

Cyberloafing activities and social media addiction among netizens: A predictive approach**Tak Jie Chan^{a*}, Jun Ying Chew^b, Tengku Siti Aisha Tengku Mohd Azzman Shariffadeen^c, Tze Wei Liew^d, Sheh Chin Foo^b and Yang Tian^e**^a*Faculty of Applied Communication, Multimedia University, Persiaran Multimedia, 63100, Cyberjaya, Selangor, Malaysia*^b*School of Communication & Creative Design, SEGi University, 47810, Petaling Jaya, Selangor, Malaysia*^c*AbdulHamid AbuSulayman Kulliyah of Islamic Review Knowledge and Human Sciences, International Islamic University Malaysia, 53100, Gombak, Kuala Lumpur, Malaysia*^d*Faculty of Business, Multimedia University, Jalan Ayer Keroh Lama, 75450, Melaka, Malaysia*^e*Department of Communication, Faculty of Modern Languages and Communication, Universiti Putra Malaysia, 43400 UPM, Serdang, Selangor, Malaysia***CHRONICLE****ABSTRACT***Article history:*

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Social media usage has increased tremendously in recent years. However, when users cannot control their social media usage, it might have some negative impacts on personal and social life, which lead to the cyberloafing phenomenon. This study aims to examine the influence of cyberloafing activities (sharing, shopping, gaming, accessing online content, real-time updating) and social media addiction among netizens. This study utilized Uses and Gratification Theory (U&G) as a theoretical basis to explain the framework. The quantitative method was implemented in this study. An online survey questionnaire was used to collect data and 318 valid respondents were generated. Partial Least Square Structural Equation Modelling via Smart-PLS was used to analyze the data. The study showed that two cyberloafing activities, namely real-time updating and sharing significantly impact social media addiction. However, the other cyberloafing activities (accessing online content, gaming, shopping) do not contribute to social media addiction. This study may help students and employees to be cognizant of the symptoms of cyberloafing and social media addiction. In addition, it also helps government agencies such as Malaysian Communication and Multimedia Commission (MCMC) to produce strategies that can address addiction among netizens and youths. Conclusion, implications, and future research directions were discussed.

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1. Introduction

In recent years, social media usage has increased tremendously as it allows users to share their content, thoughts, opinion, and feelings with their friends or family (Chen & Xiao, 2022), in addition, it also helps to make new friends regardless of location or time (Azizi et al., 2019; Cheng et al., 2021). According to Petrosyan (2023), there are 5.18 billion social media users around the world as of April 2023, which is equivalent to 64.6% of the global population. In Malaysia, the number of Internet users was forecast to continuously increase between 2023 and 2028 by a total of 1.9 million users (+5.68%) (Statista, 2023). However, when users cannot control their social media usage, it might have some negative influence on personal and social levels. For example, some people will feel stressed as they cannot use social media during work. This phenomenon is widely referred to as social media addiction (Cheng et al., 2021). Social media addiction is also referring to psychological worries about the use of social media and users having some problems with their time management. Social media addiction will affect

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their social life such as career and professional activities (Azizi et al., 2019). Users will spend more hours checking their friends' social media statuses and neglect their work and study.

