Nomophobia in Nursing Students at Universitas Padjadjaran

Evi Annisa Haryati[1*], Efri Widianti[2], Nur Oktavia Hidayati[2]

[1]Nursing Student at Faculty of Nursing Padjadjaran University, Bandung, Indonesia
[2]Psychiatric Nursing Department, Faculty of Nursing Padjadjaran University, Bandung, Indonesia
*Correspondence Email: evi16001@mail.unpad.ac.id

ABSTRACT

During the industrial revolution 4.0, everything becomes easily accessible. One of its developments is information and communication technology. The high use of smartphone as communication tools can cause dependency which is characterized by repeatedly checking smartphones which can cause an addiction so that it can cause fear or phobia, commonly known as Nomophobia. The aim of this study was to determine the overview of nomophobia in Nursing students at Padjadjaran University. This research used quantitative descriptive method with cross sectional approach. Samples were taken using a total sampling technique from the population of active student of the Bachelor program in the year of 2016, 2017, 2018 and 2019 Faculty of Nursing, Padjadjaran University. Data were collected using the Nomophobia Questionnaire (NMP-Q) and analyzed using descriptive frequency distribution. The results of this study showed that the majority of respondents 559 (63.5%) showed moderate nomophobia, as many as 243 respondents (27.6%) showed severe nomophobia and 79 respondents (9%) showed mild nomophobia. The conclusion of this study is that majority of respondents belong to the category of moderate nomophobia. Therefore, it is recommended for the following institution to be able to develop policies that regulate the use of smartphones in the context of clinical education and practice.

Keywords : Behavior Addictive, Cross-Sectional Studies, Phobic Disorder, Smartphone, Students Nursing

ABSTRAK

Pada era revolusi industri 4.0 segala sesuatunya semakin mudah diakses. Salah satu perkembangannya adalah teknologi informasi dan komunikasi. Tingginya penggunaan alat komunikasi smartphone dapat menimbulkan ketergantungan yang ditandai dengan selalu memeriksa smartphone yang dapat menimbulkan suatu kecanduan sehingga dapat menimbulkan ketakutan atau fobia yang lebih dikenal dengan sebutan Nomophobia. Tujuan penelitian ini adalah untuk mengetahui gambaran nomophobia pada mahasiswa Fakultas Keperawatan Universitas Padjadjaran. Penelitian ini menggunakan metode deskriptif kuantitatif dengan pendekatan cross sectional. Sampel diambil dengan menggunakan teknik total sampling dari populasi mahasiswa aktif program Sarjana angkatan 2016,2017,2018 dan 2019 Fakultas Keperawatan Universitas Padjadjaran. Data dikumpulkan dengan menggunakan instrumen Nomophobia Questionnaire (NMP-Q dan dianalisis secara deskriptif distribusi frekuensi. Hasil penelitian ini menunjukkan bahwa sebagian besar responden 559 (63,5%) menunjukkan nomophobia sedang, sebanyak 243 responden (27,6%) menunjukkan nomophobia berat dan sebanyak 79 responden (9%) menunjukkan nomophobia ringan. Simpulan dari penelitian ini adalah sebagian besar responden tergolong kedalam kategori

nomophobia sedang. Oleh karena itu, disarankan bagi pihak instansi untuk dapat mengembangkan kebijakan yang mengatur penggunaan smartphone dalam konteks pendidikan dan praktikum klinis.

