

Nomophobia, Social Interaction Anxiety, and Anhedonia among College Students

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ABSTRACT

The present study explores the relation between Nomophobia, Social interaction anxiety and Anhedonia among college students. The sample obtained was 200 college students (100 male and 100 female). Convenient sampling was used in this study. Convenience sampling (also known as grab sampling, accidental sampling, or opportunity sampling) is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand. Instruments such as Nomophobia Questionnaire (Yildirim and Correia., 2015), Social Interaction Anxiety Scale (Mattick and Clarke., 1998) and Snaith Hamilton Pleasure Scale (Snaith and Hamilton., 1995) were used for the collection of data. A cross-sectional comparative, correlational research design is used to compare two groups in an attempt to draw a conclusion about them and determine how related two or more variables are. The result shows that There is a significant relationship between nomophobia and social interaction among college students.

Keywords: *Nomophobia, Social interaction anxiety and anhedonia*

In the digitalized world use of smartphones is inevitable for each person to meet their requirements. Having the right knowledge about using smartphones as well as the aftereffects is also important to have an effective approach to its usage. India is one of the world's largest smartphone markets, with young adults as the primary purchasers. College students are the ones who are mainly dependent on mobile phones for purposes like education, entertainment and so on. However, Indian studies on nomophobia have been conducted mostly on adults and are restricted by small sample sizes. Despite this, there is a scarcity of Indian literature on nomophobia and its mental health consequences. The purpose of this study is to find whether there is any relationship between nomophobia, social interaction anxiety, and anhedonia among college students. Nomophobic people are most likely to feel an inability to feel pleasure or they lack motivation as well as there is a chance to have social interaction anxiety.

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Received: November 17, 2022; Revision Received: April 21, 2023; Accepted: April 25, 2023

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On a global scale, smartphones are mandatory to live in the competitive world where everyone needs to depend on them for daily purposes like contacting people, education purposes, shopping, financial transactions etc. Even though technology has made life easier, there have been some negative consequences of excessive cell phone usage. Nomophobia is the shortened term for No Mobile Phone Phobia. Smartphone addiction: Smartphone junkies spend a lot of time on their phones. One of the most important signs of smartphone addiction, which leads to nomophobia, is the amount of time spent on the device each day. When consumers are asked about their smartphone usage patterns and screen time attachment, it is revealed that they check their phones 120 times on average. Nowadays the first thing a young person does is check their smartphones and scroll through the screen; people are too reliant on their smartphones to the point that they can't leave home without bringing their smartphone and the last thing they use at night is their smartphone alone.

Although nomophobia does not appear in the current Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), it has been proposed as a "specific phobia," based on the definitions given in the DSM-IV. Bianchi and Philips (2005) stated that "psychological factors are involved in the excessive use of a mobile phone." These include low self-esteem; when individuals are looking for reassurance, use the mobile phone in inappropriate ways and extroverted personality; when individuals socially use the mobile phone to excess. It is also highly possible that nomophobia symptoms may be caused by other underlying and pre-existing mental disorders, including social phobia or social anxiety disorder, and panic disorder.

Social anxiety is the constant fear of being observed by unfamiliar individuals in social performance and interaction situation and emerges from dysfunctional beliefs about being judged and observed by others, having unrealistic high standards about expectations of others and fear of not meeting those expectations. Mattick and Clark (1998) defined social interaction anxiety as fear of being exposed and interacting with others. Social interaction anxiety makes an individual feel anxious in situations of interaction which include meeting and talking. The inability to enjoy experiences or activities that normally would be pleasurable. It is one of two defining symptoms of a major depressive episode (the other being a persistent depressed mood), but it is also seen in other disorders, including schizophrenia.

Individuals suffering from anhedonia may find it difficult to motivate themselves to seek out pleasurable stimuli, resulting in dysfunction. Changes in anhedonia, or a loss of interest or pleasure, have been linked to depression in recent years. This is because a loss indicates that a person formerly enjoyed and/or was interested in specific activities or social contexts (i.e., had a functioning reward system), but that those experiences are now providing less reward. Individuals suffering from anhedonia have lower levels of positive affect as a result of their diminished interest in or pleasure obtained from previously appreciated activities. Positive affect is linked to volition, or the desire to achieve one's objectives, suggesting that lower motivation in anhedonia people could be due to a drop in positive affect.

METHODOLOGY

Aim:

The aim of the study is to assess nomophobia and its relationship with social interaction anxiety and anhedonia among college students.

