

THE RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION AND SOCIAL ANXIETY AMONG UNIVERSITY SELANGOR (UNISEL) STUDENTS

NUR ANIS SYAFIQAH JALIL

University Selangor
anishsha2004@gmail.com

NURULIMAN MOHD KHAIZAN

University Selangor
hyunniezzz2004@gmail.com

KHAIRISA BALQIS BAHARIN KAMSUN BAHARIN

University Selangor
kbbaharin02@gmail.com

NUR MUNEERAH KASIM

University Selangor
muneerah@unisel.edu.my

Abstract

Social media is a network of online platforms and technologies that provides a valuable space for individuals to connect and communicate with each other. However, the excessive use of social media can lead to the emergence of social media addiction and subsequently increased negative consequences on users' mental health. Hence, this study wants to investigate the relationship between social media addiction and social anxiety among students at the University of Selangor (UNISEL). This study applied a quantitative approach to explore the issues of social media addiction and social anxiety. For data collection, 101 students from UNISEL responded to the questionnaire by filling in Google Forms. The items of the questionnaire are adapted from the Bergen Social Media Addiction Scale (BSMAS) and the Interaction Anxiety Scale (IAS). Then, to answer the research hypothesis, the data was analyzed through a statistical software, Statistical Packages for Social Sciences (SPSS) by carrying out a Pearson's correlation test. The findings discovered that there is no significant relationship between social media addiction and social anxiety, thus the hypothesis is rejected. The absence of significant findings might be ascribed to various reasons, including the participants' demographic and cultural backgrounds, the limits of the measuring instruments, and the specific nature of social media use among UNISEL students. Therefore, this study may be beneficial for future researchers and stakeholders to better understand the issues of social media addiction and social anxiety, which can mitigate the risks or possible factors of these issues.

Keywords: *Social Media, Social Media Addiction, Social Anxiety, UNISEL Student.*

1.0 INTRODUCTION

In today's digital era, social media has drastically replaced the traditional way people communicate and interact. Social media has become an important driver for acquiring and spreading information in various domains such as business, education, entertainment, crisis management, and politics (Stieglitz et al., 2018). The widespread use of social media has changed the trend in our communication, education, social life, and working environment. Besides, it has grown into an effective tool for facilitating collaboration and the dissemination of information because of its ability to ease the sharing of knowledge in both personal and professional contexts (Yunis Ali Ahmed et al., 2019; Kasim et al., 2022).

The growing popularity of social media raises many questions about why societies like parents and students use it so much (Hruska, & Maresova, 2020). From the emergence of influencer culture to democratizing knowledge, social media has transformed how people interact with content and entertainment. As societies get engrossed in the unending scroll of posts and likes, it is necessary to critically assess the influence of societies' digital footprint on the fascination or addiction to social media. With the increasing expansion and popularity of social media, there has been an increase in studies studying the correlations between its use and individuals' well-being (Cingel, Carter, & Krause, 2022).

Individuals can use social media to use leisure time and communicate with others to meet emotional and psychological needs (Jarrar et al., 2022). In Malaysia, the Department of Statistics Malaysia (2020) reported that 91.7% of Malaysian households had access to the Internet via smartphones (98.2%) and computers (80.0%) and that the prevalence of internet use was 89.6% (Tung et al., 2022). Approximately 83.1% of Malaysians were active social media users as of January 2024. Compared to 2023, when social media users made up over 78.5 percent of Malaysia's entire population, this represented a growth of 4.6%. This shows that Malaysians, especially young adults, are prone to have an addiction to social media due to the excessive use of social media widely used in everyday lives.

According to Chen et al. (2022), the excessive use of the internet has led to social media addiction. Besides, the usage of smartphones in daily life makes people addicted to social media, such as social networking sites and online video games (Tung et al., 2022). Social media addiction refers to the compulsive and excessive use of social networking platforms that leads to negative consequences and adverse outcomes (Zhao et al., 2022). Furthermore, social media usage is common nowadays, especially among youngsters. As time goes by, the excessive use of social media is found to be connected to loneliness and social anxiety (O'Day & Hemberg, 2021; Yukti & Waraich, 2023). An individual's attachment to social media can lead to behavioral addictions, such as social media addiction (Altuwairiqi et al., 2019). Beside of the study, one of the signs of this kind of addiction is mood swings brought on by the person's experiences on social media.