Kata Kunci : Perilaku Adiktif, Studi Cross-Sectional, Gangguan Fobia, Smartphone, Mahasiswa Keperawatan

INTRODUCTION

Currently, the world has entered the era of industrial revolution 4.0 which is characterized by all interconnections between humans using machines or devices by internet (Herman et al., 2015) and everything is done digitally (Adiansah et al., 2019). One of the developments is the development of information and communication technology. Initially communication can only be done face to face but now it can use a smartphone with various features in it (Adiansah et al., 2019). Approximately, 61% of Indonesian people have smartphone. The use of smartphone is like a coin that has two sides, on that one side it contains a lot of benefits, but on the other side it has a negative impact (Passaddhi, 2015). The development of technology, information and communication should not have a negative impact, if someone can act to it wisely, it can be something more useful (Rachman et al., 2019)

Based on data from the Newzoo (2019), it shows that Indonesia is in the 6th largest position after China, India, the United States, Brazil, and Russia as the biggest smartphone users in the world. The total number of smartphone users in Indonesia is 31.1%. Penetration of smartphone usage in Indonesia has increased from year to year. In 2017, smartphone users in Indonesia were 74.9 million, in 2018 there were 83.5 million and in 2019 it increased to 92 million (eMarketer (2015, dalam Databoks, 2016)). The high use of smartphones in modern times like today will be a problem that can cause users to experience smartphone addiction and can trigger the presence of nomophobia (Effendi & Widiastuti, 2014). Individuals feel as if they can't be separated from their smartphone is characterized by always checking the smartphone at any time which causes users become addicted. As a result of this addiction, sense of fear can be formed, namely phobias that occur in individuals when even in a

second they do not hold their smartphone, it will make them anxious.

In the last few decades, the existence of smartphones has become a mobile device which is now equipped with sophisticated features (Cheever et al., 2014). One negative impact of this technological advantage is nomophobia. Nomophobia is an uncomfortable, anxious and worried feeling when you are away from the smartphone. The appeal of smartphones that can make individuals unable to escape from the grip of a smartphone, one of which is the sophistication of a smartphone that provides interesting features and makes individuals always want to stay connected with a smartphone (Gonçalves et al., 2020).

In the present day, nomophobia is a phenomenon that has occurred in the world, Indonesia is no exception. Yildirim (2014) stated that this nomophobia is not a smartphone addiction. Nomophobia tends to occur because individuals during the use smartphone, they tend to keep up with the increasingly sophisticated smartphone development. Individuals with nomophobia will always feel comfortable when they can use the any available features on their smartphone. Nomophobia's negative impact can affect personality, academic self-esteem, stress, performance, and other physical and mental health problems. Nomophobia's negative impact can affect personality, academic self-esteem, stress, performance, and other physical and mental health problems (Rodríguez-García et al., 2020). Nomophobia can have a major impact on health which affects professional practice by triggering the appearance of constant disturbances, as well as affecting relationships and interactions between individuals resulting in distance and isolation from the real world (Dasgupta et al., 2018 ; Aguilera-Manrique et al., 2018 ; Oliveira et al., 2017).

Former research done by Lee et al (2014) stated that the early adopters of smartphones were

college students. Based on the results of a survey conducted by SecurEnvoy 2006 of 1000 people in the UK proved that humans, especially college students, experience a lot of nomophobia (Effendi & Widiastuti, 2014). College students are in the emerging adulthood phase which is a transition from the late adolescent phase to the early adult phase, experiencing psychological dynamics (Kendall, 1998). In Indonesia, the results of research by psychologists show that around 72% of nearly 1000 students in Indonesia already own a smartphone. The students' ages range from 11-12 years, who usually spend 5-6 hours playing on smart phones on average. These results indicate that 25% of children show symptoms of nomophobia (Kemendikbud, 2018).

Nursing students have responsibilities for the role and function of nursing as the prospective of healthcare professionals. Being able to develop and disseminate knowledge in the healthcare field, especially in nursing, aims to improve an individual's health status is one of the responsibilities that must be owned for both nursing students and professional nurses (Fukada, 2018). Therefore, nursing students as prospective professional nurses should not be psychologically disturbed because it will affect the process of providing nursing care. In addition, as the prospective professional nurse, they must be physically and psychologically healthy by not suffering from nomophobia. Ayar et al (2018) stated that determining the level of nomophobia before students become professional nurses is important because one of the main parts of nursing care is to prevent dependency itself.