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Objectives

1. To find the relationship between nomophobia and social interaction among college students.
2. To find the relationship between social interaction anxiety and anhedonia among college students.
3. To find the relationship between nomophobia and anhedonia among college students.
4. To find the significant difference in nomophobia among male and female college students.
5. To find the significant difference in social interaction anxiety among male and female college students.
6. To find the significant difference in anhedonia among male and female college students.
7. To find the significant difference in nomophobia among college students with respect to domicile.
8. To find the significant difference in social interaction anxiety among college students with respect to domicile.
9. To find the significant difference in anhedonia among college students with respect to domicile.

Hypotheses

- H₀: 1. There is no significant relationship between nomophobia and social interaction among college students.
- H₀: 2. There is no significant relationship between social interaction anxiety and anhedonia among college students.
- H₀: 3. There is no significant relationship between nomophobia and anhedonia among college students.
- H₀: 4. There is no significant difference in nomophobia among male and female college students.
- H₀: 5. There is no significant difference in social interaction anxiety among male and female college students.
- H₀: 6. There is no significant difference in anhedonia among male and female college students.
- H₀: 7. There is no significant difference in nomophobia among college students with respect to domicile.
- H₀: 8. There is no significant difference in social interaction anxiety among college students with respect to domicile.
- H₀: 9. There is no significant difference in anhedonia among college students with respect to domicile.

Variables

- Independent Variable: Social interaction anxiety
- Dependent Variable: Nomophobia and anhedonia

The sample obtained was 200 college students (100 male and 100 female). Convenient sampling was used in this study. Convenience sampling (also known as grab sampling, accidental sampling, or opportunity sampling) is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand.

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As per the ethics of conduction of research only those participants who are willing to be part of the study were included in the sample. The inclusion and exclusion criteria of the research were considered. Confidentiality of the data was assured so that participants do not feel any discomfort responding sincerely and honestly and patiently.

The questionnaire was administered through the direct visit and by circulating Google Forms through various social media platforms such as WhatsApp, Instagram, and Facebook with required instructions that have to be followed.

Instruments

Scale 1: Nomophobia Questionnaire (Yildirim and Correia., 2015))

The Nomophobia Questionnaire was constructed by Yildirim and Correia (2015). Sum up your responses to each item. Higher scores indicate more severe levels of nomophobia. The NMP-Q has 20 questions, each scored on a 7-point Likert scale. The lowest score possible for NMP-Q is 20 (20*1) and the highest possible value will be 140(20*7). The final reliability values of the questionnaire were estimated as 0.83 and 0.93 by Guttman's and Cronbach's alpha coefficients, respectively, showing excellent reliabilities and it has good construct validity.

Scale 2: Social Interaction Anxiety Scale (Mattick and Clarke., 1998)

The Social Interaction Anxiety Scale (SIAS) is developed by Mattick and Clarke (1998). It is a 20-item questionnaire that is rated on a 5-point Likert scale. The possible scores range from 0 to 80. Higher scores are associated with higher social anxiety. The author of the measure, Peters (2000), defined the cut-off score as 36. Pearson correlations (r) is .90.

The scale has high discriminant validity.

Scale 3: Snaith Hamilton Pleasure Scale (Snaith and Hamilton., 1995)

The 14-item Snaith-Hamilton Pleasure Scale (SHAPS; Snaith et al.,1995) measure anhedonia. Items assess hedonic experience in "the last few days" for naturally pleasurable activities, including social interaction, sensory experience, and food/drink (e.g., "I would find pleasure in my hobbies and pastimes"). Items have four responses, with "Agree" or "Strongly Agree" equalling 0, and "Disagree" or "Strongly Disagree" equalling 1. Scores range from 0 to 14, with higher scores indicating higher state anhedonia levels, score greater than 2 signifies abnormal hedonic tone. In a depressed outpatient sample, the SHAPS had high internal consistency ($\alpha = 0.91$) and a unidimensional structure with good convergent and discriminant validity as compared to multiple clinician-rated depression measures (Nakonezny et al., 2010).

Procedure

The colleges included in the study were all colleges in Kerala and colleges outside Kerala are excluded from this study. The sample was selected through a convenient sampling technique. Email Ids of the students were collected and the data was collected by using the Google forms online questionnaire. The link of the form was sent to 200 students after explaining to them the purpose of the study and taking their consent through Google Form. Reminder mails to fill the forms sent to those who didn't fill the google form on time.

RESULTS AND DISCUSSION

Results of Analysis of Socio demographic details of the respondents.