The link between social media addiction and social anxiety can lead to a vicious cycle with negative consequences for mental health. Passive social media use, such as scrolling without interaction, leads to increased loneliness, isolation, and social anxiety, with Bournemouth University showing higher levels of anxiety, depression, and stress among passive users (Panourgia.C, 2023; Mitchell, B, 2023). In addition, social anxiety happens in individuals due to spending on social media usage until it affects individual communication capacity which is related to self-presentation theory (Schlenker & Leary, 1982; Lai et al., 2023). Prolonged engagement with social media platforms can disrupt sleep patterns and quality (Zeb et al., 2023). The constant connectivity and notifications may disrupt users' regular sleep schedules, which leads to sleep disturbances and fatigue. Hence, these conditions can affect user's mental health and physical well-being.

Due to the several consequences of social media addiction on mental health, this is essential to understand the risk potential of social media addiction to feelings of social anxiety among users, particularly students. To fill this gap, this study aims to investigate the relationship between social media addiction and social anxiety. Hence, the research question and research objectives of this study are as follows:

RQ₁: What is the relationship between social media addiction and social anxiety among university students?

RO₁: To examine the relationship between social media addiction and social anxiety among university students.

2.0 LITERATURE REVIEW

2.1 COGNITIVE-BEHAVIORAL MODEL

According to the Cognitive-Behavioral Model, social media addiction can result in maladaptive cognitive patterns and behaviors that increase social anxiety symptoms. Individuals hooked to social media, for example, may acquire negative habitual thoughts about social interactions, which can exacerbate anxiety in real-life social situations (Ahmed & Vaghefi, 2021). According to research, cognitive distortions associated with social media addiction are linked to greater social anxiety symptoms (Casale & Fioravanti, 2018).

The Cognitive-Behavioral Model highlights the role of cognitive distortions in the relationship between social media addiction and social anxiety. However, further exploration is needed to understand the specific cognitive processes that mediate this relationship.

2.2. THE RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION AND SOCIAL ANXIETY

In recent years, the growing acceptance of social media addiction has aroused serious worries about its possible influence on mental health, particularly among university students who are in the early stages of social and cognitive development (Verma, 2024). A study by Naslund et al. (2020) found that regular addiction to social media platforms may enhance social anxiety symptoms due to increased social comparisons and cyberbullying events (Abd Ajis et al., 2022). Besides the study, using Instagram alone would not necessarily increase people's social anxiety. Instead, self-esteem and social comparison completely mitigated its effects. Future research should look at the mechanisms that underpin the impacts of social media on emotional well-being (Naslund et al., 2020).

An individual's attachment to social media can lead to behavioral addictions, such as social media addiction. One of the signs of this kind of addiction is mood swings brought on by the person's experiences on social media (Altuwairiqi et al., 2019). Excessive social media addiction is positively correlated with anxiety in young adults, with higher addiction prevalence in students (Taha et al., 2023). Controlling screen time and site programming are suggested preventive measures (Taha et al., 2023).

According to Deshpande (2024), inappropriate or excessive addiction to social media might worsen social anxiety symptoms among university students. Besides the previous studies, passive social media use, such as browsing through feeds without active involvement, is linked to higher levels of social anxiety and other bad effects, such as poor academic performance and body dissatisfaction (Mou et al., 2024).

In addition, a previous study discovered that university students who show early signs of social media addiction are more likely to feel social anxiety, owing to the fear of missing out (FOMO) and perceived social pressure (Gupta & Sharma, 2021). FOMO is the fear of

missing joyful and rewarding things, along with the urge to continually keep connected with individuals in one's social network (Alutybi et al., 2020). FOMO is associated with a negative emotional state and is linked to depression and anxiety severity (Dhir et al., 2018; Elhai et al., 2020).

