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# Assessing Nomophobia among University Students: A Confirmatory Factor Analysis of the NMP_Q in Pakistan

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**Abstract:** *This study presents a comprehensive Confirmatory Factor Analysis of the Nomophobia Questionnaire (NMP-Q), originally developed by Yildirim and Correia (2015), within the context of university students in Pakistan. Nomophobia, conceptualized as the anxiety and fear associated with being without a mobile phone, is a burgeoning area of research with significant implications for the psychological well-being of digital natives. While the NMP-Q is a widely recognized instrument, its reliability and validity necessitate confirmation within specific cultural and demographic contexts to ensure measurement precision. To this end, the present research undertook a rigorous methodological process to evaluate the instrument's internal consistency and construct validity. Reliability, assessed via Cronbach's alpha, demonstrated strong internal consistency for the full scale (α = .918). The four subscales— (1) unable to access information (NAI) (α = .730), (2) Giving up convenience (GUPC) (α = .704), (3) Unable to communicate (α = .743) (NBAC), and (4) Losing connectedness (LOFC) (α = .757)—all exhibited acceptable to high reliability, exceeding the conventional threshold. Furthermore, CFA was employed to verify the structure of four factors. The results confirmed that all 20 items loaded significantly (p < .05) on their respective constructs, with standardized factor loadings ranging from 0.55 to 0.67, all surpassing the recommended minimum value. The CFA findings provide strong evidence for the construct validity of NMP-Q, affirming its theoretical framework. In conclusion, this validation study confirms that the adapted NMP-Q is a psychometrically sound, valid, and reliable instrument for the assessment of the multifaceted nature of Nomophobia among university students in Pakistan. It is therefore recommended for use by researchers and practitioners seeking to understand and measure mobile phone-related anxiety in academic settings, ensuring that subsequent findings are based on a robust and validated metric.*

## Introduction

Nomophobia is a growing concern among students, as nomophobia is a condition that is the result of

growing technologies (King et al., 2014). Nomophobia, which can be translated to “no-mobile-phone phobia", describes the worry people experience in being away from or unable to use their mobile phones (Leon-Mejia, 2021). It is hardly surprising that mobile phones have become all-pervasive, serving as a communication device, a source of information, and a means of entertainment. The peak severity of Nomophobia occurs among university students, as mobile technology is integrated into numerous facets of their lives and education.

The repercussions of digital addiction among university students have profound consequences that foster concern regarding academic performance and other metrics of personal productivity. Digital addiction is defined as an infatuation with gadgets, such as mobile phones, used in a manner that disrupts normal daily functioning (Kuss and Griffiths, as cited in Pontes and Griffiths, 2014). Such an obsession is known to cause several detrimental effects, including social withdrawal, a decline in mental health, and most alarmingly, an increase in suicidal ideation.

The extensive use of the Internet has come to characterize of modern era. (Khiabany, 2010). The ability to connect individuals worldwide, overcoming geographical and distance obstacles, is the primary benefit of using the Internet (Marcoccia, 2012). Additionally, the Internet offers different services which are related to employment, health, and in education field (Mihalca et al, 2021; Okyere, 2022). Similarly, having access to the internet is possible because these technologies may be accessed and used on any device, including smartphones, laptops, and tablets (Villanti et al., 2017). According to Statista (2023a), over 7 billion people worldwide are estimated to own a smartphone, with India and China accounting for the majority of mobile users (Statista, 2022). The advancements of smartphones have led to a great transformation among young people (Tomczyk et al., 2020). The popularity of using smart devices more than four hours daily is a global phenomenon (Ditrendia, 2021). The young people perceive an essential use of mobile devices in their daily life (Seo et al., 2019).

