A STUDY ON NOMOPHOBIA AND ACADEMIC ACHIEVEMENT AMONG THE PROSPECTIVE TEACHERS

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The research paper is about the investigation that has been done for assessing the Level of Nomophobia and the academic achievement among the Prospective teachers. The investigator used Normative survey method for the selection of the sample. The Nomophobia Questionnaire (NMP-Q) of Yıldırım and Correia (2015) was adopted and used by the investigator to measure the level of Nomophobia among 142 prospective teachers. Nomophobia among the prospective teachers was chosen as the independent variable and their academic achievement as the dependent variable for the investigation. The subgroup variables include the Gender (Male /Female), Medium of instruction (Tamil / English), (Type of institution-Government /Government t aided/Private)and the Age group- 20-25/ Above 25.The findings indicated that that there is no significant difference in the level of Nomophobia with regard to their gender, medium of instruction ,type of institution and different age groups .There is significant positive but negligible relationship between the level of nomophobia and the academic achievement.

Smartphone usage has increased exponentially among the present generation which is more commonly found among the adolescents and young adults (18-27 years). The mobile phone has become an indispensable part of modern life. Many younger generations uses the smartphone for accessing camera, shopping, navigation, attending online classes, being in social media like WhatsApp, Facebook, telegram, Instagram, texting, using email and internet for accessing and sharing the information. According to Deng et al. (2018) mobile phone users form an emotional bondage with it and accept it as a source of safety. Psychologists view that the separation of mobile phones from an individual nowadays affects their emotional stability by increasing their anxiety, stress and provoke intensive negative emotions.

The term **NOMOPHOBIA or NO Mobile Phone Phobia** is used to describe a psychological condition when people have a fear of being detached from mobile phone connectivity. Nomophobia is considered a modern age phobia introduced to our lives as a byproduct of the interaction between people and mobile information and communication technologies, especially smartphones. Nomophobia is defined as "the fear of being out of mobile phone contact" and this term is the abbreviation of the "no-mobile-phone phobia" expression (Yildirim, 2014). Nomophobia is definitely a problem

of growing concern as seen among youth, that nomophobia is a disorder that has a relation to the growing expansion of technologies (King et al., 2014). This strongly indicates that smartphone addiction poses a severe risk to many people since most of them are not practically aware of developing nomophobia (Chen, 2015).

Since the investigator belongs to the field of Teacher Education, there was urgent need felt to investigate the level of Nomophobia existing among the prospective teachers and its influence on their academic achievement. Most of the prospective teachers nowadays have their own mobile phone or android phone. They use it for being in social media and for the purpose of communication. Both the pandemic period and post pandemic period directly or indirectly has developed nomophobia especially among the younger generation globally. Moreover, if a student is using a smartphone for learning purpose and communicating, there are also chances of him/her for getting distracted easily. They may get addicted to playing online games, using social media apps and watching movies or unwanted videos using Wi-Fi which is easily available in the android phones and mobile phones. They may gradually develop inattention behavior that is listening or seeing something irrelevant to their academic purpose of learning. The prolonged usage of the mobile phone to access social media platforms for communication and entertainment also creates psychological problems in an individual. So naturally it leads to nomophobia, a stage of developing fear which arises out of not having mobile or fear of losing connectivity of the people or virtual world. They start feeling insecure. They like to believe that virtual world accessed through mobile phone to be more important than facing the outside real world. Henceforth the researcher has felt the urgent need to investigate the level of Nomophobia and its relationship with the academic achievement among the prospective teachers studying B.Ed. course in the Colleges of Education.

Need and Significance of the Study

An in-depth review of the literature reveals the felt need for the current study on Nomophobia, the technological dependency of prospective teachers and its influence on their academic achievement. It necessitates the importance of the Teacher educator to assess the level of nomophobia existing among the prospective teachers which helps to assess their fear of not having mobile with them. They can also study the extent of dependence of prospective teachers on the technological resource available on their mobile phone as addiction and their feeling of security on having mobile phone anywhere and all the time. Remarkably due to the Pandemic lockdown, online teaching was undertaken by the teachers in the schools and colleges all over the world . As a result, the students became too much dependent on the smartphone for the online mode of classroom transaction. The submission of the assignment, conduction of examination posting of question papers, submissions of scanned answer sheets were done using the Google classrooms created by the institutions. Since most of the students could not afford for having Computer or laptop at home, they starting using mobile phones. The parents willingly bought smartphones for the academic usage of their children. This condition led them to be more familiar to technology and mobile usage. But the prolonged usage of smartphone leads indirectly to ill effects on an individual's psychology and enhanced dependency on the smartphone. It has led to the feeling of insecurity to certain extent knowingly or unknowingly.

