

RELATIONSHIP BETWEEN MINDFULNESS AND NOMOPHOBIA AMONG TEACHING PRACTICE STUDENTS

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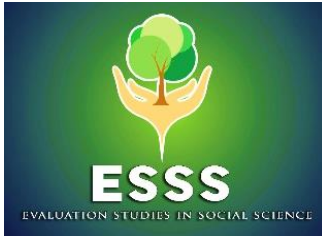
ABSTRACT

This study aimed to investigate the relationship between mindfulness and nomophobia among teaching practice students in UPSI. This descriptive cross-sectional quantitative survey design study utilized online survey which required participants to submit responses through Google Form link distributed. Instruments used in this study were Mindful Attention Awareness Scale (MAAS) and Nomophobia Questionnaire (NMP-Q). Data from N=142 teaching practice students (n=105 female, n=37 male) were analyzed using IBM SPSS Statistics 26. Pearson correlation between mindfulness and nomophobia showed a surprising finding, in which no correlation ($r=-0.026$, $N=142$, $p > 0.05$) was found between these two variables. This study has argued that no relationship was found since the sample was recruited from a leading education university in Malaysia, hence they have been trained to be a competent prospective teacher. Besides, their nature of working which require regular phone usage also was argued to be the underlying reason of this study's finding in which higher usage of mobile phone may cause the above average score of nomophobia, but at the same time they obtained an above average score of mindfulness level as well. Hence, there is no relationship from the finding reported. This study was found to have an implication towards recruiter of future teachers, and has contributed to the literature of mindfulness and nomophobia among Malaysians.

Keywords: *nomophobia, mindfulness, teaching practice, education*

INTRODUCTION

Owning a smartphone has become necessary in today's lives. It is a tool where we store documents, communicate with other people, and seek entertainment. A smartphone is defined by the Malaysian Communications and Multimedia Commission (MCMC) as a mobile handset that is used as the user's main phone device that can execute Internet-based services, function as a computer, and have an operating system proficient of downloading and running applications (Malaysian Communications and Multimedia Commission, 2019). MCMC in their documentation of Hand Phone Users Survey 2019 reported that smartphone users have increased significantly from 53.4% in 2014, to 78.0% in 2018. In their study, it is found that one out of four handphone users in Malaysia checked their phone repetitively (every 30 minutes or lower), even with no notification. Smartphone ownership also is higher among younger people with 87% of smartphone owners are between the age of 20 to 34 years old.



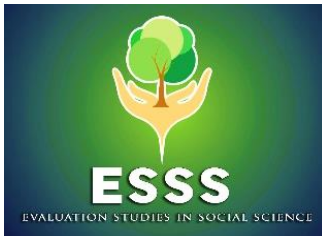
Nomophobia (no mobile phone phobia) is a relatively recent phenomenon that has grown in popularity since Nomophobia Questionnaire by Yildirim & Correia (2015) was published. Yildirim, Sumuer, Adnan, & Yildirim (2016) has revised the definition of nomophobia by describing it as a fear of being unable to access one's mobile phone or being unreachable by one's mobile phone. It also applies to the feelings of discomfort or anxiety faced by individuals when they are unable to use their mobile phones or take advantage of the affordances these devices offer (Yildirim, Sumuer, Adnan, & Yildirim, 2016). In a commentary paper by Bhattacharya, Bashar, Srivasta, & Singh (2019), they observed that in reported nomophobia cases, several signs and symptoms were identified which include anxiety, respiratory alterations, trembling, perspiration, agitation, disorientation, and tachycardia.

As a matter of fact, nomophobia has also been proposed to be included in the 5th edition of Diagnostic and Statistical Manual of Mental Disorders (DSM-5). Bragazzi & Del Puente (2014) pioneered the proposal for nomophobia to be included in DSM-5 by providing its epidemiological characteristics, psychological predictors, comorbidity, psychometric scales, and treatment. However, as we could review today's DSM-5, nomophobia is not yet included in the latest version of DSM. Further research and more study emphasizing nomophobia should be added into current literature, in order to provide more insights and detail-related characteristics of nomophobia so it can be included in the next version of DSM.