The relationship between social media addiction and social anxiety is complex, influenced by factors such as self-esteem and FOMO. While current research highlights significant correlations, there remains a need for deeper analysis of the underlying mechanisms at play. Future studies should focus on how different types of social media use affect various demographic groups differently. A synthesis of relevant findings can be found in Table 1.0 Summary of Literature Review on the next page, highlighting how different factors contribute to the link between social media addiction and social anxiety.

Table 1.0 Summary of literature review

Author Year	& Sample	Findings
Ahmed and Vaghefi (2021)	132 papers review of social media addiction literature from 2008-2019.	The findings reveal that social media addiction has an unhealthy effect on one's physical and mental health, interpersonal connections, and ability to function at work. In particular, addiction raises stress levels, interferes with sleep, and is associated with social anxiety and melancholy. Additionally, it impairs productivity and academic achievement and erodes social ties, which results in relationship dissatisfaction. These findings demonstrate a robust correlation between the emergence of social anxiety and social media addiction.
Beyari (2023)	385 young people in Saudi Arabia	Findings suggested that social media features such as likes, comments, and followers were the biggest contributors to poor mental health
Altuwairiqi et al. (2019)	Using a four-phase of qualitative study	Research suggests that tools can be provided to assist the change of problematic attachment behavior, but it remains unclear how such tools should be designed and personalized to meet individual needs and profiles.
Taha et al. (2023)	230 university students	The findings revealed a positive correlation between students' social media addiction levels and their experiences of anxiety and depression. These results

			suggest that anxiety and depression variables significantly predict social media addiction.
Mou et al. (2024)	1 2661 college students		Results indicated that social anxiety was negatively related to academic performance, only academic engagement played a single mediating role in the relationship between social anxiety and academic performance, meanwhile, social media addiction and academic engagement acted as serial mediators between social anxiety and academic performance.
Verma (2024)	30 participants		The finding discovered that there is a negative relationship between social media and anxiety along with many negative consequences. These consequences majorly consist of poor sleep quality, low self-esteem, symptoms of anxiety, and in some cases depression as well.

Based on Table 1.0, the majority of findings of previous studies demonstrated that university students with greater levels of social media addiction are more likely to suffer from social anxiety over time. Furthermore, the current study highlights the significance of problematic social media usage in leading to anxiety disorders, particularly among young adults who are still figuring out their social identities (Dhir et al., 2018). Collectively, these findings provide a solid framework for hypothesizing that social media addiction is positively associated with social anxiety among university students. Thus, the research hypothesis of this study is presented as follows:

RH₁: *There is a relationship between social media addiction and social anxiety among university students.*

2.3 THE CONCEPTUAL FRAMEWORK

This figure visualizes the expected relationship between variables in this study. The independent variable is social media addiction, and the dependent variable is social anxiety.



Figure 1: The proposed conceptual framework of the relationship between Social Media Addiction and Social Anxiety among UNISEL students.

3.0 METHODOLOGY

3.1 RESEARCH DESIGN

The research design of this study is a quantitative approach. Ahmad et al., (2019) mentioned that the social sciences rely heavily on quantitative research methods. Numerical analysis is a methodology for studying psychological, social, and economic phenomena using numerical patterns. Quantitative research gathers a range of numeric data. The quantitative findings from the study may serve as the foundation for the right distribution and allocation of the external advantages of installing prefabricated structures, which can contribute to the long-term growth of the construction industry and society (Zhou, Li, & Ren, 2022).

3.2 SAMPLING

The sample consisted of 101 students (year 1, year 2, and year 3) from different faculties at the University of Selangor (UNISEL), Bestari Jaya, and Shah Alam. The selection of the participants was the result of non-probability which is a convenience sampling. Non-probability sampling involves selecting a sample based on the researcher's subjective judgment rather than randomly (Elfil & Negida, 2017; Berndt, 2020). Non-probability sampling cannot be considered random as to participate in a survey, users must opt in or sign up to be added to a pool of respondents (Lamm & Lamm, 2019).