Currently, the lecturing process at Padjadjaran University environment has used a blended learning system, by e-learning called LIVE (Learning in Virtual Environment). The purpose of blended learning is to provide convenience in choosing the time and place when accessing the learning materials. Furthermore, there are several facilities that can be experienced such as a good internet access and Wi-Fi installation in every corner of the building. The advantages of smartphones make students become

dependent and make it as a tool that are so important and can not be left behind in daily activity.

Based on observations done by researcher during lectures at the Faculty of Nursing, Padjadjaran University, it was found that some students had secretly used smartphones during the lecture process and while lecturers were teaching. In addition, students are often found to be more preoccupied with their smartphones and ignore their friends during discussion. Besides that, smartphones are used at the lecturing process in the Faculty of Nursing students as a supporting tool to build communication between classmates through group chats created on social media platform such as Line and WhatsApp, so that they can share information about lectures or share any lecture materials and assignments. Thus, this becomes the reason of increasing intensity of smartphone usage that is accessed by the students.

In Indonesia, studies related to the case of nomophobia are still limited (Sudarji, 2018). While in fact, this topic is interesting to be studied because of the world conditions that have entered the era of the industrial revolution 4.0, it is clear that technology is increasingly developing (Adiansah et al., 2019). Everything is almost done digitally, but if it's not handled in a positive way, it can trigger the emergence of negative impacts, one to be mentioned is the phenomenon of nomophobia. In addition, the reasoning of this research being conducted to nursing students is because knowing the level of nomophobia early in nursing students is very important, so that in the future it will not interfere the nursing care process that will be provided in the future. Therefore, the aim of this study was to determine the overview of nomophobia in Nursing students at Padjadjaran University.

RESEARCH METHODS

The design of this study was quantitative descriptive with cross sectional approach. The variable of this study was nomophobia. The population of this study was active undergraduate students of the Faculty of Nursing at Padjadjaran

University 2016, 2017, 2018 and 2019 in Jatinangor, Garut and Pangandaran with a total of 961 respondents. Sampling technique used was total sampling. Samples obtained in this study totaling 881 respondents with a response rate of 91.67%.

The research instrument used was the No Mobile Phone Phobia Questionnaire (NMP-Q) questionnaire. This study used a questionnaire that has been translated into Indonesian (Rossa & Martina, 2016) in her research entitled "Smartphone Addiction with Nomophobia tendencies in Nursing Faculty Students at Syiah Kuala University" with a validity test value of 0.686 to 0.971 and a reliability test of 0.989. This questionnaire was developed from an original questionnaire created by Yildirim (2014). This instrument consists of 20 closed question items which are favorable with a Likert scale. These nomophobia items were classified into 7 Likert scale ranges, namely Absolutely Inappropriate, Inappropriate, Slightly Inappropriate, Neutral, Slightly Appropriate, Appropriate, Absolutely Appropriate. The interpretation of the scores in this questionnaire were a score of 20 means "no nomophobia", a score of 21-59 means "mild nomophobia", a score of 60-99 means "moderate nomophobia" and a score of 100-140 means "severe nomophobia". No Mobile Phone Phobia (NMP-Q) questionnaire was standard, so the researchers did not re-test the validity. The data were analyzed using univariate analysis and presented in the form of a frequency distribution table. The results of the study were explained using tables.

This study was approved by the Ethics Committee at Padjadjaran Univeristy with letter number 1476 / UN6.KEP / EC / 2019. After that, researcher distributed the questionnaire by online through Google Forms. This was because the costs were relatively cheap, respondents can answer according to their conditions without being influenced by researcher, obtaining the information was easy and can be done on collecting data with a large sample. Questionnaire link were distributed through group chats on Line and

WhatsApp with permission given from the class leader. Data were collected from December 23, 2019 - January 29, 2020.