In one of the early studies that investigated the impact of mindfulness on nomophobia, it was found that there is a significant direct effect of mindfulness towards nomophobia, but the claimed statement was only implied for women, not for men (Arpaci, Baloğlu, Özteke Kozan, & Kesici, 2017). This study was conducted among 450 undergraduate students. However, within the same year, the same researcher attempted to seek insight of mindfulness impact towards nomophobia. This time, the study was conducted among 491 Turkish undergraduate students, and it was revealed that there is a significant and negative relationship between mindfulness and nomophobia, which also suggested that individuals with lower mindfulness level would yield a higher tendency of experiencing nomophobia, and increasing mindfulness scores resulting in less nomophobic tendencies among university students (Arpaci, Baloğlu, & Kesici, 2017).

The same researcher studied these two variables with a mediating variable of psychological resilience. 300 adolescents ranging from 14 to 19 years old participated in the study and gave a similar insight that there was a significant negative relationship between mindfulness and nomophobia, with additional result implicating that there was a significant positive relationship between mindfulness and psychological resilience (Arpaci & Gundogan, 2020). Therefore, from these findings, having higher level of mindfulness would be a significant contributory factor to the reduction of nomophobia level.

Preservice teachers were chosen as the sample of this study is based on a study done by Sevim-Cirak & Islim (2020) among 1066 Turkish preservice teachers, which reported that, on average, these preservice teachers who will be in charge of educating the future generations



were nomophobic, and the researcher also believed that some sort of precautions must be considered in order to alleviate this issue. Apart from that, Gezgin, Sumuer, Arslan, & Yildirim (2017) investigated the nomophobia level among 818 Turkish preservice teachers, and it is reported that the nomophobia levels of the participants are higher than the average normal score.

However, these studies on preservice teachers are done in Turkey, with no reported finding of nomophobia among teachers or future teachers in Malaysia. By knowing the effectiveness of mindfulness on nomophobia among teaching practice students, it is hoped that the university which has an education program could train their preservice teachers on how to practice mindfulness before they go for teaching practicum.

Therefore, a reported empirical study on the effect of these two variables is needed to be tested, especially among Malaysian future teachers since more reports on Malaysian nomophobia level should be added to the nomophobia literature. Hence, this study was conducted with the aim to identify the relationship between mindfulness and nomophobia among teaching practice students. It is hypothesized that there is a significant relationship between mindfulness and nomophobia among teaching practice students.

METHODOLOGY

To conduct this research, descriptive cross-sectional survey design were implemented to identify the relationship between mindfulness and nomophobia among teaching practice students. An English and Malay version of both instruments were given. For MAAS, a Malay translated version by Zainal, Nor-Azian, & Subramaniam (2015) was utilized. While NMP-Q, a back translation method procedures involving two language teachers (a Malay language teacher, and an English teacher) and a local clinical psychologist were done in order to provide a Malay translated version of NMP-Q. The questionnaire then was distributed to respondents through various online platforms.

The questionnaire consisted of several parts including informed consent, demographic information, Mindful Attention Awareness Scale (MAAS) which was used to measure level of awareness and attention to the present moment experiences in daily functioning (Brown & Ryan, 2003), and Nomophobia Questionnaire (NMP-Q) which was used to measure the level of nomophobia of an individual (Yildirim & Correia, 2015). The reliability of MAAS and NMP-Q was tested. It was found that both instruments were reliable to be used with MAAS reported Cronbach's Alpha ($\alpha = .785$) and NMP-Q ($\alpha = .885$).

A convenience sampling method was used for data collection process. A total of 142 teaching practice students from Sultan Idris Education University who were undergoing their teaching practicum in various states of Malaysia, aged between 21 to 28 years old, have

participated in the study. The total sample (n=142) consisted of 73.9% females (n=105), and 26.1% males (n=37).

Table 1
Demographic profile of the participants (N=142)

Demographic Variable	N	%
Gender		
Male	37	26.1
Female	105	73.9
Age		
18-20 years old	0	0.0
21-22 years old	22	15.5
23-25 years old	115	81.0
26-28 years old	5	3.5
Faculty		
Faculty of Languages and Communication (FBK)	6	4.2
Faculty of Music and Performance Arts (FMSP)	0	0.0
Faculty of Management and Economics (FPE)	2	1.4
Faculty of Human Development (FPM)	21	14.8
Faculty of Science and Mathematics (FSM)	37	26.1
Faculty of Human Sciences (FSK)	24	16.9
Faculty of Art, Computing and Creative Industry (FSKIK)	21	14.8
Faculty of Sport Science and Coaching (FSSKj)	10	7.0
Faculty of Technical and Vocational (FTV)	21	14.8
Teaching Practice School's State		
Johor	13	9.2
Kedah	14	9.9
Kelantan	15	10.6
Kuala Lumpur	3	2.1
Malacca	1	0.7
Negeri Sembilan	9	6.3
Pahang	6	4.2
Penang	7	4.9
Perak	24	16.9
Perlis	7	4.9
Sabah	9	6.3
Sarawak	6	4.2
Selangor	18	12.7
Terengganu	10	7.0