The School Education and Teacher Education are interlinked and their quality influences the society of a Nation. The prospective teachers studying B.Ed. program are going to be the future teachers. They should know their strength and weakness. It is the due responsibility of the teacher Educator to assess the level of nomophobia among the prospective teachers, since they are going handle the school children. Henceforth, the level of Nomphobia of the prospective teachers who pursue B.Ed. program after the post pandemic period and their academic achievement are of due concern and the present investigation was carried out.

Statement of the Problem

"A Study On Nomophobia And Academic Achievement Among The Prospective Teachers"

Objectives of the Study

- To find out the level of nomophobia among the prospective teachers.
- To find out the level of academic achievement among the prospective teachers.
- To find out the level of nomophobia between male and female prospective teachers
- To find out the level of nomophobia of the prospective teachers based on their medium of instruction
- To find out the level of nomophobia of the prospective teachers based on their type of institution
- To find out the level of nomophobia of the prospective teachers based on their age group
- To investigate the level of academic achievement of the prospective teachers based on their gender.
- To investigate the level of academic achievement of the prospective teachers based on their medium of instruction.
- To investigate the level of academic achievement of the prospective teachers based on their type of institution
- To investigate the level of academic achievement of the prospective teachers based on their age group.
- To find if there is any significant relationship between nomophobia and academic achievement of the prospective teachers

Scope of the Study

Nomophobia is a growing concern as seen among youth that nomophobia is a disorder that has a relation to the growing expansion of technologies (King et al.,2014). This strongly indicates that smartphone addiction poses a severe risk to many people since most of them are not practically aware of developing nomophobia (Chen,2015). Teacher Educators play an important role in the education of prospective teachers who are going to educate and educare the school children. They are going to be responsible for the all-around development of the school students who are going to be the future citizens of a country. This study is aimed at studying the level of Nomophobia of prospective teachers and their academic achievement .The research will help the Teacher Educators to address the prospective teachers about the nomophobia, symptoms of it ,causes of it and measures to control it in order to safeguard themselves from mobile phone dependency and enhance their academic achievement, They can also guide them the usage of mobile phone in a healthy and productive manner .

Limitation of the Study

The prospective teachers studying first year B.Ed. course in the Colleges of Education ,in and around the Chennai district of Tamil Nadu were selected as the sample of the study.

Methodology of the Study

The investigator adopted Normative survey method for the data collection. The sample included the prospective teachers studying in the First year of B.Ed. Colleges of Education since they come from Arts and science colleges. For the present investigation, about 143 student teachers were selected as the samples from the Colleges of Education in and around Chennai district. The samples were selected from the Government, Government aided and Self-financing Colleges of Education.

Variables of the Study

The independent variable is Nomophobia and the dependent variable is the academic achievement of the prospective teachers. The subgroup variables include the Gender (Male /Female), Medium of instruction (Tamil / English), Type of College management (Government /Government t aided/Private) and the Age group- 20-25/ Above 25.

Description of the Tool Used Nomophobia Scale

The Nomophobia Questionnaire (NMP-Q) of Yıldırım and Correia (2015) was adopted and used by the investigator to measure the level of Nomophobia among the prospective teachers. It is a 7 point Likert type scale It had 20 items which are classified under the four sub-dimensions of

- 1. Not Being Able to Access Information (four items)
- 1. 2.Losing Connectedness (five items)
- 2. Not being 24 Able to Communicate (six items) and
- 3. Giving up Convenience (five items).

The responses vary from "Strongly Disagree" to "Strongly Agree" only at the extremes. Total scores are calculated by summing up responses to each item, resulting in a Nomophobia score which ranges from 20 to 140.

Nature of statements in the Questionnaire	Strongly Agree	Agree	Somewhat Agree	Neutral	Somewhat disagree	disagree	Strongly disagree
Positive	7	6	5	4	3	2	1
Negative	1	2	3	4	5	6	7

Table 1 Scoring Procedure Adopted by the Investigator

	Table 2 Interpretation of NMP-Q Scores							
S.NO	Score	re Interpretation						
1	20	Absence of Nomophobia						
2	21-59	Mild Level of Nomophobia						
3	60-99	Moderate Level Nomophobia						
4	100-140	Severe Nomophobia						

Table 2 Interpretation of NMP-O Scores

Pilot Study

A pilot study was conducted by the investigator to establish the reliability and validity of the tool. The tool was administered to 60 prospective teachers studying B.Ed. randomly selected from the Government Colleges of Education situated in Chennai district.

Reliability of the Tool

Cronbach's alpha reliability coefficient for internal consistency of the questionnaire was found by the investigator was .945, indicating that the questionnaire has good internal consistency. The alpha coefficients of Factor I - not being able to communicate – (6 items), Factor II – losing connectedness – (5 items), Factor III – not being able to access information – (4 items), and Factor IV – giving up convenience – (5 items) were .939, .874, .827, and .814, respectively. They demonstrated good internal consistency.