RESULT

Table 1. *Nomophobia* **Level in Nursing Students at Faculty of Nursing Padjadjaran University**

Nomophobia Level	f	%
Mild	79	9
Moderate	559	63,5
Severe	243	27,6

Table 1 illustrated the level of nomophobia among students of the Faculty of Nursing at Padjadjaran University. It showed that 79 respondents (9%) were in the category of mild nomophobia, 559 respondents (63.5%) were in the category of moderate nomophobia and 243 respondents (27.6%) were in the category of severe nomophobia. Therefore, this shows that the majority of respondents had moderate levels of nomophobia.

Table 2. Nomophobia Level in Nursing Students at Faculty of Nursing Padjadjaran University based on Characteristics of Respondents *(n=881)*

Characteristics of Respondents	Nomophobia Score					
	Mild		Moderate		Severe	
	f	%	f	%	f	%
Gender						
Male	19	2,2	85	9,6	13	1,5
Female	60	6,8	474	53,8	230	26,1
College year						
2016	31	3,5	193	21,9	72	8,2
2017	22	2,5	149	16,9	60	6,8
2018	20	2,3	123	14,0	46	5,2
2019	6	0,7	94	10,7	65	18,7
Location of Campus						
Jatinangor	38	4,3	348	39,5	136	15,4
Garut	32	3,6	155	17,6	76	8,6
Pangandaran	9	1,0	56	6,4	31	3,5
Residence						
Boarding/ rented house	41	4,7	382	43,4	172	19,5
Home	38	4,3	177	20,1	71	8,1
Smartphone Ownership						
<1 year	0	0,0	2	0,2	1	0,1
1-2 years	2	0,2	6	0,7	0	0,0
2-3 years	2	0,2	10	1,1	4	0,5
3-4 years	15	1,7	49	5,6	14	1,6
>5 years	60	6,8	492	55,8	224	25,4

Duration of Checking Smartphone						
5-10 Minutes	5	0,6	50	5,7	31	3,5
10-20 Minutes	22	2,5	109	12,4	31	3,5
1-3 Hours	34	3,9	272	30,9	112	12,7
Others	18	2,0	128	14,5	69	7,8
Frequently used Apps						
Line	5	0,6	55	6,2	19	2,2
WhatsApp	44	5,0	292	33,1	130	14,8
Twitter	2	0,2	43	4,9	10	1,1
Instagram	13	1,5	119	13,5	66	7,5
Others	15	1,7	50	5,7	18	2,0
Habits of Taking Smartphone to Toilet						
Yes	12	15,2	118	21,1	67	27,6
No	67	84,8	441	78,9	176	72,4

According to Table 2, the result of cross tabulation of the nomophobia level in the Nursing Faculty students of Padjadjaran University based on the characteristics of the respondents showed that the level of severe nomophobia was found in female students in the class of 2016 and located on the Jatinangor campus. Based on the characteristics of student's residence showed the result that those who lived in the boarding house/rented house is on the severe nomophobia level. In addition, respondents who have been using smartphones for more than 5 years and always check their smartphones every 1-3 hours a day mostly showed severe nomophobia.

Table 3. Mean Score of Each Nomophobia Dimension in Nursing Students at Faculty of Nursing Padjadjaran (*n*=881)

Nomophobia Dimension	Mean ± SD	Minimum	Maximum
Not being able to communicate	28,02 ± 7,173	6	42
Lossing Connectedness	20,68 ± 6,104	5	35
Not being able to access information	18,54 ± 4,196	4	28
Giving up convenience	20,53 ± 6,178	5	35

Table 3 was the average score of each dimension of nomophobia. The highest average dimension value was "not being able to communicate" with a value of 28.02 ± 7.173. Meanwhile, the lowest average dimension was in the dimension of "not being able to access information" with a value of 18.54 ± 4.196.

DISCUSSION

Based on the results of data analysis in this study about the overview of nomophobia in the Nursing Faculty of Padjadjaran University Students (Table 1), it was found that more than half of respondents, 559 (63.5%) had moderate nomophobia, the majority of the respondents were 243 (27.6 %) had severe nomophobia and a minority, 79 respondents (9%) had mild nomophobia.