The behavioural addictions of cell phone use are still under debate (Pedrero-Perez et al., 2017). Despite the advantages and popularity of smartphones, they hurt people's lifestyles if it is excessively used (Gezgin & Cagril, 2016). Therefore, the excessive use of smartphones can interfere with different aspects of daily life, and the excessive use of smartphones is not recommended by experts. The issues start when people end up becoming dependent on the use of their smartphones, and there are several sides of life that are currently being lived in the virtual world (Gezgin, 2017).

## Literature Review

The literature suggests that excessive mobile phone use has caused in the form of Nomophobia, which is an anxiety disorder that arises when a person has access to a mobile phone. Nomophobia expresses compulsive behaviours such as regularly checking their phones and being too focused on battery life and internet connection (Yildirim et al., 2016). Since young people are given mobile phones at a young age, the majority of research has revealed that this condition is more common in this demographic (Gurbuz & Ozkan, 2020; Limone & Toto, 2022; Terras & Ramsay, 2016; Rémen & Lacour, 2018). Nomophobia, a form of anxiety disorder that has been described as a severe, unreasonable, and exaggerated mobile phone use, is measured by the NMP-Q (Yildirim & Correia, 2015).

The concept of Nomophobia is directly related to the impossibility of using social networks, since to disconnect the self with the online identity means to disconnect the self with their real identity (Ortega-Baron et al., 2021) and the identity itself (Belk, 2016; Lin et al., 2018). Moreover, the inability to access a smartphone is also related to the so-called Fear of Missing Out (Hamutoglu et al., 2018). Due to the termination of that untenable linkage, we can have anxieties and maladaptive behaviours (Gonzalez-Cabrera et al., 2017; Moreno-Guerrero et al., 2020). Also, the concept of Nomophobia carries adverse

effects on the mental well-being of adolescents (Galhardo et al., 2022) and also leads to several psychological issues (Rodriguez-Garcia et al., 2020).

**Nomophobia**

It is a concept that is referred to as Nomophobia and is the phobia of not being in contact with a mobile phone and the fears with which mobile phone users are attacked. A different meaning of Nomophobia is regarded as a contemporary-world disorder, and has only been applied recently to describe the discomfort or anxiety caused by the non-availability of an MP [mobile phone], PC [personal computer], or any other virtual communication device in people who use them habitually (King, et al. 2013). Nomophobia, or No-mobile-phone phobia, is defined as your anxiety about being disconnected from your smartphone (King et al., 2013). In higher stages of the disorder, people may start to show symptoms even in the presence of devices, and their condition can lead to them experiencing panic attacks (Adnan & Gezgin, 2016; Pavithra et al., 2015; Sharma et al., 2015; Yildirim et al., 2016).

Nomophobia is the category of anxious people and some degree of nervousness because they experience that they must fill a gap (Enock, Hofmann, and McNally, 2014; King et al., 2014). Being one of the key devices, which contributes to the proliferation of Nomophobia, the smartphone is featured with numerous functions that allow it to become an inseparable part of the everyday routine. Therefore, through excessive use of the smartphone, one can become a Nomophobia, which is a combination of no and mobile (King, Valença, and Nardi, 2010).

Nomophobia can be taken to mean the anxiety, the uncomfortable, and the stressor that is inducted to him/her in the absence of their smartphone (King, 2013). The concept of Nomophobia in the context of the given research is a fear of failing to use a smartphone and/or the services delivered with the help of the given technology. It is the dread of failing to communicate and obtain information, to lose control of connectedness that people have allowed to smartphones, and to lose possibilities that people have with access to smartphones. Individuals are increasingly relying on their smartphones (Park et al. 2013) and hence they tend to experience more anxiety due to lack of access to their smartphones.

Although there has been increasing number of research on cell phone addiction, the current research on Nomophobia is a half-baked study. The Nomophobia is multi-dimensional, and its symptoms (both social and physiological and physical), like very high addiction to smartphones, are numerous (Bragazzi et al., 2014; King et al., 2013). It involves four phases of separation anxiety: failure to communicate, failure to feel connected, failure to get information and failure to do things fully due to lack of a phone at hand (Packham, 2015). Part of these characteristics is worry about not having someone to call, not carrying the phone, or carrying the phone but cannot use it (Bivin et al., 2013; Yildirim and Correia, 2015).

