

Influence of Nomophobia and Loneliness on Young Adults

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ABSTRACT

In the 22nd century, communication technology has advanced to a point where it is almost unrecognizable from what we have today. Mobile phones have become an integral part of everyone's lives and people are not only getting addicted to their phones but also becoming lonely. Increasing usage of mobile phone has considerably made differences in people's life. It is important to explore how they are related. This study aims to find out the relationship between nomophobia and loneliness and its prevalence regarding smartphones and internet use among young adults. The data was collected from 199 young adults under the age range of 18 to 25 years. The tools used were UCLA Scale for measuring loneliness and NMP-Q Scale for nomophobia levels in young adults. A total of 199 young adults in the 18-25 participated voluntarily in the study, of which 100 were females and 99 were males. The study used a Correlational research design and the statistical tests done were descriptive statistics, Independent samples t-test, Pearson correlation, and Cohen's d effect size test. Based on all the responses and the analysis, the study's major finding is that there is a significant relationship between nomophobia and loneliness level and loneliness level is significant in males and females. The results revealed that there is no significant difference between males and females for nomophobia levels.

Keywords: Mobile phones, Nomophobia, Loneliness, Young Adults

In the 22nd century, communication technology has advanced to a point where it is almost unrecognizable from what we have today. In a world where communication is supposed to be easier than ever, we have become disconnected from each other. We hide behind screens and emojis, forgetting the power of face-to-face conversations. The constant need to be connected has made us forget how to truly listen and understand one another. It's as if we are living in different realities, unable to agree on what is true and what is not. As we continue to rely on technology for communication, we must remember the importance of human connection and critical thinking (Cairns et al., 2020).

Ultimately, the solution to disconnected realities lies in the power of human connection. While technology can facilitate communication, it cannot replace the warmth and intimacy of face-to-face interactions. The need to prioritize spending time with loved ones and engaging in activities that bring us closer to others. By doing so, we can break down the barriers that

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separate us and create a more connected, empathetic society. It is up to each of us to make a conscious effort to bridge the gaps between our disconnected realities and build a brighter future for ourselves and those around us (Baca et al., 2015). Some academics have stressed how using a smartphone might result in strong psychological attachment and addiction. It was discovered that all variables significantly contribute to describing the severity of the symptoms of sadness, anxiety, and stress by examining the individual relative contributions of emotional abilities and competencies and nomophobia. In other words, those who experienced a greater dread of not being able to utilize smart devices and had weaker emotional abilities and competencies also had more pronounced symptoms of sadness, anxiety, and stress. Additionally, it appears that the amount of time spent on social media on a daily basis significantly predicts how severe a person's symptoms of stress, anxiety, and depression will be. This indicates that people who use social media frequently report more pronounced symptoms of stress, anxiety, and sadness. (Lee et al., 2013).

Nomophobia also called- No-Mobile-Phone Phobia was coined in 2008 and is defined as the fear of being out of mobile phone contact. The mere idea of not having a mobile phone makes the person fear or have anxiety about being detached from everyone. Nomophobia is a term that has gained popularity due to studies on the connection between mental health and the usage of contemporary technology. It involves feeling anxious when a person cannot use their smartphone or the tools it offers. Nonetheless, there are more and more studies being conducted daily that aim to better comprehend this novel phenomenon. Nomophobia is becoming more common because of the time in which we live and the speed at which technology is developing. So, we can anticipate a bigger proportion of people in the future who have severe nomophobia symptoms. As a result of this study, it is undeniable that nomophobia, a contemporary kind of illness, significantly impacts a person's mental health and behavioral changes. According to research, those with worse emotional abilities and competencies exhibit more severe current symptoms of stress, worry, and despair. It is also crucial to note that, when depression was the criterion, emotional skills, and competencies were the best predictors. The outcome is not unexpected given the hypothesis that emotional issues are at the root of a variety of psychopathological occurrences and diseases, including mood disorders. (Santl et al., 2022)

The constant need for connectivity and instant gratification can lead to addiction and ultimately, nomophobia. It is a type of anxiety disorder that has become increasingly common in today's digital age (King et al., 2013). Mobile addiction, on the other hand, refers to the excessive use of mobile devices that can lead to negative consequences such as social isolation, sleep disturbance, and poor academic performance (Al-Kandari & Al-Sejari, 2020). Nomophobia and mobile addiction are becoming more prevalent due to the widespread availability of smartphones and the Internet (Gezgin, Cakir, et al., 2018). Nomophobia is viewed as a symptom of excessive smartphone use and is comparable to smartphone addiction (Bragazzi & Del Puente, 2014). Existing research indicates that social networks, mobile gaming, and entertainment apps for smartphones will cause nomophobia (Jeong et al., 2016). According to Bianchi and Philips, (2005), "Psychological factors are involved in the excessive use of a mobile phone." Several research has shown that individuals with nomophobia use maladaptive stress-coping strategies like dwell on their misery, avoiding social situations, and behaving aggressively in response. (Bragazzi et al., 2019), and those with severe nomophobia are more prone to seek proximity, memory, and self (Han et al., 2017). Studies in the past have connected three symptoms to this condition: anxiety, compulsive smartphone use, and panic attacks (Musa et al., 2017). Nomophobia has also

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been shown to result in stress due to social dangers, especially when there is ambiguity or a lack of control (Olivencia et al., 2018).