3.2 INSTRUMENTS

Bergen Social Media Addiction Scale (BSMAS) which was invented by Andreassen et al. (2016) (Leung et al., 2020) was used to study social media addiction among UNISEL students. It has 6 items. Griffiths (2000; 2005) proposed six items' components to assess social media addiction: salience, mood, modification, tolerance, withdrawal conflict, and relapse (Leung et al., 2020). Participants rate their experience with social media on a five-point Likert scale, ranging from 1 (very rarely) to 5 (very often). A higher BSMAS score suggests an increased chance of acquiring a social media addiction (Leung et al., 2020). While a lower score indicates a lower chance of acquiring social media addiction.

Interaction Anxiousness Scales (IAS) by Leary (1983) was to study UNISEL students' social anxiety. It consists of 15 questions but only 10 questions were used in the online survey. The IAS (Leary, 1983) was designed to assess primarily the affective dimension of social discomfort (Leary & Kowalski, 1993). The IAS includes 15 anxiety-inducing circumstances, such as contact with strangers, parties, authoritative figures, cross-sex encounters, informal talks, job interviews, phone conversations, and more (Leary & Kowalski, 1993).

3.3 DATA COLLECTION PROCEDURE AND DATA ANALYSIS

This study employed self-administered questionnaires (SAQ) by using an online survey as a tool to collect primary data. The online survey was first given via WhatsApp to various groups of classes and clubs. Students accessed the online survey using a website and a QR code to log into Google Forms. The survey was sent from the closest contact to the anonymous respondents in UNISEL. The survey was carried out in May and ended in June. For data analysis, this study applied SPSS to use for analyzing descriptive data and inferential data.

4.0 RESULT

4.1 DESCRIPTIVE ANALYSIS

Demographically Table 1, represents the 101 respondents. The ages of the respondents among UNISEL's students ranged from 18 to 26. The percentage of 18-20 (53.5%) is more than 21-23 (41.6%) and 24-26 (5.0%). The Malay percentage (84.2) is higher than the other races. In terms of gender distribution, the female percentage is 75.2% and the male percentage is 24.8% which indicates that the male percentage is lesser than the female. While the Faculty of Education and Social Sciences (56.4) is above all the UNISEL's faculties.

Table 4.1 Demographic information of the respondent

Type	Categories	Frequency (n)	Percentage (%)
Age	18-20	54	53.5
	21-23	42	41.6
	24-26	5	5.0
Race	Malay	85	84.2
	Chinese	1	1.0
	Indian	14	13.9
	Others	1	1.0
Gender	Male	25	24.8
	Female	76	75.2
Faculty	Faculty of Communication, Visual Art and Computing, CVAC.	18	17.8
	Faculty of Engineering and Life Sciences, FELS.	7	6.9
	Faculty of Health Sciences, FHS.	3	3.0
	Faculty of Education and Social Sciences, FESS.	57	56.4
	Faculty of Business and Accountancy, FBA.	12	11.9
	Centre for Foundation and General Studies, CFGS.	4	4.0

4.2 INFERENTIAL ANALYSIS

The Pearson correlation coefficient was utilized to assess the substantial association between social media addiction and social anxiety among UNISEL students. Below is a table (**Table 4.2**) about the correlation between social media addiction and social anxiety among students in UNISEL that has been analyzed. Its finding states that there is no relationship between the two because the p -value (0.907) is above the p -value of 0.05. Hence, there is no relationship between social media addiction and social anxiety among University Selangor (UNISEL) students.

Table 4.2: Correlation between social media addiction and social anxiety.

	SMA	SA	
Social Media Addiction (SMA)	Pearson Correlation	1	-.012
	Sig. (2-tailed)		.907
	N	100	100
Social Anxiety (SA)	Pearson Correlation	-.012	1
	Sig.	.907	

5.0 DISCUSSION

This study revealed no correlation between social media addiction and social anxiety among students at the University of Selangor (UNISEL). This shows that social media addiction is not directly related to social anxiety among students. The way that UNISEL students use social media may be different from other demographics, which might affect the study's findings. It's conceivable that UNISEL students use coping methods to lessen the potential negative impacts of their social media use, or that their interactions with the platform do not worsen social anxiety. Sun et al. (2023) stress that a person's use of social media greatly influences its psychological effects. Passive consumption, such as surfing or seeing without involvement, may have different benefits than active engagement, like participating in debates and generating material.