The findings of the current study are presented in this chapter. Spearman rank order correlation, Mann Whitney U test, and Kruskal Wallis test were the statistical tests used

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along with descriptive statistics. The chapter begins with socio-demographic description of the sample, followed by descriptive statistics and then the results of the hypotheses tested.

Table 4.1 Profile of the participants

Variables	Categories	Frequency	Percentage
Gender	Male	100	50.5
	Female	98	49.5
Residential Status	Hosteler	59	29.8
	Day scholar	124	62.6
	Paying guest	15	7.6
Domicile	Rural	78	39.4
	Semi-urban	71	35.9
	Urban	49	24.7

Out of the total sample size of 198, 50% are male (n=100) and 48% are female (n=98). 29.8% of college students were hostelers (n=59), 62.6% of college students were dayscholars (124), and 7.6% of college students were paying guest (n=15). 39.4% of college students reside in rural (n=78), 35.9% of college students reside in semi-urban (n=71), and 24.7% of college students reside in urban (n=49).

Table 4.2 The Kolmogorov-Smirnov normality test of Nomophobia, Social Interaction Anxiety and Anhedonia

Variables	Statistic	df	Sig.
Nomophobia	.972	198	.004
Social Interaction Anxiety	.966	198	.038
Anhedonia	.871	198	.000

The p-value obtained for nomophobia, social interaction anxiety and anhedonia were less than 0.05. This indicates that the data is not normally distributed. Hence, non-parametric tests were used for analysis.

Table 4.3 Correlation between, Nomophobia, Social Interaction Anxiety, and Anhedonia

	1	2	3
1. Nomophobia	-	.474 **	.252**
2. Social Interaction Anxiety	.474 **	-	.165*
3. Anhedonia	.252**	.165*	-

Note: **significant at 0.01 level

Nomophobia and social interaction anxiety were positively correlated and had moderate strength. Nomophobia and anhedonia were positively but weakly correlated. Social interaction anxiety and anhedonia were positively correlated and had weak strength.

Table 4.4 Differences in Nomophobia, Social Interaction Anxiety and Anhedonia with respect to Gender

Variable	Group	N	Mean Rank	Sum of Ranks	U	p
Nomophobia	Male	100	108.24	10854	3996	0.025*
	Female	98	90.28	8847		
Social interaction anxiety	Male	100	118.63	11862.5	2987.5	.000*
	Female	98	79.98	7838.5		
Anhedonia	Male	100	102.50	10249.50	4600.50	.454
	Female	98	96.44	9451.50		

Note: * significant at .05 level

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Table 4.4 indicates differences in nomophobia, social interaction anxiety and anhedonia with respect to gender. As the p-value obtained was less than 0.05 for nomophobia and social interaction anxiety, the null hypotheses were rejected. Males were more prone to nomophobia and social interaction anxiety. However, for anhedonia the p-value obtained was greater than 0.05 ($p=.454$). Hence the null hypothesis indicating there is no significant difference in anhedonia with respect to gender was rejected.

Table 4.5 Difference in Nomophobia, Social Interaction Anxiety and Anhedonia with respect to domicile

Variable	Groups	N	Mean Rank	df	p
Nomophobia	Rural	78	98.53	2	0.531
	Semi-urban	71	104.95		
	Urban	49	93.15		
Social interaction anxiety	Rural	40	93.01	2	0.253
	Semi-urban	149	93.01		
	Urban	41	97.12		
Anhedonia	Rural	40	90.51	2	0.082
	Semi-urban	149	111.10		
	Urban	41	97.01		

Table 4.5 indicates the difference in Nomophobia, Social Interaction Anxiety and Anhedonia with respect to domicile. The p-value obtain for all the three variables were greater than 0.05. Hence the null hypothesis indicating there is no significant difference in Nomophobia, Social Interaction Anxiety and Anhedonia with respect to domicile is retained.

SUMMARY AND CONCLUSION

Implications of the study

The present study focus on the effect of over usage of smart phones which leads to nomophobia, social interaction anxiety and anhedonia among college students. It implies the importance and need to explore the timely intervention for students who are getting exposed only to the virtual world. They are the ones who lack direct human interaction who over depends on their smart phones which gradually leads to the increasing rate of nomophobia and that results in social interaction anxiety and anhedonia. As the study indicates, it is necessary to investigate the causes of nomophobia and its consequences which lead the upcoming generation to deterioration of their talents in their most productive time period of life as it affect both mental health and physical health. It also points to the need to raise the importance of educating the people about the benefits and the hazards of using smartphones and they should be aware of the increasing rate of nomophobia among college students. In this competitive world, college students are the ones who need to face interviews for getting into a new career, so by regulating the use of smart phones and increasing the opportunity to direct social interaction we can monitor a balanced and healthy mental and physical life style.