Loneliness means feeling unhappy or sad about being socially insulated. It's a state where one wants to have mortal contact but feels alone. Although teenagers and young adults are more likely to experience it, it can afflict people of any age. Increasing usage of mobile phones has considerably made a difference in people's life. These differences include psychological problems (anger, loneliness, stress, depression, etc.). Those who are lonely often avoid connections, social engagements, and time-bound obligations in their personal and professional lives (Ümme et al., 2016). Failure to live up to social and emotional expectations in interpersonal relationships leads to loneliness (Russell et al., 2012).

While nomophobia can contribute to feelings of loneliness, it is important to note that it is not the only factor. However, excessive use of technology can lead to social isolation and a lack of meaningful connections with others. This can exacerbate feelings of loneliness and make it difficult to form new relationships. In addition, the constant need to check one's phone and stay connected can detract from in-person interactions, leading to a lack of social skills and difficulty forming lasting relationships. This can further contribute to feelings of loneliness and isolation (Smith et al., 2020).

It was found in research conducted on a sample of adolescents that there is a positive relationship between nomophobia and loneliness in which nomophobia was a significant predictor of loneliness. In the same research, they also explain that individuals who do not or cannot have access to their mobile phones end up experiencing loneliness, which can be because of not being able to socialize or connect with anyone (Gezgin et al., 2017). Yildiz Durak also discovered a link between nomophobia and loneliness, and she said that people who struggle with interpersonal contact are more prone to turn to online communication, which might isolate them from their surroundings and lead to loneliness (Yildiz et al., 2018). Negative emotions may then ensue, which may cause a separation from the social environment and a decrease in motivation. According to one study, teenagers who spend more time staring at their smartphones have higher degrees of anxiety and loneliness, which is why they have higher levels of nomophobia (Kara et al., 2021).

Nomophobia and loneliness are serious concerns that can have a significant impact on mental health and well-being. It is important for individuals to be aware of the potential risks associated with excessive phone use and to understand how severely one's life can be affected, making a note of all these points, the aim of the present research is to find out the relationship between nomophobia and loneliness and its prevalence regarding smartphones and internet use among young adults.

REVIEW OF LITERATURE

The relationship between humans and mobile phones is complex and multifaceted. While these devices have undoubtedly brought many benefits and conveniences to our lives, they have also created new challenges and concerns. Ultimately, the relationship between humans and mobile phones will continue to evolve as technology advances and we learn more about the impacts of these devices on our health, society, and environment. Mobile phones have had a profound impact on society. They have changed the way we work, play, and socialize. With the ability to stay connected to others at all times, mobile phones have made it easier to maintain relationships and stay informed about what is happening in the world. However, the constant use of mobile phones has also led to concerns about addiction and the negative

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effects on mental health. Studies have shown that excessive smartphone use can lead to anxiety, depression, and sleep disturbances (Santl et al., 2022).

Associations between mobile phone use and adverse mental health outcomes are found in studies that take a psychological or behavioral perspective on the exposure (Thomé, 2018). It was discovered that a variety of psychological variables, such as extrovert personality and low self-esteem, are connected to excessive cell phone use. Nomophobia is rising as a threat to our social, mental, and physical health. The study suggests that we cannot ban using mobile phones or smartphones still we can limit our use and exposure to them (Bhattacharya et al., 2019). Additionally, it was found that one of the disorders of the modern world that is already pervasive among young people is nomophobia, or the dread of not being able to access and consume information through mobile phones (Yildirim & Correia, 2017).

Humans are social creatures, and our need for connection with others is hardwired into our brains. Studies have shown that social isolation and loneliness can lead to depression, anxiety, and even physical illnesses such as heart disease and stroke. Therefore, it is crucial that we make an effort to connect with others and build meaningful relationships (Valtorta et al., 2016). Loneliness is a feeling that every human being experiences at some point in their lives. It is a natural response to the absence of social interaction and connection with others. However, it is important to recognize that loneliness can have serious consequences on one's mental health and well-being (Arslan, 2021). One of the biggest barriers to human interaction is fear. Fear of rejection, fear of vulnerability, and fear of judgment can all prevent individuals from reaching out and connecting with others. However, it is important to recognize that these fears are often speculative. Making oneself vulnerable and reaching out to others can lead to deep, meaningful connections and a sense of belonging. By breaking down these barriers and taking risks, individuals can experience the joy of human interaction and combat feelings of loneliness (Goll et al., 2015).

Nomophobia and loneliness are serious concerns that can have a significant impact on mental health and well-being (Rodríguez-García et al., 2020). A study was conducted to investigate the relationship between nomophobia levels among high school students and their Internet Addiction. This study also explores the factors including the duration of smartphone and mobile Internet usage that trigger and create this phenomenon. Results show that the longer the duration of smartphone usage the higher the risk of exhibiting nomophobic behaviors and also indicated that they tend to exhibit more nomophobic behaviors as an increase in the level of student Internet addiction, (Yıldız Durak, 2018). In another study, there were substantial variations in the students' scores on nomophobia, loneliness, and self-happiness (Ozdemir et al., 2018).