In addition, Famemass (2021), highlighted that more than 330 million people are suffering from social media addiction in 2021, which is an increase from 2019, which consists of 210 million around the world. Other than that, people will spend at least 2 hours 32 minutes in five popular social media applications which are Facebook, Twitter, Tiktok, YouTube, and Instagram. Although Facebook has more than 2.23 billion users, Tiktok has been defined as the most addictive social media platform. However, social media users spend more time on YouTube which is 44 minutes on average (Famemass, 2021). This situation will create a risk of netizens having social media addiction as they need to compulsively use social media (Moghavvemi et al., 2017; Zhao et al., 2022). Cyberloafing is an activity in which people use the Internet for their purpose while they are engaged in their main tasks such as checking the latest news, online shopping, personal email, online gaming, etc. (Usman et al., 2021). Cyberloafing will have an impact on a person's productivity and will result in delay or incomplete tasks (Koay, 2018). Cyberloafing also will affect students in the classroom and technology and social media are gradually adopted in the teaching and learning environment. Although this is very convenient, it may also lead students to be excessively dependent and addicted to technology while carrying out teaching and learning activities in the classroom (Akgun, 2020). When students are addicted to the internet or social media in class, it may cause some problems such as being distracted in class by other tasks that are not related to academic activities and them losing the motivation to study (Arabaci, 2017; Coskun & Gokcearslan, 2019). Thus, social media is a primary reason people engage in cyberloafing activities during work/ study time. Currently, organizations don't punish people who use social media such as WhatsApp, Facebook, or Instagram during working hours, as it is the norm to use social media even in the organizational setting. There are many enterprises that do not use email as a primary communication tool but social media to communicate with employees and other stakeholders. Social media is not only used for external reflection and communication, but also for learning, teamwork, efficiency, and knowledge sharing (Sheikh et al., 2019). Based on a review of past studies, there are studies indicating a significant relationship between social media addiction and cyberloafing. However, the findings were not consistent, where some of the studies stated that there is no direct relationship between them (Turan et al., 2020; Orta & Saygili, 2021; Sivrikova et al., 2019). Therefore, the present study would like to reexamine the influence of cyberloafing activities and social media addiction. Besides, one theory such as the theory of planned behavior assumes that people tend to react rationally to conscious behavior that a person can consider before acting (Kan & Fabrigar, 2017). In previous studies, there are many researchers that have utilized the theory of planned behavior to explain cyberloafing and social media addiction (e. g. Soh et al., 2018; Orta & Saygili, 2021; Dursun, et al., 2018; Simanjuntak et al., 2018). However, there is a lack of studies that use the Uses and Gratification theory to explain cyberloafing and social media addiction from the communication perspective (Karami et al., 2014; Rehman et al., 2019). Therefore, the present studies will examine cyberloafing from the perspective of communication by using the Uses and Gratification Theory to explain cyberloafing dimension as one of the main motivations to use social media.

In addition, many of the studies were done in foreign countries (Orta & Saygili, 2021; Moningkey & Franksiska, 2020). However, there are limited studies that have focused on the Malaysian context (Moghavvemi et al., 2017; Razali et al., 2019), and hence there is a dearth to reexamine the study again. Based on the discussion, therefore, this study aims to investigate the cyberloafing activities dimensions and social media addiction among netizens.

2. Literature Review

2.1 Theoretical Framework: Uses and Gratification Theory

Uses and Gratification theory (U&G) categorizes the functions/ motives that people use in the mass media (Karimi et al., 2014). This theory assumes that people are active in using mass media or activities to meet the specific needs of users (Limvarakul, 2017). U&G has been widely applied to understand motivation to use traditional and new media such as television, newspaper, the Internet, smartphone, and e-mail. Many researchers have also applied the U&G theory in social media applications such as Facebook or Instagram (Sun et al., 2020, Chan et al., 2022). As new media brings widespread use, communication has become important because users can seek satisfaction/ gratifications from social media. Users are able to gratify a wide range of personal and social needs when using social media. A possible implication from social media use is that once social media is able to fulfil users' needs, the intensity of use will increase even during study or working hours, and this may lead to addiction (Sun et al., 2020). Hence, for this study, researchers apply the cyberloafing activities dimensions as the analogy in the U&G, which is related to the users' needs and motivation.

2.2 Social media addiction

Social media addiction is defined as users are unable to control the use of social media or engage in excessive use of social media which causes incomplete tasks, or psychological problems (Wainner, 2018). Social media addiction is also described as the compulsive use of social media, which represents negative phenomena in the virtual world (Tarafdar et al., 2019). Social media addiction is mostly used to define people who have a psychological dependence on social media and produce adverse reactions until an addictive response is produced (Cao et al., 2020), such as spending a lot of time and energy on it (Haand & Shuwang, 2020).

