

# FACTORS INFLUENCING NOMOPHOBIA AMONG UNDERGRADUATE STUDENTS IN UITM KEDAH

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#### ABSTRACT

Smartphones have become a necessity in our lives not only as a medium for communication but also as a trading platform for sellers and buyers. Initially, the users of smartphones were among those who are working but now even students use it as teaching and learning tools. The necessity for using smartphones among students emerged during the pandemic Covid-19 when all the classes were conducted online. Hence, the reliance on smartphones has skyrocketed but over-dependence may produce a negative impact on the users. Statistics showed that about 71.4% of Malaysians will check their smartphones even when it does not ring. It was stated that in Southeast Asia, Malaysia smartphone users used an average of 187 minutes per day which was the highest in hours spent on their devices. Hence, this research seeks to identify the factors influencing Nomophobia among undergraduate students in UiTM Kedah. A cross-sectional survey was conducted using a stratified random sampling technique among 214 undergraduate students and the result showed that they have a high level of nomophobia. This study has identified that all variables which are smartphone usage, smartphone addiction, and internet addiction tested have a strong correlation toward Nomophobia among the respondents.

Keywords: Nomophobia, Smartphone usage, Smartphone addiction, Internet addiction

# **1.0 INTRODUCTION**

Smartphone usage has grown crucial in this age group, as kids use them to play games, access social media, and music, and connect. Despite their benefits and popularity, excessive smartphone use may lead to Nomophobia which is described as the dread of losing the ability to communicate and access information, as well as losing the connectivity and convenience that smartphones provide (King et al., 2010). The issue of Nomophobia involved a wide range of people including adults as well as students. According to a study by Columbia Broadcast System (2012) revealed that 66% of adults in the United States have Nomophobia. In addition, the Malaysian Communications and Multimedia Commission (2014) revealed that people of all ages, from teens to adults, were unable to turn off their smartphones. They were both put to the test and discovered that being without their electronics for more than 24 hours was exhausting. Statistics showed that about 71.4% of Malaysians will check their smartphone even when it does not ring.



Despite Malaysia's superb national internet coverage, Malaysian teenagers' overdependence on the internet is a serious worry that might lead to a range of consequences. This issue mostly affects young individuals, particularly teens, and students, who are more prone to use smartphones. This scenario proved by Nurul et al. (2019) in their study indicated that students are likely to experience Nomophobia for academic or educational reasons. Due to this reason, the researchers conducted this study to investigate the factors influencing nomophobia among undergraduate students in UiTM Kedah.

### 2.0 LITERATURE REVIEW

### 2.1 Nomophobia

The dread of being without "Mobile" is known as Nomophobia. It may be related to the increased interest in smartphones. Malaysian smartphone users spend an average of 187 minutes a day using their devices, ranking first in Southeast Asia (Yin et al., 2019). This suggests that smartphones are a part of our everyday lives as the development of technologies requires of using the internet through smartphones as a new medium to facilitate business and social interaction. For example, booking an appointment could be hard for someone if they are not good at utilising a smartphone. Furthermore, there are a lot of works that make use of smartphones as the medium to make tasks easier as certain smartphones already have applications for work examples are One Drive, Outlook, and Microsoft 365. Hence, it is necessary to learn more about how to use and the benefits of smartphones. However, the inappropriate use of smartphone can disrupt our daily lives and mental health. Examples of problematic smartphone usage included phantom mobile phone ringing in the absence of incoming phone alerts, which was caused by worry, and continual checking on phones to stay connected with people on social media.

A study on Nomophobia was conducted in Lebanon where the result showed that 769 (34.1%) participants had mild Nomophobia, 1089 (48.3%) moderate Nomophobia, and 349 (15.5%) had severe Nomophobia out of 2260, the number of participants who answered the questionnaire (Youssef, 2021). Spending time on the smartphone may help them to relieve stress and become one of their coping styles for their overwhelmed emotion. On the other hand, the overuse of smartphones which causes poor communication and decreased interpersonal relationships may also lead to depression.