METHODOLOGY

Aim

It is to find out the relationship between loneliness and nomophobia among young adults.

Statement of the problem

To find out if nomophobia is the cause for loneliness among young adults

Research Design

The study will be a Correlational Research (Pearson) Design using a quantitative approach. A sample of 199 Young Adults (n=199, where males=99 and females=100), between the age range of 18-25 years will be taken for the study.

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Operational Definition

- **Nomophobia:** The unreasonable fear of going without a phone is known as nomophobia. The word, which is derived from the anglicization "nomophobia," was first used in the UK in 2009. ("no-mobile-phone-phobia"). The user who does not have the electronic device—either because they have forgotten it at home, the battery has run out, or they are out of range—experiences an erroneous sense of communication.
- **Loneliness:** Being alone or believing oneself to be alone can cause both subjective and cognitive pain. Research and theory in psychology provide a variety of viewpoints: Cognitive psychology emphasizes the unpleasant and unsettling experience that results from a perceived discrepancy (i.e., deficiency in quantity or quality between an individual's desired and actual social relationships), whereas social psychology emphasizes the emotional distress that results when inherent needs for intimacy and companionship are not met. According to existential or humanistic psychologists, loneliness is an essential and painful part of being human, but it can also help people become more self-aware and experience renewal.
- **Young Adults:** An individual who is in the years following adolescence and aged approximately 18-26.

Objectives

- To find out if there is a significant relationship between nomophobia and loneliness levels.
- To find the difference in nomophobia between males and females.
- To find the difference in loneliness between males and females.

Hypotheses

(H₀)- There is no significant relationship between nomophobia and loneliness.

(H₀₁)- There is no significant difference between males and females for Nomophobia

(H₀₂)- There is no significant difference between males and females in Loneliness.

Sample and Technique

Sample size- 200 participants between the age group of 18 to 25 years

Sampling Technique: Purposive Sampling (n=199, males=99, females=100)

Data Collection Method: Offline (Printed Forms)

Inclusion Criteria

- Girls and Boys in the age group of 18 to 25 years
- People know English
- Individuals residing in India
- People with high levels of-
 - Duration of smartphone usage
 - Duration of daily smartphone usage
 - Duration of mobile internet usage
 - Duration of daily mobile internet usage

Exclusion Criteria

- Other genders
- People who are illiterate
- People with less usage of smartphones and mobile internet

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Tools

The following tools will be used in the study:

Socio-demographic datasheet. An information schedule was prepared for collecting the Socio-demographic details of the participants.

Nomophobia Questionnaire NMP-Q (Yildirim & Correia, 2015). This 20-item. The scale comprises four factors namely not being able to communicate, losing connectedness, not being able to access information, and giving up convenience. A 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) was applied to each NMP-Q item leading to a summated total score. The higher score reflects the severity of nomophobia. In addition, the interpretation of the NMP-Q score into the level of nomophobia (out of a total score between 20 and 140) 20 corresponding to the absence; 21–59 corresponding to a mild level; 60–99 corresponding to a moderate level; and ≥ 100 corresponding to severe level. Cronbach's alpha reliability coefficient for internal consistency of the questionnaire is .94. The four-factor obtained as a result of the exploratory factor analysis corroborates the connection of the four dimensions to the theoretical construct of nomophobia, and thus ensures the construct validity of the NMP-Q.

Revised UCLA Loneliness Scale (Russell et al., 1980). A 20-item scale designed to measure one's subjective feelings of loneliness as well as feelings of social isolation. The measure has high internal consistency (coefficient alpha = .96) and a test-retest correlation over a two-month period of .73.

Procedure

Several prospective participants meeting the selection criteria were contacted through university and departments. An offline form was created containing the required scales for collecting data. Participants were subjected to provide first provide their consent, before administration of the study tools. Responses received through the offline forms were then recorded for further investigation. Statistical operations of the collected data were done using Statistical Package for Social Sciences version 16.0. (IBM, New York). Descriptive statistics (such as frequency, percentage, mean, and standard deviation) were computed to describe sample characteristics. Correlational analysis (Pearson r) was done to find out the relationships between the study variables Cohen's d effect size test was done to study the standardized difference between two variables.

The Statistical Analysis

IBM SPSS Statistics 22 was used to statistically analyze the data. Descriptive statistics, independent samples t-test to find the significant gender difference, Pearson correlation to find the relationship, and Cohen's d effect size test.