Additionally, Sun et al. 's (2023) study discovered that the context and style of use greatly influence social media use's psychological effects. The effects on social anxiety may be less severe than those seen in research focussing on more passive or problematic use if university students use social media primarily for professional networking, academic goals, or good social interactions (Sun et al., 2023), specifically in UNISEL. The lack of a substantial connection between social media addiction and social anxiety in this study may be attributed to these differences in usage habits. This suggests that when examining social media addiction among university students, it is crucial to consider not only the amount of use but also the purpose and quality of engagement, as these factors may buffer against negative psychological outcomes such as social anxiety.

Despite these well-documented findings, our study did not observe a significant correlation between Social Media Addiction (SMA) and Social Anxiety (SA). One reason for this mismatch is our study's unique demographics and sample size. The sample included 101 students from various faculties at UNISEL, with the majority of respondents being female (75.2%) and Malay (84.2%). These demographic characteristics may have impacted the results since cultural and social circumstances can play a critical role in how social media consumption affects psychological well-being.

There are several possible explanations for the lack of a significant relationship in this study: the sample's cultural and demographic background may have a big impact on the outcomes that are seen. The majority of the study's participants were female and were from the social science and education faculties. The findings' ability to be applied generally may be

impacted by this demographic bias. Dhir et al. (2020) point out that demographic variables including age, gender, and educational background might affect how people use social media and perceive its effects. According to their research, social norms and cultural expectations influence how various groups see and interact with social media. According to Dhir et al. (2020), female students could face distinct social media pressures and expectations in comparison to their male peers, which could have an impact on their social anxiety levels.

Furthermore, Malaysian cultural norms may influence social media addiction and the consequences that come with it. Students' experiences with and reporting of social anxiety may be influenced by cultural perspectives on social media and mental health. According to research like that done by Lee et al. (2021), cultural variables are a major determinant of the psychological impacts of social media use. The results of the study may be impacted by the particular coping strategies or cultural expectations that Malaysian students have, which may attenuate the association between social media addiction and social anxiety.

The Bergen Social Media Addiction Scale (BSMAS) and the Interaction Anxiousness Scale (IAS), which are widely recognized instruments for measuring social media addiction and anxiety, might not fully account for the entire extent of social media's influence on social anxiety in Malaysian university students. Despite being approved for widespread use, the BSMAS could not adequately take into consideration contextual and cultural variations in social media usage (Andreassen et al., 2016). Similarly, not all components of social media-induced anxiety may be covered by the IAS, which focuses on interactional anxiety, especially in a culturally unique setting.

According to Montenegro and Jankowski (2017), people from diverse cultural backgrounds may have complex experiences that are not always accurately captured by traditional assessment instruments. The primary focus of the IAS is on evaluating the emotional aspects of anxiety, which may not fully account for the distinct ways social media affects social anxiety among students in Malaysia. The fact that these assessment instruments did not adequately address the intricacy of social media usage and its psychological effects in this particular group may be the reason for the absence of noteworthy results.

6.0 LIMITATION AND RECOMMENDATION

Despite its insightfulness, this study has several limitations that should be noted. First off, the results' potential to be broadly applied may be restricted by the convenience and non-probability sampling techniques used. The sample size of 101 UNISEL students may not be a true representation of the larger number of university students in Malaysia or other countries. To improve the generalisability of the findings, bigger and more varied sample sizes should be the goal of future studies.

Second, the study's cross-sectional approach limits the capacity to draw causal conclusions about social media addiction and social anxiety. Longitudinal studies might give stronger evidence by recording changes over time and showing temporal correlations between factors. Furthermore, the reliance on self-reported data may add bias, as individuals may under or exaggerate their social media addiction and anxiety levels due to social desirability or recollection bias. Incorporating objective measurements, such as tracking real social media activity or doing professional assessments of anxiety, might yield more reliable results.