RESULTS AND DISCUSSION

Mindful Attention Awareness Scale (MAAS) used in this study yielded an average score of 62.10 ($M=62.10$, $SD=12.70$), an above average score. Score of MAAS varied from 15 to 90, in which higher score indicate higher mindfulness level (Brown & Ryan, 2003). Meanwhile, the Nomophobia Questionnaire (NMP-Q) yielded an average score of 86.02 ($M=86.02$, $SD=27.54$), which indicated a moderate level of nomophobia. Score of NMP-Q varied from 20 to 140. Score of 20 indicated absence of nomophobia, greater than 20 and less than 60 corresponded to a mild level of nomophobia, a score equal to 60 or more and less than 100 corresponded to a moderate level of nomophobia, and a score of equal or greater than 100 corresponded to severe nomophobia.

Nomophobia Questionnaire (NMP-Q) consisted of four dimension (1) not being able to communicate, (2) losing connectedness, (3) not being able to access information, and (4) giving up convenience. Table 2 showed the average score for each dimension. It was revealed that the dimension of “not being able to communicate” have the highest mean ($M=4.56$, $SD=1.63$). This explained the nature of prospective teachers’ phone usage in which they have to be with their phone in order to be able to communicate with colleagues and students, especially during this pandemic COVID-19 era.

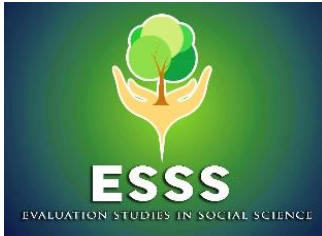
Table 2

Descriptive analysis of Nomophobia Questionnaire’s dimensions

Dimension	Minimum	Maximum	Mean	SD
Not being able to communicate	1.00	7.00	4.56	1.63
Losing connectedness	1.00	7.00	3.98	1.66
Not being able to access information	1.00	7.00	4.46	1.51
Giving up convenience	1.00	7.00	4.18	1.54

To identify the relationship between mindfulness and nomophobia in this study, Pearson correlation was used and executed using IBM SPSS Version 26. The finding revealed that there is no significant relationship found between nomophobia and mindfulness ($r = .026$, $N = 142$, $p = .757$), $p > 0.05$.

Current study revealed that mindfulness has no association with nomophobia. This result is inconsistent with previous studies (Arpaci, Baloğlu, Özteke Kozan, & Kesici, 2017; Arpaci, Baloğlu, & Kesici, 2017; Arpaci & Gundogan, 2020). These studies reported that individuals with lower mindfulness level would yield a higher tendency of experiencing nomophobia, and vice versa. But, with the current finding, this does not appear to be the case. One of the possible reasons to be ruled out in explaining this contradicting finding, is that the sample used to observe these two variables are different from previous literature. Presumably, the sample of this study was recruited from an education university in Malaysia, in which

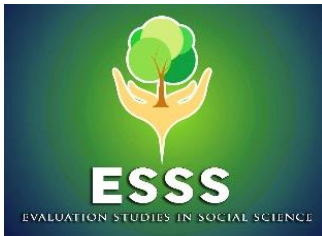


prospective teachers were produced in this university. To explain further, as reported in Table 2, the “not being able to communicate” dimension obtained the highest mean of other dimensions. This would integrate the finding by Alawamleh, Al-Twait, & Al-Saht (2020), where students were found to have problems of decreasing communication levels with their teachers during COVID-19 pandemic. Therefore, it is argued that the sample of this study may experience nomophobia since they were frequently trying to communicate with their students by using mobile phone. It is therefore likely that even a teaching practice student has a low mindfulness level, it is not necessarily that the teaching practice student would have a higher possibility of experiencing nomophobia. The result from this study could also suggest that even a teaching practice student has a higher mindfulness level, this student may still have a tendency of having nomophobia, as there is no significant relationship found between these two variables.