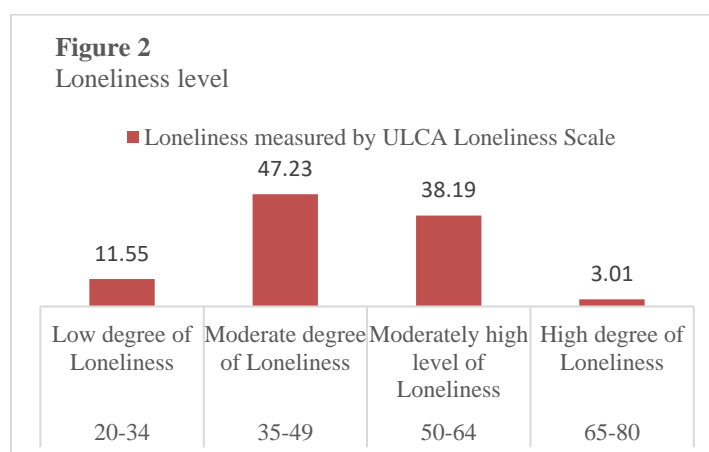
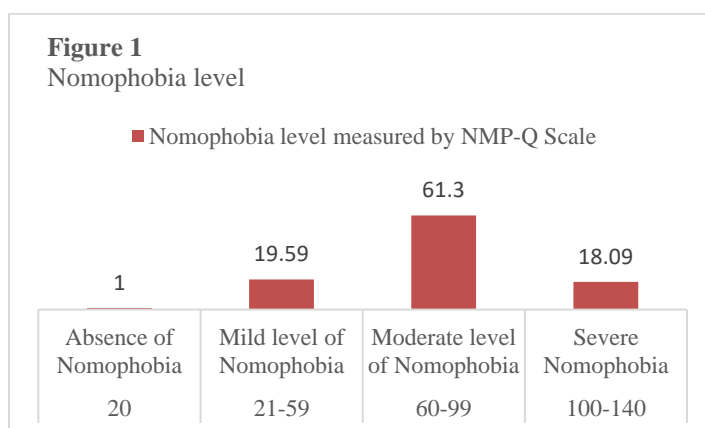
Ethical Consideration

The anonymity of the respondent was maintained by not taking their name during the data collection. Participants received an explanation of the study's purpose and the potential dangers and risks associated with it. The participants were also provided with the mail id, in case of any concerns. Additionally, informed consent was taken before the collection of data from the participant.

RESULTS AND DISCUSSION

Table 1 Demographic characteristics on the Internet use of study sample

Variable		No.	Percentage
Age in years	18	9	4.52
	19	18	9.04
	20	13	6.53
	21	25	12.56
	22	56	28.14
	23	46	23.11
	24	18	9.04
	25	14	7.03
Sex	Female	100	50.25
	Male	99	49.74
Duration of mobile phone usage	>3h	0	0
	4-6h	93	46.73
	7-9h	66	33.16
	9-12h	22	11.05
	>12h	18	18.09
Duration of mobile phone internet usage	4-6h	129	64.82
	7-9h	37	18.59
	9-12h	17	8.54
	>12h	16	16.08



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Table 2 Independent sample t-test for Loneliness levels based on gender.

Gender	N	Mean	Std. Deviation	t	p
Females	100	46.62	9.74	-0.45	0.647
Males	99	47.26	10.02	-0.45	

Table 3 Independent sample t-test for Nomophobia levels based on gender.

Gender	N	Mean	Std. Deviation	t	p
Females	100	82.53	20.42	2.405	0.017
Males	99	74.61	25.72	2.402	

Table 4 Pearson correlations, mean, and standard deviations among study variables.

	M	SD	loneliness	Nomophobia
Loneliness	46.93	9.86	---	---
Nomophobia	78.59	23.49	0.169*	---

*. Correlation is significant at the 0.05 level (2-tailed).