This shows more than half of the respondents in this study had moderate nomophobia which meant that respondents had an uncomfortable feeling when they are far away from their smartphone, even though the feeling was not excessive. Besides that, respondents always wanted to carry their smartphone anywhere, but that dependency can still be controlled. Students in the moderate nomophobia category need to be in under controlling, so that they do not shift to severe nomophobia.

Whereas, this study also showed the results that the category of severe nomophobia was in the second largest position after moderate nomophobia. Individuals with severe nomophobia can hardly be separated from their smartphone and always check their smartphone every 60 seconds. This category of severe nomophobia needs to be provided a special time to be given an intervention as a preventive action because if this is not immediately prevented, it can cause undesirable events in the life of each individual (Gupta, 2019).

Individuals who do not have nomophobia in their daily lives can manage good time in smartphone usage and these individuals prefer to communicate directly rather than using a smartphone (Rachman et al., 2019). Individuals who are included in the mild category tend to be more confident living life without making smartphones as a priority in their life (Gupta, 2019).

Based on the characteristics of respondents at the Faculty of Nursing, Padjadjaran University based on gender, it was found that the majority of respondents who were female had the majority

having a moderate nomophobia (53.8%). This could happen due to the majority of students in the Faculty of Nursing at Padjadjaran University were female. In addition, the results of this study were also supported by Young (2009, dalam Ulfah & Syafrizaldi, 2017) who stated that hormonal and psychological sex in men and women have differences that will affect the emotional characteristics. However, the results of this study are not in line with studies conducted by (Daei et al., 2019) conducted in Iran and showed the results that male who experience nomophobia disorders is higher than female. This is because now there are many interesting features provided by each smartphone supported by an easy access process and can be used anywhere and anytime.

This nomophobia makes a person more individualistic which causes individuals to prefer to be alone rather than dealing with people directly (Musdalifa, 2017). This was also evidenced by the results of research that showed that the highest nomophobia based on those whose residence is in boarding/rented house. The majority of Padjadjaran University Nursing Faculty students had conditions far away from their parents and family, this makes getting homesick could be the cause of individuals to be more dependent on smartphones to reduce their loneliness and always wanted to stay connected with their family.

Then, from the duration of smartphone usage showed the highest result dominated by individuals who used smartphones for more than 5 years with 776 respondents (88.1%). According to Chandak et al (2017), the duration of smartphone usage can influence the emergence of nomophobia tendencies. This is also supported by the results of research by Chandak et al (2017) which showed the results of 71% of respondents experiencing nomophobia were those who have been using smartphones for about 5-10 years. The use of smartphones that are high enough can cause individuals to pay attention more on their own smartphones and will ignore those around them. The results of this study were supported by the theory explained by Bivin et al (2013), regarding

patterns that make individual characteristics have nomophobia where one of them is using a smartphone for more than 3 years. Based on the intensity of respondents checking smartphones in a day, the average of respondents chose the category *once every 1-3 hours*. When viewed from the duration of an individual checking a smartphone in a day, the responses from every respondent vary greatly, including depending on busyness, uncertainty, when there is an incoming message, and even there are respondents who stated that they check their smartphone almost every time.

Based on the dimensions of nomophobia in this study showed that "not being able to communicate" dimension had the highest average with a value of 28.02 ± 7.173. On this dimension, respondents felt worried when they cannot communicate or suddenly cannot contact or are contacted by family or friends. This can occur because the majority of respondents in this study were far away from family, so that respondents consider smartphones as a tool to always stay connected with family or friends. This is in line with the results of research done by Kanmani (2018) which stated that staying connected or communicating with people in terms of culture and security is needed because of the perception of parents who will always want look after their children.