Lastly, the study's survey approach, which was mostly performed online, may have eliminated those who had poor internet access or were less likely to engage in online surveys, thereby skewing the sample. Future research should take a mixed-methods approach, combining online and in-person data collecting to create a more inclusive and representative sample.

7.0 CONCLUSION

This study aimed to look into the relationship between social media addiction and social anxiety among students at the University of Selangor. Despite a growing body of research indicating a strong correlation between these two variables, the finding of this study did not find a significant relationship. Several factors might account for this finding, including the demographic and cultural background of UNISEL students, the measuring instruments utilized, and the type of social media addiction among participants. In conclusion, this study adds to the continuing discussion about social media addiction and social anxiety by providing empirical evidence from a Malaysian higher education context, specifically among University Selangor (UNISEL) students. This study emphasises the need for context-specific research to understand these concerns in varied communities better. By addressing the highlighted limitations and implementing the proposed techniques, future research can give more thorough insights into the link between social media usage and psychological well-being among university students.

REFERENCES

- Ahmad, S., Wasim, S., Irfan, S., Gogoi, S., Srivastava, A., & Farheen, Z. (2019). Qualitative v/s. quantitative research-a summarized review. *Population*, 1(2), 2828-2832.
- Ahmed, E., & Vaghefi, I. (2021). *Social media addiction: A systematic review through Cognitive-behavior model of pathological use*. Proceedings of the Annual Hawaii International Conference on System Sciences. <https://doi.org/10.24251/hicss.2021.802>
- Altuwairiqi, M., Jiang, N., & Ali, R. (2019). Problematic attachment to social media: five behavioural archetypes. *International Journal of Environmental Research and Public Health*, 16(12), 2136. <https://doi.org/10.3390/ijerph16122136>
- Alutaybi, A., Al-Thani, D., McAlaney, J., & Ali, R. (2020). Combating fear of missing out (FoMO) on social media: The FoMO-R method. *International Journal of Environmental Research and Public Health*, 17(17), 6128. <https://doi.org/10.3390/ijerph17176128>
- Andreassen, C. S., Billieux, J., Griffiths, M. D., Kuss, D. J., Demetrovics, Z., Mazzoni, E., & Pallesen, S. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorder: A large-scale cross-sectional study. *Psychology of Addictive Behaviors*, 30(2), 252-262. <https://doi.org/10.1037/adb0000160>
- Berndt, A. E. (2020). Sampling methods. *Journal of Human Lactation*, 36(2), 224-226.
- Casale, S., Rugai, L., & Fioravanti, G. (2018). Exploring the role of positive metacognitions in explaining the association between the fear of missing out and social media addiction. *Addictive Behaviors*, 85, 83-87. <https://doi.org/10.1016/j.addbeh.2018.05.020>
- Chen, Z., Tian, F., & Wang, C. (2023). Social media usage and anxiety: An overview of intermediary factors. *Lecture Notes in Education Psychology and Public Media*, 12(1), 263-269. <https://doi.org/10.54254/2753-7048/12/20230826>
- Cingel, D. P., Carter, M. C., & Krause, H-V. (2022). Social media and Self-esteem. *Current Opinion in Psychology*, 45, 101304. <https://doi.org/10.1016/j.copsyc.2022.101304>
- Deshpande, M. (2024). The relationship between social media and anxiety. *International Journal of Research Publication and Reviews* 5(6), 4135-4138. <https://ijrpr.com/uploads/V5ISSUE6/IJRPR30225.pdf>
- Dhir, A., Yossatorn, Y., Kaur, P., & Chen, S. (2018). Online social media fatigue and psychological wellbeing—A study of compulsive use, fear of missing out, fatigue,