People with Nomophobia tend to feel insecure without a smartphone, frequently check their phones, and carry them everywhere. They often check their phones out of anxiety, distress, or panic over notifications, even secretly checking them during formal meetings (Carroll & Heiser, 2010).

Users who exhibit Nomophobia behaviours tend to fret over not having a phone with them, being out of battery or network coverage, and they compulsively check devices even in scenarios where they can put the phone down. In advanced stages of the disorder, users may begin to exhibit these symptoms even when devices are nearby, and their condition can escalate to experiencing fear spells (Adnan & Gezgin, 2016; Yildirim et al., 2016). Carrying a charger, owning multiple mobile devices, keeping phones powered on at night, incurring debt through smartphone usage, and engaging with the phone immediately before sleep and upon waking are some frequently observed behaviours of Nomophobia individuals (Akilli & Gezgin, 2016). This phenomenon is so novel that very few researchers have sought to describe its behavioural traits, patterns, or symptoms, which suggests smartphone addiction (Kim et

al., 2014). Prior researches suggest that smartphone and internet dependency all share similar symptoms and almost the same features as Nomophobia (Al-Barashdi et al., 2015; Ching et al., 2015). Social networks allow users to share stories and answers instantly and serve as communication channels, especially for young people to interact, connect, and network (Turel & Serenko, 2012).

Evaluating the influence of Nomophobia on university students' learning activities is crucial, as it affects academic performance and overall wellness. The growing addiction and concern of being detached from these devices, particularly mobile phones, impedes focus, learning, and productivity within the classroom. Understanding the scope of Nomophobia and its repercussions on students' academic performance is essential for educators and policymakers, including mental health professionals, to develop effective strategies aimed at assisting these students. The findings relate smartphone usage to diverse impacts on students' psychological and physiological health. For example, Thomée et al. (2011), in a study of young adults, found that those with higher cell phone usage reported greater stress levels, worsened sleep, and depressive symptoms. Alongside the diverse health complications, the presence of Nomophobia will further exacerbate the decline in students' academic performance and overall well-being.

Yet, the findings indicate that Nomophobia has adverse effects on academic achievement, social interaction, and even personal relationships. Yildirim and Correia (2015) reported in their study that individuals scoring high on the Nomophobia scale tend to avoid situations where they might not have access to their mobile phones due to the fear of social isolation. This phenomenon contributes to social isolation, which, when combined with Nomophobia, leads to loneliness, which in turn negatively impacts multiple aspects of life.

Nonetheless, it is important to highlight that Nomophobia can impact psychological and social aspects while also changing the mental processes of students. In their study on college students, Clayton Leshner and Almond (2015) suggested that students' frequent access to mobile devices is detrimental because it leads to cognitive overload, which hinders their ability to focus on coursework. Students may have diminished capacity to perform well academically, and in fact, accelerate their learning. Further, these factors, in addition to age, gender, and the discipline of study, may influence the degree to which Nomophobia affects students or how its symptoms manifest. A study conducted by Gezgin, Şahin, and Yildirim in 2017 explored differences in Nomophobia between students of different faculties, revealing that humanities students exhibited higher levels of Nomophobia relative to their peers from the sciences and engineering faculties.

Nomophobia strongly correlates with technological addiction, showing behaviours such as excessive phone checking, constant inability to disconnect, and the ever-present risk of not being informed on pertinent issues (Gajdics & Jagodics, 2022; Anjana et al., 2021; Modesto et al., 2022). There is a suggestion that people with nomophobia feel overwhelming dread when unable to access their mobile phones due to anxiety. Moreover, social influence, peer pressure, and exclusion fears are regarded as social factors of nomophobia (Celikkalp et al., 2020).