### 2.2 Smartphone Usage

Smartphones, or phones that can connect to the internet and run apps, are the most prevalent type of mobile device in nine of the 11 countries surveyed: A majority of adults (median of 53%) reported using a smartphone. The highest usage was recorded in Lebanon (86%), Jordan (85%), and the lowest in India (32%). Younger adults lead the way in smartphone use in each of the countries surveyed. Across all 11 countries, those under 30 are much more likely to use a smartphone than those ages 50 and older. However, usage rates among 18 to 29-year-olds differ substantially by country (Laura & Aaron, 2019). Furthermore, according to the Turkish Statistical Institute, the average age for adolescents to start using a smartphone was ten years old. As reported by Pamuk and Atli (2016), smartphone use. In addition, poor smartphone use also proved to be linked with sadness, loneliness, academic procrastination, and sleep quality.

### 2.3 Smartphone Addiction

Smartphone addiction is a disorder involving compulsive overuse of mobile devices, usually quantified as the number of times users access their devices and/or the total amount of time



they are online over a specified period. Addiction to smartphone technology and internet service falls under the psychological demands of belongingness, love, and esteem. In this light, addiction to technology, in anything, may be regarded as a need to acquire a sense of connection and intimacy that is lacking in real life (Yin et al., 2019).

According to Olsen et al. (2022), smartphone addiction has been done on a large scale involving 24 countries including Malaysia, and also the respondents range from 15 to 35 years old, indirectly students are also involved in the respondents of this study. A study conducted by researchers from Harvard, McGill, and Chapman University released results that showed Malaysia ranked third after China and Saudi Arabia for smartphone addiction. The data used from 2014 to 2020 increased, and it is expected that this trend will continue. They also added that the problem of addiction in the increasing use of smartphones can have psychological effects.

### **2.4 Internet Addiction**

Over the last 20 years, the concept of internet addiction has been intensively contested and evolved significantly. Regardless of such arguments, a minority of Internet users will get hooked; this addiction is classified as a behavioural addiction that is frequently connected with substantial physical and mental health-related deficits. According to Chang et al. (2020), about three out of ten teenagers (29.0%) were hooked to the internet. The rapid evolution of networking and the wide spread of internet coverage areas, as well as the low cost of internet services, are expected to increase the prevalence of Internet addiction in Malavsia, as are increased internet usage for educational and recreational activities, and widespread use of smartphones among adolescents.

Individual internet use in Malaysia climbed to 96.8 percent in 2021, up from 89.6 percent in 2020. Participating in social networks was the most common internet usage activity in 2021. accounting for 99.0 percent, followed by playing or downloading games (91.8%), obtaining information or services (89.4%), making phone calls through the internet (89.2%), and downloading programmes (86.3%) (Department of Statistic Malaysia, 2022).

### 3.0 METHODOLOGY

This quantitative study applied a cross-sectional survey using the stratified random sampling technique. The respondents were among the final semester students from Bachelor of Administrative Science & Policy Studies selected according to the ratio calculated in Table 1. The data was gathered through self-administered questionnaires as the instrument.

la	Table 1. Sampling technique and sample size		
SEMESTER	POPULATION	SAMPLE SIZE	
1	53	53 X 43.5% = 23	
3	107	107 X 43.5% = 47	
4	111	111 X 43.5% = 48	
5	99	99 X 43.5% = 43	
6	121	121 X 43.5% = 53	
TOTAL	491	214	

Table 1 Cam ~!:~ a toobaic .