- anxiety and depression. *International Journal of Information Management*, 40, 141–152. <https://doi.org/10.1016/j.ijinfomgt.2018.01.012>
- Elfil, M., & Negida, A. (2017). Sampling methods in clinical research; an educational review. *Emergency*, 5(1). <https://pmc.ncbi.nlm.nih.gov/articles/PMC5325924/>
- Elhai, J. D., Yang, H., Fang, J., Bai, X., & Hall, B. J. (2020). Depression and anxiety symptoms are related to problematic smartphone use severity in Chinese young adults: Fear of missing out as a mediator. *Addictive Behaviors*, 101, 105962. <https://doi.org/10.1016/j.addbeh.2019.04.020>
- Ergün, N., Özkan, Z., & Griffiths, M. D. (2023). Social media addiction and poor mental health: Examining the mediating roles of internet addiction and phubbing. *Psychological reports*, 128(2), 723-743. <https://doi.org/10.1177/00332941231166609>
- Griffiths, M. D. (2000). Internet addiction - Time to be taken seriously? *Addiction Research*, 8(5), 413–418. <https://doi.org/10.3109/16066350009005587>
- Griffiths, M. D. (2005). A ‘components’ model of addiction within a biopsychosocial framework. *Journal of Substance Use*, 10(4), 191-197. <https://doi.org/10.1080/14659890500114359>
- Gupta, M., & Sharma, A. (2021). Fear of missing out: A brief overview of origin, theoretical underpinnings and relationship with mental health. *World Journal of Clinical Cases*, 9(19), 4881–4889. <https://doi.org/10.12998/wjcc.v9.i19.4881>
- Hruska, J., & Maresova, P. (2020). Use of social media platforms among adults in the United States - behavior on social media. *Societies*, 10(1), 27. <https://doi.org/10.3390/soc10010027>
- Hysa, B., Karasek, A., & Zdonek, I. (2021). Social media usage by different generations as a tool for sustainable tourism marketing in society 5.0 idea. *Sustainability*, 13(3), 1018. <https://doi.org/10.3390/su13031018>
- Jarrar, Y., Awobamise, A. O., & Nweke, G. E. (2022). The mediating effect of social anxiety on the relationship between social media use and body dissatisfaction among university students. *Frontiers in Communication*, 7. <https://doi.org/10.3389/fcomm.2022.900257>
- Kasim, N. M., Fauzi, M. A., Yusuf, M. F., & Wider, W. (2022). The effect of WhatsApp usage on employee innovative performance at the workplace: perspective from the stressor–strain outcome model. *Behavioral Sciences*, 12(11), 456.
- Lai, F., Wang, L., Zhang, J., Shan, S., Chen, J., & Tian, L. (2023). Relationship between social media use and social anxiety in college students: Mediation effect of communication capacity. *International Journal of Environmental Research and Public Health*, 20(4), 3657. <https://doi.org/10.3390/ijerph20043657>
- Lamm, A. J., & Lamm, K. W. (2019). Using non-probability sampling methods in agricultural and extension education research. *Journal of International Agricultural and Extension Education*, 26(1), 52-59. <https://doi.org/10.5191/iaee.2019.26105>
- Leary, M. R. (1983). *Interaction Anxiousness Scale*. https://iaapsy.org/site/assets/documents/IAS_English.pdf
- Leary, M. R., & Kowalski, R. M. (1993). The Interaction Anxiousness Scale: Construct and criterion related validity. *Journal of Personality Assessment*, 61(1), 136-146. https://doi.org/10.1207/s15327752jpa6101_10
- Leung, H., Pakpour, A. H., Strong, C., Lin, Y., Tsai, M., Griffiths, M.D., Lin, C. & Chen, I (2020). Measurement invariance across young adults from Hong Kong and Taiwan among three internet-related addiction scales: Bergen social media addiction scale (BSMAS), smartphone application-based addiction scale (SABAS), and internet gaming addiction scale (IGAS). *Addictive Behaviors*, 101, 105969. <https://www.diva-portal.org/smash/get/diva2:1318367/FULLTEXT01.pdf>