### Objectives of the Study

The study has the following objectives:

1. To assess the internal consistency of the Nomophobia Questionnaire (NMP-Q) and its four subscales (giving up convenience, unable to access information, incapability to communicate, and losing connectedness) for measuring Nomophobia in university students.
2. To assess the construct validity of the NMP-Q by conducting a CFA to confirm the stability and significance of its hypothesized four-factor model within Pakistan.

### Research Instrument

To ensure the robustness and credibility of the study's findings, the selected instrument underwent a rigorous process of validation. This process was critical to confirm that the Nomophobia Questionnaire (NMP-Q) was appropriate, reliable, and valid for the specific context of the present study's population.

### The Nomophobia Questionnaire (NMP-Q)

Nomophobia Scale was used to measure the fear of being without a mobile device or unable to use it. The NMP-Q was originally developed by Yildirim and Correia (2015). The NMP-Q consists of 20 items with four factors of Nomophobia: (1) unable to communicate (NAI), (2) lose connectedness (GUPC), (3) unable to access information (NBAC), and (4) giving up convenience (LOFC). Each question on the questionnaire was intended to be answered by students using a Likert scale with 7 points. Strongly Disagree (SDA=1) --------- Strongly Agree (SDA=7). Formal permission to utilize and adapt the scale for academic research purposes was obtained from the original authors.

### Pilot testing

The pilot study was conducted on a sample of 300 university students. The primary objectives of the study were to: (a) assess the clarity and comprehensibility of the questionnaire items; (b) estimate the average time required for completion; and (c) most importantly, evaluate the internal consistency reliability of the scale and its subscales within the target demographic.

The inclusion criteria were based on the 6th and 8th semesters on the notion that the respondents must be active students registered in a BS degree. They have smartphones and are social media users. They must be willing to participate freely.

Table 1. Characteristics Sample Allocation across Universities

| Background Variables/Sample Features | | N=300 |
|---|---|---|
| Gender | Male | 170 (56%) |
| | Female | 130 (43%) |
| Semester | $6^{th}$ | 165 (55%) |
| | $8^{th}$ | 135 (45%) |
| Faculty | Social Science | 198 (66%) |
| | Physical Sciences | 102(34%) |
| University Sector | Public | 201 (67%) |
| | Private | 99 (33 %) |
| University | UEF | 201 (67%) |
| | UOF | 99 (33%) |

| | | |
|---|---|---|
| CGPA | Min: 2.0 to Max: 4.0 | M (2.99), SD (.605) |

Table 1 depicts that a total of 300 samples were allocated across the two universities conveniently. The gender distribution shows a higher representation of females (103) compared to males (99). Regarding academic progression, students were distributed across semesters; participants from the 6th semester were 165 (55%), and 8th semester were 135 (45%). The majority of participants belonged to the Social Sciences faculty, 198 (66%), while those from Physical Sciences were 102 (34%). Public sector universities accounted for the majority of the samples, 201 (67. %). This includes the University of Education 201 (67%) and Private sector universities—University of Faisalabad contributed the samples 99 (33%). Academic performance, measured by CGPA, ranged from 2.0 to 4.0, with a mean CGPA of 2.99 (SD = .605), indicating generally good academic standing among the students.

Table 2. Description of Subscales, Their scope, Number of Items, Sr# in Final Scale, and Reliability of the scale.

| **Sub Factors** | **Scope** | **No of items** | **After CFA** | **α** |
|---|---|---|---|---|
| NAI | Pertains to the anxiety of not being able to search for information instantly (e.g., maps, news, queries). | 4 | 4 | .730 |
| GUPC | Relates to the discomfort or inconvenience caused by the loss of the utility and ease that a smartphone provides. | 5 | 5 | .704 |
| NBAC | Concerns the fear of being unable to contact or be contacted by one's social network. | 6 | 6 | .743 |
| LOFC | Involves the anxiety of disconnectedness from online and the constant flow of information and social updates. | 5 | 6 | .757 |