# 4.0 RESULT AND DISCUSSION

### 4.1 Result for Demographic Profiles

A total of 214 respondents participated in this study. As indicated in Table 2 most of the respondents were female with 303 respondents (69%) and male with 94 respondents (31%). The majority of the respondents' age were 22 years old and above while the remaining were



below 22 years old with 224 (73.9%) and 79 (26.1%) respectively. Next, the Cumulative Grade Point Average (CGPA) of 3.00-3.47 was recorded as the highest with 142 (46.9%) respondents while a CGPA of 2.00-2.99 was recorded as the least with 3 (0.9%) respondents. Furthermore, most respondents were from semester 6 with 74 respondents (24.4%) while the least respondents were from semester 1 with 32 (10.6%). The result also indicates that most of the respondents owned up to 3 gadgets represented by 285 (94.1%) while only 1 respondent (0.3%) owned only 1 gadget. The majority of the respondents use smartphones for more than 7 hours per day which is represented by 151 (49.8%) respondents. The results also indicate that WhatsApp is the most used application responded to 275 (90.8%) respondents. Lastly, most of the respondents spend between RM31 – RM50 per month to buy top-up which represented by 221 (72.9%) respondents while the least respondents with 17 (5.6%) spend <RM30 to buy top-up per month.

Profile	Frequency	Percentage (%)
Gender:		
Male	94	31
Female	209	69
Age:		
Below 22 years old	79	26.1
22 years old and above	224	73.9
Current CGPA:		
0.00 - 1.99	32	10.6
2.00 - 2.99	3	0.9
3.00 - 3.49	142	46.9
3.50 - 4.00	126	41.6
Current Semester:		
1	32	10.6
3	67	22.1
4	69	22.8
5	61	20.1
6	74	24.4
Number of Gadgets Owned:		
1	1	0.3
2-3	285	94.1
4-7	17	5.6
Hours Spend Using Smartphone		
(per day):		
Less than 1 hour	5	1.7
1 hours – 4 hours	33	10.9
4 hours – 7 hours	114	37.6
More than 7 hours	151	49.8
Most used application:		
WhatsApp	275	90.8
Twitter	165	54.5
TikTok	235	77.6
Instagram	180	59.4
Facebook	74	24.4
Telegram	79	26.1
Money Spend Buying Top-up (per	. •	
month):		
< RM30	17	5.6
RM31 – RM50	221	72.9
>RM50	65	21.5



# 4.2 Result for Level of Nomophobia among Undergraduate Students in UiTM Kedah

Table 3. Mean Value on Nomophobia among Undergraduate Stu	dents in UiTI	M Kedah
Statements on Nomophobia	Mean	
· · · · · · · · · · · · · · · · · · ·	Value	
<ol> <li>I would like to have constant connections or keep in touch with my family/friends.</li> </ol>	4.40	
<ol> <li>I would like to be with my smartphone avoiding getting stranded somewhere.</li> </ol>	4.33	
3. Running out of battery in my smartphone would scare me.	4.25	
4. I lose track of how much I am using my smartphone.	4.27	
5. I check my notifications for updates from my connections and online networks even though there is no need to do so.	4.14	
6. I would constantly check to see if I had a signal and could find a Wi-Fi network.	4.17	
<ol><li>I constantly top up my internet to get the stories or news from social media.</li></ol>	4.09	
8. I would feel a desire to check my smartphone every minute.	4.11	
<ol> <li>I would like to be able to get the news (for example: what's happening, weather, etc) on my smartphone.</li> </ol>	4.17	
10. Without my phone, I would feel lost.	4.19	
Average Mean Value	4.20	

Table 3 above indicates the mean value for each statement used in measuring the level of Nomophobia among undergraduate students in UiTM Kedah. Based on the result, the average mean of Nomophobia among the respondents is 4.20 which is influenced by the mean value for all statements recorded at the value of 4.00 and above. From all the mean scores, Statement 1 recorded with highest mean of 4.40, showing that the item is doubtless to predict the level of Nomophobia among Bachelor of Administrative students. Compatible with Dixit et al. (2010), smartphone provides them with the right to communicate on any occasion. This allows them to use their smartphones freely. Therefore, this result reflects that the level of Nomophobia among undergraduate students in UiTM Kedah is at a high level.