- Mitchell, B. (2023). Passive scrolling on social media leads to anxiety and depression—new study. *The Independent*. <https://www.independent.co.uk/news/science/social-media-bournemouth-university-office-for-national-statistics-b2367223.html>
- Montenegro, E., & Jankowski, N. A. (2017). *Equity and assessment: Moving towards culturally responsive assessment* [Occasional Paper No. 29]. Urbana, IL: University of Illinois and Indiana University, National Institute for Learning Outcomes Assessment (NILOA). <https://files.eric.ed.gov/fulltext/ED574461.pdf>
- Mou, Q., Zhuang, J., Wu, Q., Zhong, Y., Dai, Q., Cao, X., Gao, Y., Lu, Q., & Zhao, M. (2024). Social media addiction and academic engagement as serial mediators between social anxiety and academic performance among college students. *BMC Psychology*, 12(1). <https://doi.org/10.1186/s40359-024-01635-7>
- Muhammad Khairul Annuar Abd Ajis, Nur Muneerah Kasim & Fitty Ayunee Ghazali (2022). Gender differences in cyberbullying victimization. *Selangor Humaniora Review*, 6(1), 51-60. <https://share.journals.unisel.edu.my/index.php/share/article/view/214>
- Naslund, J. A., Bondre, A., Torous, J., & Aschbrenner, K. A. (2020). Social media and mental health: Benefits, risks, and opportunities for research and practice. *Journal of Technology in Behavioral Science*, 5(3), 245–257. <https://doi.org/10.1007/s41347-020-00134-x>
- Nuzha Mohamed Taha, Intan Surianie Mahassan, Nur Adilah Aishah Nor Azman & Nur Aina Irman Zuwardi (2023). The relationship between social media addiction with anxiety and depression among undergraduate students in Klang Valley, Malaysia. *International Journal of Academic Research in Progressive Education and Development*, 12(3). <https://doi.org/10.6007/ijarped/v12-i3/17897>
- Parashar, Y., & Waraich, S. B. (2022). Relationship between social media usage and social anxiety among college students. *International Journal of Indian Psychology*, 11(4), 2260-2291. <https://ijip.in/wp-content/uploads/2023/12/18.01.210.20231104.pdf>
- Stieglitz, S., Mirbabaie, M., Ross, B., & Neuberger, C. (2018). Social media analytics challenges in topic discovery, data collection, and data preparation. *International journal of information management*, 39, 156-168. <https://doi.org/10.1016/j.ijinfomgt.2017.12.002>
- Sun, L. (2023). Social media usage and students' social anxiety, loneliness and well-being: Does digital mindfulness-based intervention effectively work? *BMC Psychology*, 11(1). <https://doi.org/10.1186/s40359-023-01398-7>
- Tung, S. E. H., Gan, W. Y., Chen, J. S., Ruckwongpatr, K., Pramukti, I., Nadhiroh, S. R., & Griffiths, M. D. (2022). Internet-related instruments (Bergen social media addiction scale, smartphone application-based addiction scale, internet gaming disorder scale-short form, and nomophobia questionnaire) and their associations with distress among Malaysian university students. *Healthcare* 10(8), 1448. <https://doi.org/10.3390/healthcare10081448>
- Verma, V. (2024). The Relationship between Social Media and Anxiety. *International Journal of Indian Psychology*, 12(3). <https://ijip.in/pdf-viewer/?id=44855>
- Yunis Ali Ahmed, Mohammad Nazir Ahmad, Norasnita Ahmad & Nor Hidayati Zakaria (2019). Social media for knowledge-sharing: A systematic literature review. *Telematics and Informatics*, 37, 72–112. <https://doi.org/10.1016/j.tele.2018.01.015>
- Zeb, R., Arzeen, S., Mumtaz, M., & Haroon, M. (2023). The perils of technology: Social networking addiction and anxiety. *Pakistan Journal of Medical & Health Sciences* 17(5), 507–512. <https://doi.org/10.53350/pjmhs2023175507>
- Zhao, J., Jia, T., Wang, X., Xiao, Y., & Wu, X. (2022). Risk factors associated with social media addiction: An exploratory study. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.837766>

Zhou, J., Li, Y., & Ren, D. (2020). Quantitative study on external benefits of prefabricated buildings: From perspectives of economy, environment, and society. *Sustainable Cities and Society*, 86, 104132.