Table 2 analyzes the Nomophobia scale in terms of its reliability for internal consistency measured with Cronbach's alpha coefficients based on item deletion. The findings demonstrate that each sub factor maintained acceptable reliability within a range of .730 (unable to communicate (NAI) and .704 (lose connectedness (GUPC). The factor giving up convenience (LOFC) showed the strongest reliability at .757, which demonstrates consistent measurement of this dimension. Also satisfactory was sub factor to access information (NBAC) at .743. Overall, it appears that the scale captures core components of Nomophobia among university students. With all subscales having adequate psychometric rigor for use in quantitative research or practical application.

**Construct Validity of CFA**

To verify the four-factor structure of the NMP-Q and establish its construct validity, a Confirmatory Factor Analysis was executed using LISREL version 8.80. CFA is a powerful statistical technique used to test whether the data conform to a pre-specified theoretical model—in this case, the four-factor model proposed by Yildirim and Correia (2015).

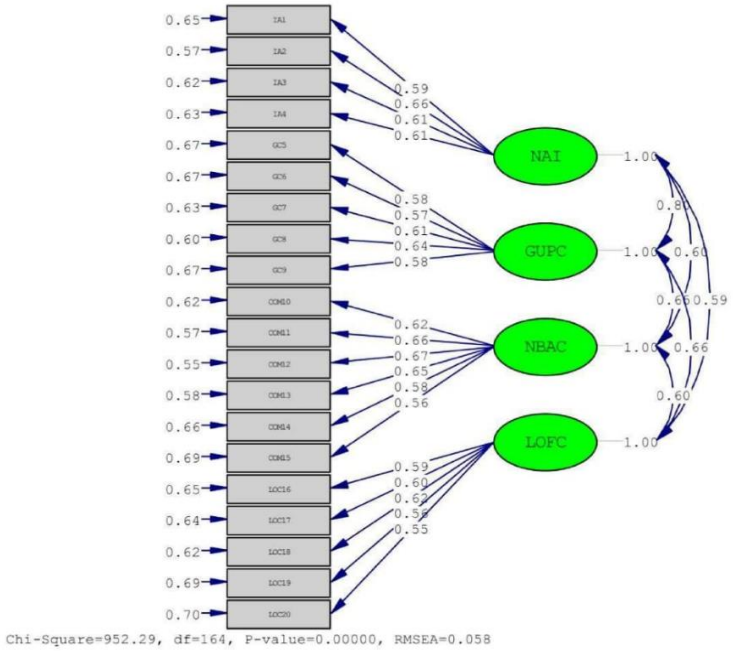


Figure 1: Confirmatory Factor Analysis of NMP-Q Questionnaire

Factor loading of NMP-Q. CFA was performed on 20 content-valid items. All 20 items were selected for the final questionnaire, having a factor loading of more than 0.40. Table 3 presents the findings from the confirmatory factor analysis of NMP-Q.

Table 3. Factor loading of NMP-Q

| ***Statements No.*** | ***NAI*** | ***GUPC*** | ***NBAC*** | ***LOFC*** |
|---|---|---|---|---|
| **S_1** | 0.59 | | | |
| **S_2** | 0.66 | | | |
| **S_3** | 0.61 | | | |
| **S_4** | 0.61 | | | |
| **S_5** | | 0.58 | | |
| **S_6** | | 0.57 | | |
| **S_7** | | 0.61 | | |

| | | | |
|---|---|---|---|
| **S_8** | 0.64 | | |
| **S_9** | 0.58 | | |
| **S_10** | | 0.62 | |
| **S_11** | | 0.66 | |
| **S_12** | | 0.67 | |
| **S_13** | | 0.65 | |
| **S_14** | | 0.58 | |
| **S_15** | | 0.56 | |
| **S_16** | | | 0.59 |
| **S_17** | | | 0.60 |
| **S_18** | | | 0.62 |
| **S_19** | | | 0.56 |
| **S_20** | | | 0.55 |