Validity of the Tool

The tool was given to the Experts from the Colleges of Education to ascertain face and content validity. Moreover, the square root of the reliability score gives the value for validity (Garrett). Hence forth the square root of the reliability was also calculated by the investigator and it was found out to be 0. 876. The tool has good validity level for the administration to the main study.

Main Study

The main study was conducted by administering the tool to the prospective teachers studying first year of B.Ed. course in the Colleges of Education working under different types of management in and around Chennai district after getting the prior concern from the Head of the Institution. The investigator personally administered the tool to the Prospective teachers .About 142 prospective teachers formed the total sample. For the academic achievement, their semester Examination marks were collected from the institution after getting due permission from the authority.

Analysis and Interpretation of the Results

The investigator has undertaken the following statistical analyses of the data:

- 1. Descriptive Analysis
- 2. Differential Analysis
- 3. Correlational Analysis

Based on the analysis of the data, the interpretation of the results were given by the investigator.

Table 3 Mean, Standard Deviation and t- Value for Nomo PhobiaScores Concerning the Gender

Variables	Sample	Mean	SD	t-value	Level of significance
Boys	53	66.5	20.2		
Girls	89	67.0	21.5	0.131	NS

NS= not significant

From the table 3, it is inferred that the calculated t-value of 0.131 (p=0.671) is lesser than the table value 1.96 at a 0.05 level of significance. It is evident that there is no significant difference in the level of Nomophobia between the male and female prospective student teachers. Hence the null hypothesis H1 is accepted.

Table 4 Mean, Standard Deviation and t- Value for Nomophobia Scores Concerning the Type of Institution

Variables	Mean	SD	Sum of squares	Df	Mean square	F value	Level of significance
Government	65.82	19.74	295.66	2	147.8		
Aided	64.41	18.97	49449.0	139	355.7	0.416	NS
Private	60.99	17.45	49744.6	141		0.410	

NS= Not significant

From the table 4, it is inferred that the calculated F value of 0.416 (p=0.661) is lesser than the F critical table value of 3.0. It is evident that there is no significant

difference in the level of Nomophobia among the prospective teachers studying in the Government ,Government aided and Self-financing Colleges of Education. Hence the null hypothesis H2 is accepted.

Table 5 Mean, Standard Deviation and t- Value for Nomophobia Scores withRespect to the Medium of Instruction

Variables	Sample	Mean	SD	t-value	Level of significance
Tamil	59	68.0	19.9		
English	83	66.0	21.7	0.555	NS

NS= Not significant

From the table 5, it is inferred that the calculated t-value of 0.555 (p=0.468) is lesser than the table value of at 0.05 level of significance. It is evident that there is no significant difference in the level of Nomophobia between the prospective teachers from Tamil and English medium. Hence the null hypothesis H3 is accepted.

Table 6 Mean, Standard Deviation and t- Value for NomophobiaScores Concerning the Age Group

Variables	Sample	Mean	SD	t-value	Level of significance
20-25 years	115	65.0	18.4		
25 above	27	59.0	19.8	1.495	NS

NS= Not significant

From table 6, it is inferred that the calculated t-value of 1.495 (p=0.309) is lesser than the table value of at 0.05 level of significance. It is evident that there is no significant difference in the level of Nomophobia in the prospective teachers between the age group of 20-25 years and 25 years. Hence from the interpretation of the analysis of the above table value, the null hypothesis H4 is accepted.

Table 7 Mean, Standard Deviation and t- Value for AcademicAchievement Concerning Gender

Variables	Sample	Mean	SD	t-value	Level of significance
Male	53	70	7.47		
Female	89	71	8.15	1.289	NS

N=142, NS= not significant, ** significant at 0.01, * significant at 0.05 level

From table 7, it is inferred that the calculated t-value of 1.289 (p=0.200) is lesser than the table value of at 0.05 level of significance. It is evident that there is no significant difference in academic achievement between male and female prospective teachers. Hence the null hypothesis H5 is accepted.

Variables	Mean	SD	Sum of squares	Df	Mean square	F value	Level of significance
Government t	71	7.29	65.5	2	32.7		NS
Aided	70	7.97	8801.0	139	63.3.7	0.518	113
Private	72	8.46	8867.6	141			

Table 8 Mean, Standard Deviation and t- Value for Academic Achievement ofStudent Teachers Concerning the Type of Institution

NS= not significant

From the table 8, it is evident that the calculated F value of 0.518 (p=0.661) is lesser than the F critical table value of 3.0. It is evident that there is no significant difference in the level of academic achievement between the prospective teachers from the Government , Government aided and Self Financing Colleges of Education. Hence the null hypothesis H6 is accepted.

