19 lockdown

Characteristics	Variables	Frequency (n=347)	Percentage (%)
Social media usage before lockdown	I do not have an account	23	6.6
	Less than one hour per day	61	17.6
	One to four hours per day	132	38.0
	More than four hours per day	131	37.8
Time spent on social media per day (after lockdown)	1-2 hours	59	17.0
	3-4 hours	121	34.9
	5-9 hours	167	48.1

The association between social media usage and the body esteem evaluation

The adolescents seem to have moderate usage of social media and low body esteem. A Pearson correlation test was used to test the association between social media usage and body-esteem evaluation (Table 7). The results showed that there is no significant association between the social media usage and the body-esteem evaluation among adolescents in Kuantan, Pahang.

Table 7: Association between social media usage and body esteem evaluation among adolescents

Variables		r-value	p-value
Social media usage	Body-esteem	-0.045	0.407

*Significant level set p-value <0.05, with a 95% Confidence Interval (CI)

DISCUSSION

Based on the result, there seems to be a slight increase in the number of students who use social media more than four hours a day can be seen before and after the pandemic. The increment was about 10.3%. Apart from attending learning sessions, the adolescents are also free to use technological devices for other purposes such as communication, socialisation, sharing of knowledge needed for learning and

entertainment especially amidst COVID-19. The finding is consistent with one study conducted in Canada, which the frequency of reported social media usage shows an increase after COVID-19 compared to before COVID-19 in a sample of high school students aged 14 to 18 years (11) It was also supported with previous studies by Fernandes et al. in 2020 and Vall-Roque in 2021 both proved that there is a significant increase in the frequency of social network use which included Instagram, YouTube, TikTok, Twitter and Facebook.

The current study indicated that there was no significant association between social media usage and body esteem evaluation. This indicate that what is shown in the media does not sufficiently affect adolescents to the extent that they feel concerned with their body esteem just for following accounts that displayed regarding appearance and beauty that only lies in the thin and muscular ideal. This finding contradicts a study conducted by Phramita et al. (12), which portrayed that there is a strong and significant correlation between the intensity of the use of Instagram and female adolescents’ body-esteem (8). Most of the participants were found to be satisfied with their bodies even though exposed to content on social media, especially about body image. A previous study conducted by Lessard and Pulh (13) showed that elevated exposure to weight-stigmatizing social media content is likely to affect the health and well-being of adolescents, especially how they feel about their bodies as about 41% of the sample reported increased body dissatisfaction since the COVID-19 pandemic began with 67% of them being girls (9).

CONCLUSION

This study found that social media usage shows an increased pattern even after COVID-19 lockdown. Other than that, this study has revealed that there is no significant association between social media usage and body-esteem among adolescents in Kuantan, Pahang. There are several limitations of the study that need to be addressed. First, the researcher relied on self-report of social media activity before the lockdown using retrospective recall. This could lead to some inaccurate information. Furthermore, the participants had difficulty reaching online as there were chances of the

participants forgetting to answer the survey, ignoring the messages or it may not reaching them. In addition, current results may not be generalized to other races or regions, primarily considering predominantly Malay participants.

ETHICAL CONSIDERATIONS

This study has been approved by Kulliyah of Nursing Post Graduate Research Committee (KNPGRC) and IIUM Research Ethics Committee (IREC) prior to data collection. The researcher then obtained the permission of the parents or guardians' participation in the research and solicited assent from the adolescents after information regarding the study was provided to them. The participants were also assured that the information given will be kept confidential throughout the research process.

CONFLICT OF INTEREST

The author declares that there was no conflict of interest in this study.

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