Table 3 presents the standardized factor loading for confirmatory factor analysis is displayed in the results. At the five percent significance level ($p<.05$), almost all of the factor loadings were statistically significant. The model fit indices, though not explicitly listed in the provided data, are typically reported in a full CFA (e.g., $\chi^2$ (952.29/df (164), CFI (0.96), RMSEA (0.058), SRMR (0.19). A well-fitting model would provide further evidence that the data support the four-factor structure adequately. The strong and significant factor loadings presented here are a primary and robust indicator of good construct validity.

### Conclusion of Confirmatory Factor Analysis

In summary, the Confirmatory factor Analysis conducted through a pilot study confirmed that the adapted Nomophobia Questionnaire (NMP-Q) is a highly suitable instrument for this research. The demonstrably high internal consistency reliability ($\alpha = .918$ for the full scale) and the strong, significant factor loadings from the CFA provide compelling evidence for both the reliability and construct validity of the scale. Therefore, the NMP-Q is deemed a psychometrically sound tool for assessing the levels and facets of Nomophobia among university students in Pakistan in the subsequent main study.

**References**

Andrews, S., Ellis, D. A., Shaw, H., & Piwek, L. (2015). Beyond self-report: tools to compare estimated and real-world smartphone use. *PLoS One 10*: e0139004. doi: 10.1371/journal.pone.0139004

Aznar-Diaz, I., Kopecky, K., Romero-Rodriguez, J. M., Caceres-Reche, M. P., & Trujillo-Torres, J. M. (2020). Pathologies associated with problematic internet use. A systematic review and meta-analysis in WOS and Scopus. *Bibliotecatecológica Research, 34*(82), 229-253.

Ditrendia (2021). Mobile 2021 Spain and World. Ditrendia digital marketing trends. Retrieved April 5, 2022, from https:// ditre ndia. es/ infor

Galhardo, A., Loureiro, D., Massano-Cardoso, I., & Cunha, M. (2022). Adaptation of the European Portuguese version of the Nomophobia Questionnaire for adolescents, factor structure and psychometric properties. *International Journal of Mental Health and Addiction*. https:// doi. org/ 10. 1007/ s11469- 022- 00754-9

Gonzalez-Cabrera, J., Leon-Mejia, A., Perez-Sancho, C., & Calvete, E. (2017). Adaptation of the Nomophobia Questionnaire (NMPQ) to Spanish in a sample of adolescents. *Spanish Records of Psychiatry, 45*(5), 137–144.

Gurbuz, I. B., and Ozkan, G. (2020). What is your level of nomophobia? An investigation of prevalence and level of nomophobia among young people in Turkey. *Community Ment. Health J.* 56, 814–822. doi: 10.1007/s10597-019-00541-2

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis (7th ed.).* Prentice Hall.

Hamutoglu, N. B., Gezgin, D. M., Sezen-Gultekin, G., & Gemikonakli, O. (2018). Relationship between nomophobia and fear of missing out among turkish university students. *Cypriot Journal of Educational Sciences, 13*(4), 549–561. https:// doi. org/ 10. 18844/cjes. v13i4. 3464

Khiabany, G. (2010). Globalization and the internet: myths and realities. *Trends Communication, 11*, 137–153. doi: 10.1207/S15427439TC1102_05

King, A. L. S., Valenca, 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

León-Mejía, A. C., Gutiérrez-Ortega, M., Serrano-Pintado, I., & González-Cabrera, J. (2021). A systematic review on nomophobia prevalence: surfacing results and standard guidelines for future research. *PLoS One* 16: e0250509. doi: 10.1371/journal.pone.0250509

Marcoccia, M. (2012). The internet, intercultural communication and cultural variation. *Language and Intercultural Communication*, *12*(4), 353-368.