2.3 Cyberloafing

Cyberloafing is defined as the use of the Internet or technology activities which are not related to the job or academic purposes (Knight, 2017). People who feel powerless at work or study will participate in cyberloafing activities to escape reality, including playing online games (Salleh et al., 2018). Workers or students will consider conducting cyberloafing because they feel happy and gratified during the process. It can also be defined as a psychological withdrawal that a person is trying to escape from the workplace/ studying. They can feel relaxed while doing other activities such as using social media, playing online games, or shopping online (Mashal, 2020). Cyberloafing not only depends on personal psychological needs but also environmental and personal needs. For instance, people can use working/ studying resources for their purposes such as sharing, shopping, accessing online content, a real-time update on social media, and online gaming (Knight, 2017). According to Orta and Saygili (2021), sharing is defined as sending messages, photos, videos, chatting with friends, and writing comments on social media. Besides, real-time updating refers to posting or reposting content on social media. Accessing online content meant downloading applications or watching videos virtually. Shopping is meant to use online shopping apps such as Shopee and Lazada and perform online purchases, and last but not least, gaming in this context of the study refers to playing online games during work/ study (Orta & Saygili, 2021). According to Connexus Recruit (n. d.), 65% of employees use the Internet for their purposes during working time. In other words, the time spent on cyberloafing was originally used for work, if employees or students carry out cyberloafing activities during work or study, it will cause their concentration and productivity rate to decrease.

2.4 Relationship between cyberloafing activities and social media addiction

Social media addiction is more likely to happen to young people as compared to other age groups. This is because they will use social media unconsciously until they get immersed in it (Turan et al., 2020). Due to the digital device being easy and convenient to use, using it for personal purposes is common in every situation such as during class or in working periods (Orta & Saygili, 2021). According to Turan et al., (2020), there is a positive relationship between cyberloafing and social media addiction. There are five dimensions of cyberloafing which are sharing, shopping, real-time updating, access to online content and gaming, and it has a significant relationship with social media addiction (Koay, 2018). In recent years, social media users have increased in number, in which youths cater for a big percentage because social media promotes interaction between users and convenience, it attracts many users. Social media is a social tool that can let people share. Users can share their lifestyles, experience, and also opinion on some incidents on social media, which will help users maintain relationships with their families, reduce extra connection costs, and share information and opinion (Baglari et al., 2020). According to Salleh et al. (2020), it has been found that people who like to use social media share information instantly. Users would like to seek information about their friends through social media because it is a trend in checking and sharing in reality (Salleh et al., 2020). For instance, the study by Turan et al., (2020) found that the most frequent cyberloafing activity among students are sharing information and transmission of information not related to their study during class time. They are active in using social media for social information purposes, but not for their education (Bashir et al., 2021). Based on the discussion, the hypothesis below is developed:

H₁: *There is a positive relationship between sharing and social media addiction.*

People prefer to shop online because it is easy to search, there is a wide selection of products to choose from, flexible time, ease of use, fun, promotional, and impulsive. Most online shoppers shop online because of their hedonic motivation. People will be shopping online because they are able to enjoy and relax to release their stress, boredom, and loneliness. Besides, the seller will provide a lot of information and service and do a comparison with other products. This will lead buyers to shop with confidence and not be affected by time or space. In addition, buyers will collect information about the product before they purchase them. Due to this process being a continuous activity and they can obtain their desired result, shopping on social media has become an interesting activity (Miah et al., 2022). Many social media use and shopping will cause addiction (Sharif et al., 2021). According to Elisa et al., (2022), overuse of social media leads to increased shopping impulse. The relationship between shopping and social media addiction is because of impulse induction of social media. Social media will show online advertisements for the user and users can directly access them while they are using social media (Sharif et al., 2018). Hence, this study postulated that:

H₂: *There is a positive relationship between shopping and social media addiction.*

Real-time updating includes reposting on social media or posting photos or videos on social media. Students nowadays always use digital devices during class which are not related to their lecture. They will put their attention on checking social media updates or updating their social media during lecture time (Twum et al., 2021). According to Twum et al. (2021), if students carry out Internet-based activities such as updating social media, it will be seen as cyberloafing. Other than that, youth are addicted to social media as they can post their status, give comments, and update on their social media, where social media has already become a necessity of life for them (Judita, 2021). Based on the discussion, this study hypothesized that:

H₃: *There is a positive relationship between real-time updating and social media addiction.*

Students contemporarily use meeting applications such as Zoom, Google Meet, and Microsoft Teams to attend their classes by using a tablet, phone, or laptop. Students who have social media addiction have opportunities to access online content during their class such as watching videos online or watching other social media users' content (Twun et al., 2021). The attractiveness of content in social media will lead students to widespread use of social media and affect their efficiency of study. Social media allows users to search for any content online and watch it instantly to meet their personal needs (Balakrishnan & Griffiths, 2017), and lead to addiction. This is aligned with the Uses and Gratification Theory. Therefore, this study postulated that:

H4: *There is a positive relationship between accessing online content and social media addiction.*

Gaming addiction, which is also defined as continuously playing with teammates in the virtual world. People who have gaming addiction have some of the symptoms such as playing at least 8 hours of games a day and they cannot control this situation. Addiction to games can cause people to procrastinate on the main tasks and ignore other tasks. People will use this technology to escape from reality or the problem that they are facing (Yayman & Bilgin, 2020). Social media addiction may be more common with teenagers because social media is accessible on smartphones and it is easy to access (Tras, 2019). According to Tullett-Prado et al. (2023), intensive use of social media in terms of gaming has been linked to the development of addictive behavior. Many youths and students spend more time playing online games rather than using social media to complete their main task. Accordingly, this study hypothesized that:

H5: *There is a positive relationship between gaming and social media addiction.*

3. Methodology

3.1 Research Design

This research utilized a quantitative design, where it aims to establish a relationship between two or more variables by using mathematics, computational, and statistics methods (Adedoyin, 2020). Quantitative design relates to data collection that can be quantified and statically processed. Besides, quantitative research begins with a problem statement, proposing an assumption or examining the research, checking the literature review, and performing quantitative data and analysis (Apuke, 2017). The study utilized the survey method, which is suitable for collecting data in cross-sectional studies.

3.2 Sampling Procedure

Purposive sampling is a type of non-probability sampling and it is also called judgment, selective and subjective sampling (Sharma, 2017). It is used to choose the people who answer the survey with certain criteria (Campwell et al., 2020). Researchers need to know what they are researching and find selected people who are willing to provide their knowledge and experience information (Etikan et al., 2015). Therefore, this study used purposive sampling to solicit the responses from the respondents by incorporating the screening questions such as "Do you use social media?" "Have you continuously used social media for more than 2 hours?" to filter invalid responses.

3.3 Instruments and Measurements

For the instrument, Section A will collect data with nominal and ordinal scales which ask participants' age, gender, income, nationality, employment, and education level, as well as the screening questions. Section B focuses on the exogenous variables which are cyberloafing activities (namely sharing, shopping, accessing online content, gaming, and real-time updating), where the items are adapted from Koay (2018). Section C is the endogenous variable which is social media addiction by adapting the items from Gokdas and Kuzucu (2019). Sections B and C were measured based on a Likert-type scale with the anchor 1 = strongly disagree, 2 = disagree, 3 = slightly agree, 4 = agree and 5 = strongly agree.

3.4 Data collection procedure

The data were collected through online surveys via platforms such as Facebook, WhatsApp, and email. Researchers seek permission to conduct the study through the introductory/ cover letter of the instrument, and the participation of the respondents is voluntary. Researchers ensured the respondents on data confidentiality and anonymity. The data were collected from Feb 2021 till the middle of March 2021.

4. Results and discussion

Based on Table 1, the majority of the respondents are young adults (18-25 years old) with the highest percentage of 90.6%. As for gender, most of the respondents are female (69.5%). Besides, nearly half of the respondent's household income is below RM2000 (47.8%). For this study, most of the respondents are Malaysian (95.6%), and always use social media regularly (85.2%). A majority of the respondents are educated, at least with a Bachelor's degree (78.0%). This also indicates that they are able to make wise decisions and are savvy with social media and new technology.

Table 1
Profile of respondents (n=318)

Profile	Frequency	Percentage (%)	Profile	Frequency	Percentage (%)
Age			Do you use social media?		
18-25	288	90.6	Rarely	3	0.9
26-33	25	7.8	Sometimes	44	13.8
34-39	5	1.5	Always	271	85.2
Gender			Nationality		
Male	97	30.5	Malaysia	304	95.6
Female	221	69.5	International	14	4.4
Household income level			Employment		
Below RM2000	152	47.8	Unemployed	18	5.7
RM1000-RM3000	44	13.8	Part-Time	27	8.5
RM3000-RM5000	59	18.6	Employed	41	12.9
More than RM5000	63	19.8	Self-Employed	6	1.9
			Student	226	71.1
Education Level					
High School	5	1.6			
Diploma	34	10.7			
Degree	248	78.0			
Master	29	9.1			
Ph.D.	2	0.6			