### 4.3 Result for Correlations between Smartphones Usage, Smartphones Addiction, and Internet Addiction on Nomophobia among Undergraduate Students in UiTM Kedah

 Table 4. Summary of Correlations between Smartphones Usage, Smartphones Addiction, and Internet Addiction on Nomophobia among Undergraduate Students in UiTM Kedah

Correlations between Smartphones Usage and Nomophobia				
Strong positive relationship				
Correlations between Smartphones Addiction and Nomophobia				
Strong positive relationship				
Correlations between Internet Addiction and Nomophobia				
Strong positive relationship				

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

Table 4 indicates the summary of correlations between smartphone usage, smartphone addiction, and internet addiction on nomophobia among undergraduate students in UiTM Kedah. Based on the results, it clearly stated that all factors tested which are smartphone usage, smartphone addiction, and internet addiction have a strong positive relationship with Nomophobia. These results determined by the r-value are more than 0.800 for each factor analysed.



The results on the correlations between the factors tested towards Nomophobia are much influenced by the respondents' demographic profiles. As such, the question on the *"Number of gadgets owned"* indicates that students have more than one gadget whereas the majority have 2 to 3 gadgets with a result of 94.1%. This does not rule out the possibility of students spending their time using gadgets excessively because they have a 'back-up' gadget if one of them runs out.

Furthermore, it can be seen that a total of 151 students equivalent to 49.8% have spent more than 7 hours using gadgets. This majority was followed by 114 (37.6%) students who spent 4 to 7 hours a day. This shows that students have spent an excessive amount of time with their smartphones at the same time making them addicted and it is difficult to get rid of this habit as they are used to it. This result suggests students are comfortable and do not mind wasting more time on gadgets at once it will be hard to find something to dismiss this unhealthy habit.

Besides, 75.5% chose to agree and strongly agreed with the statement "*I often choose to spend more time online over going out with others*", and as many as 71.9% chose to agree and strongly agree with the item "I often feel preoccupied with the Internet when offline, or fantasize about being online". This number shows that most respondents agree that they spend a lot of time on the internet which directly leads them to internet addiction.

Overall, the results of this study strengthen the idea that the respondents prefer spending more time on the internet with an average spending time of more than 4 hours daily. Even though the respondents were proved to have a high nomophobia but statistically shown that this scenario led to a positive implication towards their academic achievement. Most of the respondents (88.5%) were able to achieve a good grade between 3.00 - 4.00 in their CGPA. Hence, this data signifies that reliance on smartphones does have positive implications, it is just a matter of how the smartphones are being used.

# 5.0 CONCLUSION

In conclusion, this study revealed that there is a high level of Nomophobia among undergraduate students at UiTM Kedah. The majority of respondents are heavy smartphone users with at least 7 hours a day using smartphones and respondents tend to skip housework rather than using smartphones. Respondents who are exposed to the excessive use of smartphones are only aware of the benefits it provides and they are not aware of the potential risks they will face. In addition, to prevent Nomophobia from emerging and its negative effects, it is important to encourage the responsible and effective use of smartphones in the learning environment. Finally, we great dependence that all the factors tested in this study indeed have a strong positive correlation with Nomophobia among respondents.

### 6.0 SUGGESTION FOR FUTURE RESEARCH

Besides the findings that have been identified in this study, it is suggested for future research to explore other dimensions as potential contributors and determinants towards Nomophobia. The background of the course or program undertaken by students is wise to be taken into consideration too. It is also recommended for future research to use workers as the unit of analysis. Next, the future researcher can mix the methodologies by integrating the qualitative and the quantitative modes of study. Having the mixed method, can provide a more comprehensive and nuanced understanding of the research problem and enhance the validity of the results. Lastly, the future researcher also suggested employing T-test analysis to determine the difference between male and female respondents in identifying which group of respondents is more susceptible to nomophobia. This may contribute to the enrichment and diversification of data and findings in the body of knowledge and the literature.

### **CO-AUTHOR CONTRIBUTION**

The authors affirmed that there is no conflict of interest in this article. Author 1 carried out the fieldwork and prepared the literature review. Author 2 wrote the research methodology and did the data entry. Author 3 carried out the statistical analysis and interpretation of the results and overlooked the write-up of the whole article.

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