Mihalca, L., Irimiaș, T. and Brendea, G., 2021. Teleworking During the COVID-19 Pandemic: Determining Factors of Perceived Work Productivity, Job Performance, and Satisfaction. *Amfiteatru Economic, 23*(58), 620-636. DOI: 10.24818/EA/2021/58/620

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory (3rd ed.).* McGraw-Hill.

Pérez Cabrejos, R. G., Rodríguez Galán, D. B., Colquepisco Paúcar, N. T., Enríquez Ludeña, R. L., Pérez Cabrejos, R. G., Rodríguez Galán, D. B., et al. (2021). Consequences of nomophobia in adolescents: A systematic review. *Conrad, 17*, 203–210.

Pérez Cabrejos, R. G., Rodríguez Galán, D. B., Colquepisco Paúcar, N. T., Enríquez Ludeña, R. L., Pérez Cabrejos, R. G., Rodríguez Galán, D. B., et al. (2021). Consequences of nomophobia in adolescents: A systematic review. Conrado, 17, 203–210.

Rodriguez-Garcia, A. M., Moreno-Guerrero, A. J., & Lopez-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/ ijerp h1702 0580

Seo, S. E., Tabei, F., Park, S. J., Askarian, B., Kim, K. H., Moallem, G., Chong, J. W., & Kwon, O. S. (2019). Smartphone with opticalphysical, and electrochemical nanobiosensors. *Journal of Industrial and Engineering Chemistry, 77*, 1–11. https:// doi. org/10. 1016/j. jiec. 2019. 04. 037

Statista. (2022).Smartphone users by country 2021. Available at: https://www.statista.com/statistics/748053/worldwide-top-countries-smartphone-users.

Statista. (2023a). Forecast number of mobile users worldwide 2020-2025. Available at: https://www.statista.com/statistics/218984/number-of-global-mobile-users

Statista. (2023a). Forecast number of mobile users worldwide 2020-2025. Available at: https://www.statista.com/statistics/218984/number-of-global-mobile-users-since-2010

Statista. (2023b). LatAm: number of smartphone users by country 2020. Available at: https://www.statista.com/forecasts/274689/latam-number-of-smartphone-users-by-country.
Statista. (2023b). LatAm: number of smartphone users by country 2020. Available at: https://www.statista.com/forecasts/274689/latam-number-of-smartphone-users-by-country.
Thomée, S.; Härenstam, A.; Hagberg, M. Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults—A prospective cohort study. *BMC Public Health* **2011**, *11*, 66.

Tomczyk, Ł, Szyszka, M., & Stošić, L. (2020). Problematic internet use among youths. *Education Sciences, 10*(6), 161. https:// doi. org/ 10. 3390/ educs ci100 60161

Villanti, A. C., Johnson, A. L., Ilakkuvan, V., Jacobs, M. A., Graham, A. L., & Rath, J. M. (2017). Social media use and access to digital technology in US young adults in 2016. *Journal of Medical Internet Research, 19*(6), e196. doi: 10.2196/jmir.7303

Yildirim, C., & Correia, A. P. (2015). Exploring the dimensions of nomophobia: development and validation of a self-reported questionnaire. *Computers in Human Behavior, 49*, 130–137. https://doi. org/ 10. 1016/j. chb. 2015. 02. 059

Yildirim, C., & Correia, A.-P. (2015). Exploring the dimensions of nomophobia: Development and validation of a self-reported questionnaire. *Computers in Human Behavior, 49*, 130–137. https://doi.org/10.1016/j.chb.2015.02.059

Yildirim, C., Sumuer, E., Adnan, M., & Yildirim, S. (2015). A growing fear: Prevalence of nomophobia among Turkish college students. *Information Development*, *32*(5), 1322-1331.doi: 10.1177/0266666915599025

Yildirim, C., Sumuer, E., Adnan, M., & Yildirim, S. (2016). A growing fear: Prevalence of nomophobia among Turkish college students. *Information Development*, *32*(5), 1322-1331.