4.1 Measurement model

Factor loadings and composite reliability can assess the reliability of a construct (Henseler et al., 2009). Table 2 indicates that the loading of all items on each construction exceeds the threshold value of 0.60 as suggested by Byrne (2016), and Cronbach's α value of each construction surpassed 0.70. Then, the convergence validity was evaluated through the Average Variance Extracted (AVE). As shown in Table 2, the AVE values of all constructs were higher than the cut-off value of 0.50, thus establishing convergence validity (Hair et al., 2017).

Table 2
Loading, composite reliability, and AVE measures

Variables	Items	Loadings	Cronbach's Alpha	CR	AVE
Accessing online content (AOC)	AOC1	0.851	0.853	0.894	0.629
	AOC2	0.758			
	AOC3	0.676			
	AOC4	0.886			
	AOC5	0.778			
Gaming (GM)	GM1	0.896	0.921	0.944	0.808
	GM2	0.889			
	GM3	0.930			
	GM4	0.880			
Real-Time Updating (RTU)	RTU1	0.818	0.872	0.908	0.663
	RTU2	0.837			
	RTU3	0.745			
	RTU4	0.842			
	RTU5	0.826			
Social media addiction (SMA)	SMA1	0.631	0.830	0.875	0.541
	SMA2	0.700			
	SMA4	0.659			
	SMA5	0.777			
	SMA6	0.795			
	SMA7	0.829			
	Sharing (Sha)	Sha1			
Sha2		0.721			
Sha3		0.817			
Sha4		0.734			
Sha5		0.788			
Sha6		0.819			
Sha7		0.773			
Sha8		0.655			
Sha9		0.737			
Shopping (Sho)	Sho1	0.856	0.919	0.936	0.675
	Sho2	0.889			
	Sho3	0.858			
	Sho4	0.838			
	Sho5	0.750			
	Sho6	0.775			
	Sho7	0.776			

Moreover, Heterotraits-Monotrait Ratio (HTMT) is used to determine the discriminant validity test. Since there is one construct where the value is more than 0.902, thus, researchers applied $HTMT_{inference}$ as a liberal criterion (Henseler et al., 2015).

In the complete bootstrapping procedure with 5,000 resamples the results show that all upper bounds of HTMT confidence intervals do not more than a value of one. Hence, discriminant validity was established for all the constructs.

Table 3
Heterotrait-Monotrait Ratio (HTMT)

	AOC	GM	RTU	Sha	Sho	SMA
AOC						
GM	0.788 (0.722-0.846)					
RTU	0.764 (0.690-0.829)	0.644 (0.568-0.712)				
Sha	0.784 (0.726-0.836)	0.665 (0.595-0.729)	0.902 (0.856-0.944)			
Sho	0.778 (0.715-0.835)	0.712 (0.646-0.774)	0.757 (0.699-0.810)	0.786 (0.732-0.834)		
SMA	0.589 (0.505-0.671)	0.495 (0.407-0.579)	0.813 (0.756-0.866)	0.805 (0.753-0.854)	0.562 (0.480-0.641)	