Although a teaching practice student may possess a higher level of mindfulness and higher level of nomophobia, the best insight that could be given is that smartphone itself is one of the primary tools in education setting, where it is used to conduct online classes, to share notes and exercises, as well as to received news or update from their students if anything happens to them (Biswas, Roy, & Roy, 2020; Samad, Ihsan, & Khalid, 2021). However, as a prospective teacher, multiple skills should be equipped with themselves including to always have alternative solution and acquired better problem-solving skills (Arikan, 2016), as well as to be present and mindful, which may help to manage the worries or fears that might arise when their smartphone is not with them (Kindel, & Rafoth, 2020).

This study has argued that mindfulness will not necessarily have an association with nomophobia, as claimed in previous studies (Arpaci, Baloglu, Özteke Kozan, & Kesici, 2017; Arpaci, Baloglu, & Kesici, 2017; Arpaci & Gundogan, 2020). From this finding, it is a great help to be a reference for recruiters of future teachers to look on these variables when they are recruiting a teacher. Since mindfulness did not necessarily have an association with nomophobia, therefore, although a teacher candidate possessed a convincing character and mindful behavior, they should be asked on the duration that they spent using smartphones, as well as the purpose they use their smartphone. Given that, among teaching practice students, the absence of smartphones seemed to really have an impact on triggering their worries or fears (Gezgin, Hamutoğlu, Sezen-Gültekin, & Yıldırım, 2019), which may affect their teaching process in the school later. By doing this, recruiter could trace their candidates if they are vulnerable to nomophobia.

Apart from that, this study benefits universities who have education program, to have better insight on their future teachers’ behavior towards smartphone. Since this study figured that there is no relationship between mindfulness and nomophobia among teaching practice students, therefore, it is recommended for policymakers and curriculum designers to



incorporate prospective teachers' education curricula with other external seminars or training that not just only focusing on mindfulness, in order to avoid the negative consequences of nomophobia which may affect the quality of their teaching later once they have been appointed as a teacher.

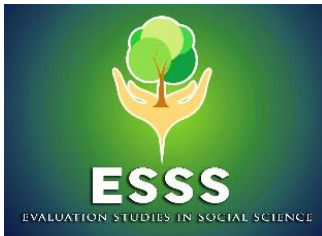
LIMITATIONS, RECOMMENDATIONS, AND CONCLUSION

Limitations

The sample of teaching practice students was drawn from an easily available population at a public university in Malaysia. It may not be entirely representative of all future teachers, which may limit the generalizability of current findings to Malaysian's future teachers' community. Lack of study about the correlation of nomophobia and mindfulness also contributed to this limitation since not much study could be used for data comparison. Apart from that, the sample in current study also showed a disparity in terms of gender, with female participants (73.9%) outnumbered male participants (26.1%). In Social Role Theory of Sex Differences, there is a core social cognitive principle known as correspondence bias, which is the tendency to assume attitudes that match to observed behavior (Eagly & Wood, 2016). Observing the social roles of men and women leads to opinions about the characteristics that are unique to each gender. Therefore, although in this study, the social role featured was future teachers, it would be an insightful contribution to observe gender differences among future teachers in relation to nomophobia.

Recommendations

In future investigations, a larger sample of teaching practice students or prospective teachers should be recruited in Malaysia to generalize the findings. In addition, future research should also recruit gender-balanced samples with an equal percentage of males and females to provide firmer conclusions about gender disparities in nomophobia levels. Besides, more variables should be associated into the study of nomophobia in order to explore what other factors that may have a significant correlation with nomophobia. As presented in the current study, mindfulness is found to have no correlation or a negligible relationship with nomophobia among teaching practice students. Hopefully, in the future, associated variables that have a significant correlation with nomophobia may contribute to construct suitable interventions to alleviate the impact of nomophobia among prospective teachers.

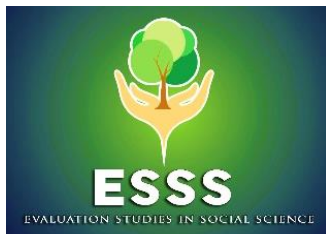


Conclusion

As a conclusion, mindfulness was found to not correlate with nomophobia when studied among teaching practice students in Malaysia. Although there is no relationship found between mindfulness and nomophobia in this study, it is still one of the pioneer studies that took teaching practice students as a sample to observe the relationship that may have existed between mindfulness and nomophobia. However, several recommendations for future research have been suggested including recruiting a gender-balanced sample, and to associate more variables in similar study in order to alleviate nomophobia. This study also is believed to have brought awareness to teaching practice students about the emerging phobia, known nomophobia.

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