Limitation of this study is that at the time of data collection there were some respondents who did not fill out the questionnaire because when the data retrieval coincided with the semester holiday that caused some respondents to have problems when filling out questionnaires, among them signal constraints and not having internet quotas and there were respondents who refused to participate in this study. So the sampling technique that should be total sampling only obtained response rate of 91.67%. In addition, the respondents in this study only students of the Faculty of Nursing Universitas Padjadjaran without representing all students at Universitas Padjadjaran and only examined the overview of nomophobia not the relationship nomophobia with the factors that affect it.

CONCLUSION

In conclusion, the results of this study indicated that more than half of respondents had moderate nomophobia, most of the others had severe nomophobia and the rest of respondents had mild nomophobia. Based on the nomophobia dimension the dimension of "not being able to communicate" had the highest average and the lowest dimension was "not being able to access information."

Based on the results of this study, the majority of students had moderate nomophobia. This does not rule out the possibility to move into severe nomophobia. Therefore, academics can pay more attention to psychological conditions in the learning process for all students from each class or can develop policies that regulate the use of smartphones in the context of education and clinical practice.

REFERENCES

Adiansah, W., Setiawan, E., Kodaruddin, W. N., & Wibowo, H. (2019). Person in Environment Remaja Pada Era Revolusi Industri 4.0. *Focus : Jurnal Pekerjaan Sosial*, *2*(1), 47. https://doi.org/10.24198/focus.v2i1.23118

Aguilera-Manrique, G., Márquez-Hernández, V. V., Alcaraz-Córdoba, T., Granados-Gámez, G., Gutiérrez-Puertas, V., & Gutiérrez-Puertas, L. (2018). The relationship between nomophobia and the distraction associated with smartphone use among nursing students in their clinical practicum. *PLoS ONE*, *13*(8), 1–14. https://doi.org/10.1371/journal.pone.0202953

Ayar, D., Özalp Gerçeker, G., Özdemir, E. Z., & Bektaş, M. (2018). The Effect of Problematic Internet Use, Social Appearance Anxiety, and Social Media Use on Nursing Students' Nomophobia Levels. *CIN - Computers Informatics Nursing*, *36*(12), 589–595. https://doi.org/10.1097/CIN.0000000000000458

Bivin, J., Mathew, P., Thulasi, P., & Philip, J. (2013). *Nomophobia-Do We Really Need To Worry About?* 1–5. http://figshare.com/articles/Comparision_Of_Two_Dna_Extraction_Methods_Using_The_RT_PCR/709549

Chandak, D. P., Singh, D. D., Faye, D. A., Gawande, D. S., Tadke, D. R., Kirpekar, D. V, & Bhave, D. S. (2017). An Exploratory Study of Nomophobia in Post Graduate Residents of a Teaching Hospital in Central India. *The International Journal of Indian Psychology*, *4*(3), 48–56.

Cheever, N. A., Rosen, L. D., Carrier, L. M., & Chavez, A. (2014). *Out of sight is not out of mind: The Impacat of restricting wireless mobile device use on anxiety levels among low, moderate and high users* (pp. 290–297). Computers in Human Behaviour.

Daei, A., Ashrafi-rizi, H., & Soleymani, M. R. (2019). Nomophobia and Health Hazards: Smartphone Use and Addiction Among University Students. *International Journal of Preventive Medicine*, *8*, 1–5. https://doi.org/10.4103/ijpvm.IJPVM

Dasgupta, P., Bhattacherjee, S., Dasgupta, S., Roy, J. K., Mukherjee, A., & Biswas, R. (2018). Nomophobic behaviors among smartphone using medical and engineering students in two colleges of West Bengal. *Indian Journal of Public Health*, *62*(1), 70. https://doi.org/10.4103/ijph.IJPH_407_17

Databoks. (2016). *Pengguna Smartphone di Indonesia 2016-2019*. Katadata.Co.Id. https://databoks.katadata.co.id/datapublish/2016/08/08/pengguna-smartphone-di-indonesia-2016-2019

Effendi, N., & Widiastuti, H. (2014). Hubungan Ketergantungan Smartphone dengan Kecemasan. *Jurnal Kesehatan*, *7*(2), 353–360. https://doi.org/10.24252/kesehatan.v7i2.54

Fukada, M. (2018). Nursing Competency: Definition, Structure and Development. *Yonago Acta Medica*, *61*, 1–007.