Limitations of the study

- Most of the data were collected through google forms.
- Data collection was collected from in districts of Kerala.
- The majority of the respondents were day scholars and the majority of the respondents were from rural domiciles.

Suggestions for future research

Considering a large number of samples from varied locations will help to understand the variables better. The results of research on these variables among various populations can be compared to the results of this study. It's better to include intervention on this research topic by taking the control group as an experimental group. Future studies can make use of a descriptive research design in this research. For the survey, minimize using Google Forms and try to acquire data largely directly. Limitations are lessened as a result.

CONCLUSION

In the digital era, nomophobia has turned to be a major problem that drastically affects the well-being of people, especially the college students. The proportion of students who are having varied levels of nomophobia will again increase in the coming years if appropriate interventions are not taken. If the use of smartphones are not regulated, it will result in social interaction anxiety and anhedonia.

The study concluded that there is a positive correlation between nomophobia and social interaction anxiety, between social interaction anxiety and anhedonia as well as between nomophobia and anhedonia. It must also be noted that there was no significant difference in nomophobia, social interaction anxiety and anhedonia with respect to gender and domicile.

REFERENCES

- Alkhatami, S. (2014). Social anxiety among adolescents and its relation to quality of life. *The European Proceedings of Social and Behavioural Sciences*.
- APA dictionary of psychology. (n.d.). *APA Dictionary of Psychology*.
- Christodoulou, G., Majmundar, A., Chou, C., & Pentz, M. A. (2019). Anhedonia, screen time, and substance use in early adolescents: A longitudinal mediation analysis. *Journal of Adolescence*, 78(1), 24-32.
- Guillot, C. R., Halliday, T. M., Kirkpatrick, M. G., Pang, R. D., & Leventhal, A. M. (2017). Anhedonia and abstinence as predictors of the subjective pleasantness of positive, negative, and smoking-related pictures. *Nicotine & Tobacco Research*, 19(6), 743-749.
- Jeong, K., & Oh, E. (2017). Influence of interaction social interaction anxiety on interpersonal relation of female college students. *Journal of the Korea Academia Industrial cooperation Society*, 18(1), 475-482.
- Kubrusly, M., Silva, P. G., Vasconcelos, G. V., Leite, E. D., Santos, P. D., & Rocha, H. A. (2021). Nomophobia among medical students and its association with depression, anxiety, stress and academic performance. *Revista Brasileira de Educação Médica*
- Lapierre, M. A., Zhao, P., & Custer, B. E. (2019). Short-term longitudinal relationships between smartphone use/Dependency and psychological well-being among late adolescents. *Journal of Adolescent Health*, 65(5), 607-612.
- Nair, A. J., & Sreekumar, S. (2021). Social interaction anxiety and its influence on learning engagement of students during COVID-19
- Setterfield, M., Walsh, M., Frey, A., & McCabe, C. (2016). Increased social anhedonia and reduced helping behaviour in young people with high depressive symptomatology. *Journal of Affective Disorders*, 205, 372-377.
- Silvia, P., Eddington, K., Maloney, K. H., Kwapil, T. R., Harper, K., & Lunsford, J. (2021). Self-report measures of anhedonia and approach motivation weakly correspond to anhedonia and depression assessed via clinical interviews. <https://doi.org/10.1007/s00787-019-01364-y>

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- Winer, E. S., Bryant, J., Bartoszek, G., Rojas, E., Nadorff, M. R., & Kilgore, J. (2017). Mapping the relationship between anxiety, anhedonia, and depression. *Journal of Affective Disorders*, 221, 289-296
- Yen, J., Yen, C., Chen, C., Wang, P., Chang, Y., & Ko, C. (2012). Social anxiety in online and real-life interaction and their associated factors. *Cyberpsychology, Behavior, and Social Networking*, 15(1), 7-12.

Acknowledgement

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Baby, D., Paikkatt, B. & Mukesh, V. (2023). Nomophobia, Social Interaction Anxiety, and Anhedonia among College Students. *International Journal of Indian Psychology*, 11(2), 298-305. DIP:18.01.030.20231102, DOI:10.25215/1102.030