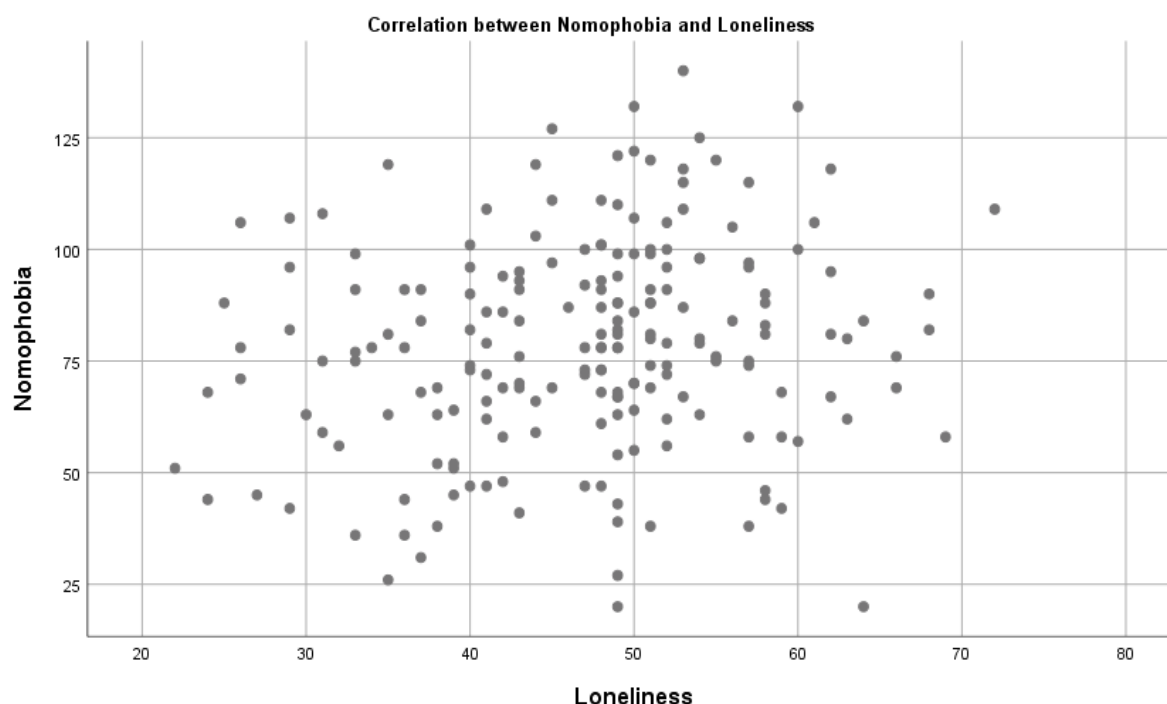


Table 1 demonstrates that more than half of the population was 22 years or older (67.32%), while 32.65% were 21. Moreover, the highest percentages in the studied population were for the female gender (50.25%), while 49.74% were for the male gender. Regarding mobile phone usage and mobile phone internet usage, the results show that the maximum usage was for four to six hours 46.73% and 64.82%, respectively.

According to Fig. 1, the level of nomophobia with the highest percentage in the study sample was moderate (61.3%). Research results show that most young adults participating in the study experience nomophobia to varying degrees, accounting for 98.98%. Specifically, 18.09% of young adults have severe nomophobia, 61.30% of young adults have moderate nomophobia, 19.59% have mild nomophobia and 1.00% have no nomophobia.

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According to Fig. 2, the level of feelings of loneliness with the highest percentage among the participants was a moderate level of loneliness, at 47.23%. Research results show that most young adults participating in the study experience loneliness to varying degrees, accounting for 96.97%. Specifically, 3.01% of young adults have a high degree of loneliness, 38.19% of young adults have a moderately high level of loneliness, 47.23 % have a moderate level of loneliness and 11.55% have a low level of loneliness.

(H₀)- There is no significant relationship between nomophobia and loneliness level.

The results show that nomophobia has a positive correlation with loneliness ($r = 0.169$, $p < 0.05$). (Table 4.) Cohen's d test was performed to determine how nomophobia predicted young adults' loneliness. The analysis results indicate an inverse relationship between loneliness and gender, $z = -0.46$, $p < 0.01$, and $d = -0.06$, and a direct relationship between gender and nomophobia, $z = 2.40$, $p < 0.01$, and $d = 0.38$. The null hypothesis which states that there is no significant relationship between nomophobia and loneliness level is rejected.

(H₀₁)- There is no significant difference between males and females for Nomophobia

An Independent sample t-test was conducted to find out whether there are any significant gender differences in nomophobia levels. The p-value obtained was 0.647 which indicates that there are no significant gender differences in nomophobia levels since the obtained p-value is greater than 0.05 (Table 3). Therefore, the null hypothesis is accepted which states that there are no significant male and female differences in nomophobia level.

(H₀₂)- There is no significant difference between males and females in Loneliness.

An Independent sample t-test was conducted to find out whether there are any significant gender differences in loneliness levels. The p-value obtained was 0.017 which indicates that there are significant gender differences in mental well-being since the obtained p-value is smaller than 0.05 (Table 2). Therefore, the null hypothesis is rejected which states that there are no significant male and female differences in Loneliness level.

DISCUSSION

In today's digital age, mobile phones have become a ubiquitous part of our daily lives. While it has brought us closer together in some ways, it has also contributed to feelings of loneliness and disconnection. Empathy is often lacking in today's society. Many individuals are so consumed with their own lives and problems that they fail to truly listen and understand the experiences of others. Studies have shown that excessive use of mobile phones can lead to feelings of envy, anxiety, and FOMO (fear of missing out) (Li et al., 2021). This constant comparison to others' seemingly perfect lives can leave individuals feeling inadequate and lonely. Social media platforms, instant messaging, and video conferencing have made it easier for us to communicate with people from all over the world. However, this constant connectivity has also created an illusion of connection that can be misleading. While we may have thousands of friends and followers online, many of these connections are superficial and lack depth. We often mistake likes and comments for genuine human interaction, leading us to believe that we are more connected than we actually are. Despite the illusion of connection, studies have shown that loneliness is on the rise. In a world where we are constantly bombarded with information and stimuli, it can be difficult to find meaningful connections with others. Many people feel isolated and disconnected, even when surrounded by others. This loneliness epidemic can have serious consequences for our mental and physical health. Without social support, we are more likely to experience depression, anxiety, and other health problems. It is important that we recognize the limitations of digital communication and make an effort to connect with others in meaningful ways.

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The purpose of the study was to study how nomophobia influences loneliness among young adults.

The findings indicated that 22 years or older constituted the research population, females were the highest studied population, mobile phones, and mobile internet usage was maximum for four to six hours and also, there is a moderately high level of nomophobia and loneliness among young adults.