4.2 Structural model

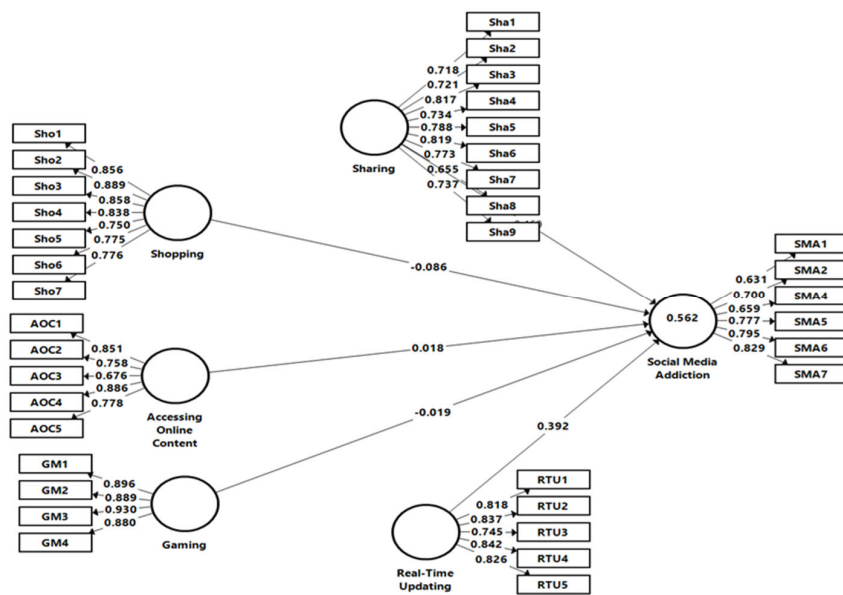


Fig. 1. Structural model

As demonstrated in Table 4, sharing ($\beta = 0.460, t = 6.312, p < 0.001$) and real-time updating ($\beta = 0.392, t = 5.530, p < 0.001$) is positively and significantly related to social media addiction, which supports H1 and H3. However, H2 ($\beta = -0.086, t = 1.337, p > 0.001$), H4 ($\beta = 0.018, t = 0.277, p > 0.001$), and H5 ($\beta = -0.019, t = 0.344, p > 0.001$) were rejected.

Table 4
Direct Effects of hypothesis testing

Path	Std Beta	Std. error	T	P	LLCI (5%)	ULCI (95%)	Decision
H1: Sha → SMA	0.460	0.073	6.312**	0.000	0.337	0.574	S
H2: Sho → SMA	-0.086	0.064	1.337	0.091	-0.190	0.020	NS
H3: RTU → SMA	0.392	0.071	5.530**	0.000	0.281	0.516	S
H4: AOC → SMA	0.018	0.067	0.277	0.391	-0.095	0.124	NS
H5: GM → SMA	-0.019	0.054	0.344	0.365	-0.108	0.072	NS

Note: AOC= Access Online Content; GM= Gaming; RTU= Real-Time Updating; Sha= Sharing; Sho= Shopping; SMA= Social Media Addiction; LLCI = Lower Limit Confidence Interval; ULCI = Upper Level Confidence Interval; S = Supported; NS = Not supported
** $p < 0.01$; 1-tailed test

This study used the variance inflation factor (VIF) to evaluate multicollinearity (Table 5). The VIF value of the five exogenous variables in this study was below the value of 5 thresholds (Akinwande et al., 2015), thus indicating that there is no multicollinearity problem in this study. In addition, f^2 values of 0.35, 0.15, and 0.02, respectively, represent large, medium, and small effect sizes (Cohen, 1988). Table 5 indicated that assessing online content, gaming, and shopping exerted a small effect on social media addiction, and real-time updating (0.113) and sharing (0.137) exerted a medium effect on social media addiction. The result showed that the R^2 value was 0.562, which means that this model can explain 56.2% of social media addiction.

Furthermore, Table 5 indicates blindfolding procedure results, social media addiction ($Q^2=0.294$), which is greater than 0, which suggests that the model has sufficient predictive ability.

Table 5
VIF, R^2 , f^2 , and Q^2 values

Variables	Social media addiction			
	VIF	f^2	R^2	Q^2
Accessing Online Content	2.781	0.000	0.562	0.294
Gaming	2.239	0.000		
Real-Time Updating	3.101	0.113		
Sharing	3.526	0.137		
Shopping	2.671	0.006		

Additionally, the present study also applied PLSpredict (Shmueli et al., 2019) to analyze the predictive relevance of the model to the out-of-sample prediction. As shown in Table 6, there is medium predictive power for social media addiction.