Gonçalves, S., Dias, P., & Correia, A. (2020). Nomophobia and lifestyle : Smartphone use and its relationship to psychopathologies. *Computers in Human Behavior Reports*, *2*, 100025. https://doi.org/10.1016/j.chbr.2020.100025

Gupta, R. (2019). *Nomophobia : A Smartphone Addiction*. *7*(1). https://doi.org/10.25215/0701.110

Herman, N., Pentek, T., & Otto, B. (2015). *Design Principles for Industrie 4.0 Scenarios: A Literature Reviwq*. *01*.

Kanmani, A. (2018). *NOMOPHOBIA – An Insight into Its Psychological Aspects in India*. *May*.

Kemendikbud. (2018). *Nomophobia*. Inspektorat Jenderal Kementerian Pendidikan Dan Kebudayaan. https://itjen.kemdikbud.go.id/public/post/detail/nomophobia

Kendall. (1998). *Abnormal Psychology Human Problems Understanding Second Edition*. Houghton Mifflin Company.

Lee, Y. K., Chang, C. T., Lin, Y., & Cheng, Z. H. (2014). The dark side of smartphone usage: Psychological traits, compulsive behavior and technostress. *Computers in Human Behavior*, *31*(1), 373–383. https://doi.org/10.1016/j.chb.2013.10.047

Musdalifa. (2017). *KEBUTUHAN AFILIASI DAN NOMOPHOBIA MAHASISWA UNIVERSITAS NEGERI MAKASSAE*. *3*, 43. https://doi.org/10.1017/CBO9781107415324.004

Newzoo. (2019). *Top Countries by Smartphone Users*. https://newzoo.com/insights/rankings/top-countries-by-smartphone-penetration-and-users/

Oliveira, T. S., Barreto, L. K. D. S., El-Aouar, W. A., Souza, L. A. De, & Pinheiro, L. V. D. S. (2017). CADÊ MEU CELULAR? UMA ANÁLISE DA NOMOFOBIA NO AMBIENTE ORGANIZACIONAL. *RAE Revista de Administracao de Empresas*, *57*(6), 634–635. https://doi.org/10.1590/s0034-759020170611

Passaddhi, A. F. (2015). *Menggunakan Smartphone Secara Bijak dengan Pengendalian Diri (Sainvara) Bagi Mahasiswa*. 1–7.

Rachman, L. S., Ma, L., & Ibnu, F. (2019). *HUBUNGAN ANTARA HARGA DIRI DENGAN NOMOPHOBIA PADA PENGGUNA SMARTPHONE DI KELAS X SMAN 2 MOJOKERTO*.

Rodríguez-García, A. M., Belmonte, J. L., & Moreno-Guerrero, A. 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). https://doi.org/10.3390/ijerph17020580

Rossa, E., & Martina, M. (2016). Smartphone Addiction dengan Kecenderungan Nomophobia pada Mahasiswa Fakultas Keperawatan Universitas Syiah Kuala. *Jurnal Ilmiah Mahasiswa Fakultas Keperawatan*, *1*(1).

Sudarji, S. (2018). Hubungan Antara Nomophobia Dengan Kepercayaan Diri. *Psibernetika*, *10*(1), 51–61. https://doi.org/10.30813/psibernetika.v10i1.1041

Ulfah, S. A., & Syafrizaldi. (2017). Perbedaan Kematangan Emosi Ditinjau dari Jenis Kelamin pada Remaja di SMAS Sinar Husni Medan. *Jurnal Diversita*, *3*(2), 59–65.

Yildirim, C. (2014). *Exploring the dimensions of nomophobia: Developing and validating a questionnaire using mixed methods research*. http://lib.dr.iastate.edu/etd.