In the research, it was found that there is a positive correlation between nomophobia and loneliness. The outcomes concurred with earlier research showing that loneliness had a strong significant relationship with nomophobia (Gezgin et al., 2018, Yıldız Durak, 2018). These results provide credence to Gezgin et al. (2018) that adolescents' levels of loneliness somewhat predict their levels of nomophobia. According to the research, people who lose access to their smartphones experience loneliness because they worry about being unable to interact and connect with others. The major finding of the study is that there is a significant relationship between nomophobia and loneliness level and loneliness level is significant in males and females. The results revealed that there is no significant difference between males and females for nomophobia levels.

Given these findings and the data on the relationship between nomophobia and loneliness in the literature, it is believed that nomophobia may develop following loneliness and may worsen as a person becomes more isolated. Because those who experience loneliness can connect with others via their smartphones, social networking sites, and online games, meet new people and communicate with them there. According to this perspective, people who are experiencing feelings of loneliness may get dependent on their smartphones while using them to access platforms and may be able to eliminate such sensations. Finally, using their smartphones to escape feelings of loneliness may cause nomophobic actions.

Nomophobia can also have a significant impact on social connections. While smartphones are often seen as tools for staying connected with others, excessive reliance on them can actually hinder interpersonal relationships. Social desirability and loneliness may seem like unrelated concepts, but they are more closely intertwined than one might think. In many cases, social desirability can actually contribute to feelings of loneliness and isolation. While social desirability, loneliness, and nomophobia can all have negative impacts on individuals and society as a whole, there are steps that can be taken to address these issues. Promoting authenticity and vulnerability can help break down the barriers created by social desirability and foster genuine connections between individuals. Encouraging mindfulness and limiting technology use can also help combat feelings of loneliness and nomophobia, allowing individuals to fully engage with the world around them. Gratitude and appreciation are essential components of healthy relationships. Expressing gratitude for the things one does, no matter how small can foster feelings of love and connection. Appreciation also involves recognizing and valuing each other's strengths and contributions to the relationship. Physical touch and showing empathy is a fundamental aspect of human interaction. From a simple hug to a handshake, physical touch releases oxytocin, a hormone that promotes feelings of trust and bonding. It is a critical component of human interaction, as it allows individuals to connect with others on a deeper level and build meaningful relationships. By cultivating empathy and actively seeking to understand others, individuals can break down barriers and build strong, lasting connections. Therefore, it is crucial to find a balance between social interaction and solitude. By prioritizing meaningful connections with others while also taking time for ourselves, we can cultivate a sense of fulfillment and combat feelings of loneliness.

SUMMARY AND CONCLUSION

While human interaction is essential for our mental health and well-being, it is also important to recognize the value of solitude. Solitude provides us with the opportunity to reflect, recharge, and connect with ourselves. Whether it involves limiting screen time, prioritizing in-person interactions, or seeking professional help, there are many strategies that can be effective. By taking action and making a conscious effort to form meaningful connections with others, individuals can overcome these challenges and live happier, healthier lives.

Nomophobia and loneliness are complex issues that require attention and action. By understanding the impact of excessive phone use on mental health and well-being, individuals can take steps to combat these issues and improve their overall quality of life. To combat the illusion of connection and disconnected realities, we need to prioritize authenticity in our interactions with others. This means being honest about our thoughts and feelings, even if they are unpopular or uncomfortable. It means being vulnerable and open to feedback and criticism. Authenticity also means valuing quality over quantity in our relationships. Instead of focusing on the number of friends or followers we have, we should prioritize building deep, meaningful connections with a few individuals. By doing so, we can create a sense of belonging and community that is lacking in many disconnected realities.

CONCLUSION

Based on the study done, the major finding of the study is that there is a significant relationship between nomophobia and loneliness level and loneliness level is significant in males and females. The results revealed that there is no significant difference between males and females for nomophobia levels.

Limitations

Nevertheless, some limitations of this research study are as follows:

- People who are illiterate and the ones with low mobile phone usage could also fall under a severe degree of loneliness which was not explored in this study and can be further researched in other studies.
- The research was conducted on young adults but the cause of mobile usage was not studied which can be furthered studied.

Implications of the Study

- The findings of this study can provide base for the source of information if the young adults are nomophobic and lonely.
- The information can be utilized by the parents, teachers as well as counsellors to monitor the patterns of behaviors and mobile phone usage.
- It can help developing interventions for adults who are on the verge of becoming nomophobic or have symptoms of loneliness because of this.
- To reduce nomophobia and loneliness a reality approach has to be introduced.