Table 6
PLS Predict

	PLS-SEM		LM		PLS-SEM- LM	
	RMSE	Q^2 predict	RMSE	Q^2 predict	RMSE	Q^2 predict
SMA2	0.943	0.224	0.950	0.213	-0.007	0.011
SMA1	0.916	0.160	0.900	0.189	0.016	-0.029
SMA6	1.050	0.364	1.084	0.323	-0.034	0.041
SMA7	1.054	0.400	1.105	0.341	-0.051	0.059
SMA5	0.865	0.400	0.894	0.359	-0.029	0.041
SMA4	1.036	0.184	1.102	0.075	-0.066	0.109

In Zhao's (2021) study, there are similar ideas of a positive association between sharing and social media addiction. He highlighted that social media is communication and involvement such as sharing, updating status, or commenting on other user's posts (Wang et al., 2014). The finding in this study suggested that sharing is the stronger predictor ($\beta = 0.406$) which explains social media addiction. Real-time updating and social media addiction was supported which aligned with the notion of (Twium et al., 2021; Judita, 2021). Real-time updating is social media users want to update their content at any time. Thus, it is possible that real-time updating has a positive relationship with social media addiction. Previous studies such as (Andreasen et al., 2016) findings show that there is a relationship between additive video games and social media addiction. However, this study found out differently, where gaming is not a predictor of social media addiction. Besides, accessing online content and social media addiction were also not significantly related, which contradicted the study of Balakrishnan and Griffiths (2017) which found a substantial positive link between social happiness and the inclination to consume YouTube content. The possible reason is that there are various online contents and types of games in social media, which will vary depending on the interest of the users, thus, each individual might have different interests and favourites for the game and content, where the current study also did not examine which genres of the game and content that prefer by the users, which may justify and explain the insignificant results. Besides, Nasidi et al. (2022) study proposed that social media is linked to internet shopping behavior. However, the current study found contradicting results. A possible explanation is that the current demographic profile of the respondents are mostly young adults with a monthly income of less than RM2000. Thus, even though this group of respondents may be educated and technology savvy, they might not have enough purchasing power to engage in excessive online shopping. Therefore, this may explain why online shopping as a cyberloafing activity is not directly related to the addiction of social media.

5. Conclusion

This study intended to find the cyberloafing activities dimension as the predictors in explaining social media addiction. The results found that sharing and real-time updating are the 2 cyberloafing activities (predictors) that lead to social media addiction among young netizens.

5.1 Implications of the study

This study contributed to the U&G Theory, which explained the motives behind why an individual uses the media. Hence, based on that notion, this study utilized that notion and applied it to cyberloafing activities, where accessing online content, gaming, real-time updating, sharing, and shopping are the motives of people cyberloafing which leads to social media addiction. This added a new perspective to the current social media scholarship. In terms of practical implication, this study also helps government agencies such as Malaysian Communication and Multimedia Commission (MCMC) to come out with solutions to cater to the addiction among netizens and youths. Josh Hawley advocated that the government limit users' ability to update social media after scrolling to a certain point. Furthermore, many social media platforms, such as YouTube and Facebook, include an auto-play feature. Josh Hawley also advocated removing this feature and replacing it with an active click on the video. In some cases, this step can help people avoid becoming addicted to social media. He also recommends setting a

time limit of 30 minutes for using social media to avoid misuse (Pagoto, 2019). Besides, this research can help students and employees to raise people's vigilance against social media addiction and try to avoid the occurrence of cyberloafing.

5.2 Limitations and Recommendations of Future Research

There are some limitations in this study. Firstly, this study only targeted the Malaysian setting. However, the situation of social media addiction and cyberloafing may be more serious abroad than in Malaysia. Foreign countries are more open than Malaysia, for example, schools in foreign countries can bring mobile phones to their school. This might increase the level of social media addiction and cyberloafing. Therefore, future research can try to conduct and collect data in other foreign countries/ regions, so that comparison studies can be carried out. Besides, most of the respondents are between the age group of 18-25 years old. Hence, future research can collect equal sample size/data for each category of age group, so that multigroup (MGA) analysis and comparisons of the study can be done. As this study only looks from the positivist viewpoints, future studies can carry out mixed methods by combining cross-sectional survey with a qualitative method such as the in-depth interview, in order to get more detailed insights into the motives why people do cyberloafing, which have the potential to expand the cyberloafing activities dimension. In addition, this study only focused on the direct relationship, and all the predictors only can predict 56.2%. In other words, other potential variables are currently not being investigated. Thus, future studies can include variables such as digital literacy, fear of missing out (FOMO) (Gürbüz et al., 2023), and perceived stress, as well as demographic variables to test the mediating and moderating roles of these variables to make the model more robust and contribute to the media and communication technology scholarship.

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