REFERENCES

- Al-Kandari, Y. Y., & Al-Sejari, M. M. (2020). Social isolation, social support and their relationship with smartphone addiction. *Information, Communication & Society*, 1–19. <https://doi.org/10.1080/1369118x.2020.1749698>
- Arslan, G. (2021). School belongingness, well-being, and mental health among adolescents: exploring the role of loneliness. *Australian Journal of Psychology*, 73(1), 70–80. <https://doi.org/10.1080/00049530.2021.1904499>

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- Baca, K., Rico, M., & Stoner, M. (2015). Embracing Technology to Strengthen Care and Enhance Human Connection. *Dimensions of Critical Care Nursing*, 34(3), 179–180. <https://doi.org/10.1097/dcc.0000000000000111>
- Banskota, S., Healy, M., & Goldberg, E. (2020). 15 Smartphone Apps for Older Adults to Use While in Isolation During the COVID-19 Pandemic. *WestJEM 21.3 May Issue*, 21(3). <https://doi.org/10.5811/westjem.2020.4.47372>
- Bhattacharya, S., Bashar, M., Srivastava, A., & Singh, A. (2019). NOMOPHOBIA: NO MOBILE PHONE PHOBIA. *Journal of Family Medicine and Primary Care*, 8(4), 1297. https://doi.org/10.4103/jfmpc.jfmpc_71_19
- Bragazzi, N. L., Re, T. S., & Zerbetto, R. (2019). The Relationship Between Nomophobia and Maladaptive Coping Styles in a Sample of Italian Young Adults: Insights and Implications from a Cross-Sectional Study. *JMIR Mental Health*, 6(4), e13154. <https://doi.org/10.2196/13154>
- Cairns, M. R., Ebinger, M., Stinson, C., & Jordan, J. (2020). COVID-19 and Human Connection: Collaborative Research on Loneliness and Online Worlds from a Socially-Distanced Academy. *Human Organization*, 79(4), 281–291. <https://doi.org/10.17730/1938-3525-79.4.281>
- Gezgin, D. M., Cakir, O., & Yildirim, S. (2018). The Relationship between Levels of Nomophobia Prevalence and Internet Addiction among High School Students: the factors influencing Nomophobia. *International Journal of Research in Education and Science*, 4(1), 215–225. <https://doi.org/10.21890/ijres.383153>
- Gezgin, D. M., Hamutoglu, N. B., Sezen-Gultekin, G., & Ayas, T. (2018a). The Relationship between Nomophobia and Loneliness among Turkish Adolescents. *International Journal of Research in Education and Science*, 4(2), 358–374. <https://eric.ed.gov/?id=EJ1184958>
- Gezgin, D. M., Hamutoglu, N. B., Sezen-Gultekin, G., & Ayas, T. (2018b). The Relationship between Nomophobia and Loneliness among Turkish Adolescents. *International Journal of Research in Education and Science*, 4(2), 358–374. <https://doi.org/10.21890/ijres.409265>
- Goll, J. C., Charlesworth, G., Scior, K., & Stott, J. (2015). Barriers to Social Participation among Lonely Older Adults: The Influence of Social Fears and Identity. *PLOS ONE*, 10(2), e0116664. <https://doi.org/10.1371/journal.pone.0116664>
- Han, S., Kim, K. J., & Kim, J. H. (2017). Understanding Nomophobia: Structural Equation Modeling and Semantic Network Analysis of Smartphone Separation Anxiety. *Cyberpsychology, Behavior, and Social Networking*, 20(7), 419–427. <https://doi.org/10.1089/cyber.2017.0113>
- Jeong, S.-H., Kim, H., Yum, J.-Y., & Hwang, Y. (2016). What type of content are smartphone users addicted to?: SNS vs. games. *Computers in Human Behavior*, 54, 10–17. <https://doi.org/10.1016/j.chb.2015.07.035>
- Kara, M., Baytemir, K., & Inceman-Kara, F. (2019). Duration of daily smartphone usage as an antecedent of nomophobia: exploring multiple mediation of loneliness and anxiety. *Behaviour & Information Technology*, 1–14. <https://doi.org/10.1080/0144929x.2019.1673485>
- King, A. L. S., Valença, A. M., Silva, A. C. O., Baczynski, T., Carvalho, M. R., & Nardi, A. E. (2013). Nomophobia: Dependency on virtual environments or social phobia? *Computers in Human Behavior*, 29(1), 140–144. <https://doi.org/10.1016/j.chb.2012.07.025>
- King, D. L., Delfabbro, P. H., Billieux, J., & Potenza, M. N. (2020). Problematic online gaming and the COVID-19 pandemic. *Journal of Behavioral Addictions*, 9(2), 184–186. <https://doi.org/10.1556/2006.2020.00016>

Influence of Nomophobia and Loneliness on Young Adults

- Lee, S., Tam, C. L., & Chie, Q. T. (2013). Mobile Phone Usage Preferences: The Contributing Factors of Personality, Social Anxiety and Loneliness. *Social Indicators Research, 118*(3), 1205–1228. <https://doi.org/10.1007/s11205-013-0460-2>
- Li, L., Niu, Z., Mei, S., & Griffiths, M. D. (2021). A network analysis approach to the relationship between fear of missing out (FoMO), smartphone addiction, and social networking site use among a sample of Chinese university students. *Computers in Human Behavior, 107*086. <https://doi.org/10.1016/j.chb.2021.107086>
- Musa, R., Saidon, J., & Rahman, S. A. (2017). Who's at Risk for Smartphone Nomophobia and Pathology; The Young or Matured Urban Millennials? *Advanced Science Letters, 23*(8), 7486–7489. <https://doi.org/10.1166/asl.2017.9504>
- Olivencia-Carrión, M. A., Ferri-García, R., Rueda, M. del M., Jiménez-Torres, M. G., & López-Torrecillas, F. (2018). Temperament and characteristics related to nomophobia. *Psychiatry Research, 266*, 5–10. <https://doi.org/10.1016/j.psychres.2018.04.056>
- Ozdemir, B., Cakir, O., & Hussain, I. (2018). Prevalence of Nomophobia among University Students: A Comparative Study of Pakistani and Turkish Undergraduate Students. *EURASIA Journal of Mathematics, Science and Technology Education, 14*(4). <https://doi.org/10.29333/ejmste/84839>
- Rodríguez-García, A.-M., Moreno-Guerrero, A.-J., & López Belmonte, J. (2020). Nomophobia: An Individual's Growing Fear of Being without a Smartphone—A Systematic Literature Review. *International Journal of Environmental Research and Public Health, 17*(2), 580. <https://doi.org/10.3390/ijerph17020580>
- Russell, D. W., Cutrona, C. E., McRae, C., & Gomez, M. (2012). Is Loneliness the Same as Being Alone? *The Journal of Psychology, 146*(1-2), 7–22. <https://doi.org/10.1080/00223980.2011.589414>
- Santl, L., Brajkovic, L., & Kopilaš, V. (2022a). Relationship between Nomophobia, Various Emotional Difficulties, and Distress Factors among Students. *European Journal of Investigation in Health, Psychology and Education, 12*(7), 716–730. <https://doi.org/10.3390/ejihpe12070053>
- Santl, L., Brajkovic, L., & Kopilaš, V. (2022b). Relationship between Nomophobia, Various Emotional Difficulties, and Distress Factors among Students. *European Journal of Investigation in Health, Psychology and Education, 12*(7), 716–730. <https://doi.org/10.3390/ejihpe12070053>
- Smith, K. J., Gavey, S., Riddell, N. E., Kontari, P., & Victor, C. (2020). The association between loneliness, social isolation and inflammation: A systematic review and meta-analysis. *Neuroscience & Biobehavioral Reviews, 112*, 519–541. <https://doi.org/10.1016/j.neubiorev.2020.02.002>
- Thomé, S. (2018). Mobile Phone Use and Mental Health. A Review of the Research That Takes a Psychological Perspective on Exposure. *International Journal of Environmental Research and Public Health, 15*(12), 2692. <https://doi.org/10.3390/ijerph15122692>
- Ümmet, D., & Ekşi, F. (2016). Internet Addiction in Young Adults in Turkey: Loneliness and Virtual-Environment Loneliness. *Addicta: The Turkish Journal on Addictions, 3*(1), 42–55. <https://doi.org/10.15805/addicta.2016.3.0008>
- Valtorta, N. K., Kanaan, M., Gilbody, S., Ronzi, S., & Hanratty, B. (2016). Loneliness and Social Isolation as Risk Factors for Coronary Heart Disease and stroke: Systematic Review and meta-analysis of Longitudinal Observational Studies. *Heart, 102*(13), 1009–1016. <https://doi.org/10.1136/heartjnl-2015-308790>
- Victor, C. R., & Yang, K. (2012). The Prevalence of Loneliness Among Adults: A Case Study of the United Kingdom. *The Journal of Psychology, 146*(1-2), 85–104. <https://doi.org/10.1080/00223980.2011.613875>

Influence of Nomophobia and Loneliness on Young Adults

- Yildirim, C., & Correia, A.-P. (2017). Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire Redesigning Basic Statistics course for improving student performance and retention. View project Impact of Virtual Reality Mindfulness Training on Anxiety and Affect View project Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. *Computers in Human Behavior*, 49. <https://doi.org/10.1016/j.chb.2015.02.059>
- Yıldız Durak, H. (2018a). What would you do without your smartphone? adolescents' social media usage, locus of control, and loneliness as a predictor of nomophobia. *Acikerisim.bartın.edu.tr*. <https://acikerisim.bartın.edu.tr/handle/11772/963>
- Yıldız Durak, H. (2018b). What Would You Do Without Your Smartphone? Adolescents' Social Media Usage, Locus of Control, and Loneliness as a Predictor of Nomophobia. *Addicta: The Turkish Journal on Addictions*, 5(3). <https://doi.org/10.15805/addicta.2018.5.2.0025>
- Yıldız Durak, H. (2018c). What Would You Do Without Your Smartphone? Adolescents' Social Media Usage, Locus of Control, and Loneliness as a Predictor of Nomophobia. *Addicta: The Turkish Journal on Addictions*, 5(3). <https://doi.org/10.15805/addicta.2018.5.2.0025>
- Zwilling, M. (2022). The Impact of Nomophobia, Stress, and Loneliness on Smartphone Addiction among Young Adults during and after the COVID-19 Pandemic: An Israeli Case Analysis. *Sustainability*, 14(6), 3229. <https://doi.org/10.3390/su14063229>

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