Table 9 Mean, Standard Deviation and t- Value for Academic AchievementConcerning the Medium of Instruction

Variables	Sample	Mean	SD	t-value	Level of significance
Tamil	59	70.5	8.08	0.812	NS
English	83	71.6	7.8	0.012	

NS= not significant

From table 9, it is inferred that the calculated t-value of 0.812 (p=0.368) is lesser than the table value of at 0.05 level of significance. It is evident that there is no significant difference in the level of academic achievement between the prospective teachers from Tamil and English medium of instruction. Hence the null hypothesis H7 is accepted.

Table 10 Mean, Standard Deviation and t- Value for AcademicAchievement Concerning the Age Group

Variables	Sample	Mean	SD	t-value	Level of significance
20-25 years	115	71.2	8.0	0.262	NS
25 above	27	70.7	8.1	0.202	

NS= not significant

From table 10, it is inferred that the calculated t-value of 0.262 (p=0.0.587) is lesser than the table value at a 0.05 level of significance. It is evident that there is no significant difference in the level of academic achievement between the prospective student teachers between the age group of 20-25 years and 25 years Hence from the interpretation of the analysis of the above table value, the null hypothesis H8 is accepted.

Variable	N	Df=n-2	Calculated r- value	Table r -value	Level of Significance
Level of Nomophobia	142	140	0.0801	0.138	NS
Academic Achievement	142	140	0.0001	0.130	N3

Table 11 r-Value Between the Level of Nomophobia and Academic Achievement

From table 11, it can be observed that the calculated r-value of 0.0801 is lesser than the table value (0.138) at the 0.05 level. It is also found that there exists a significant positive but negligible level of relationship between the level of Nomophobia and academic achievement of the student teachers. Hence it can be inferred that there exists positive but negligible extent of relationship between the level of Nomophobia and academic achievement of the prospective teachers studying in the Colleges of Education from the Chennai district. Hence the null hypothesis H9 is rejected and it is inferred that that the level of nomophobia has only mild influence on the academic achievement of the prospective teachers.

Educational Implications

Based on the results showing the prevalence of moderate level of Nomophobia among the student teachers studying in Colleges of Education n Chennai district.(General mean score 89.7). Dissemination of the knowledge about the concept, symptoms, effects and drastic consequences of long term nomphoba must be given to the student teachers. The awareness about handling No mobile phobia or Nomophobia in a healthy way and gradual avoidance of the usage of Smart phone to a larger extent must be given to the student teachers as they are going to teach the future generations. The frequent usage and irrational Smartphone dependence in all the forms and dimensions is prevalence among the younger generation which is the current issue which has to be taken care of the educators in School, College and Teacher education.in such a case the present research work is of the current need in studying the Nomphobia and academic achievement of the student teachers. The prospective teachers or the student teachers should be taken care of, educated and well trained by the Teacher educators, so that they will be properly streamlined and channelized before playing as role model to the school children. The student teachers play significant role in school education they should acquire the knowledge about NOMOPHOBIA, its causes, the symptoms ,effects and consequences of Nomophobia to help the school children and promoting their academic performance because now a days the school students in adolescent age are more prone to smartphone usage and online learning.

It is necessary to implement recreational programs and training programs to protect the mental and physical health and creating awareness about the eye care of students. Especially young adults who are addicted to smartphone usage, video gaming, nomphobia and watching YouTube videos suffer from depression, anxiety, aggression, frustration and negative self-concept .They should be encouraged to participate in more enjoyable social activities with behavioral therapy techniques. Prolonged dependence of smartphone leads to mental health problems like unwanted depression, anxiety, smartphone addiction leads ill effects of health. The Student's sense of imagination and creativity, presence of mind can be promoted from accessing information merely from real life experiences rather than merely though usage of mobile phones and internet. Healthcare professionals and college counsellors should also educate parents about nomophobia. Moreover, considering the effects of nomophobia on academic achievement, Mobile phone restriction should be strictly enforced in colleges

References

- 1. Abraham, N., Mathias, J., & Williams, S. (2014). A study to assess the knowledge and effect of nomophobia among students of selected degree colleges in Mysore. Asian Journal of Nursing Education and Research, 4(4), 421
- Adnan, M., & Mertkan Gezgin, D. (2016). A Modern Phobia: Prevalence of Nomophobia among College Students 1. In Journal of Faculty of Educational Sciences (Vol. 49, Issue 1).
- 3. Ahmed, S., Pokhrel, N., Roy, S., & Samuel, A. J. (2019). Impact of nomophobia: A nondrug addiction among students of physiotherapy course using an online cross-sectional survey. Indian journal of psychiatry, 61(1), 77.
- 4. Anshari, M., Alas, Y., & Sulaiman, E. (2019). Smartphone addictions and nomophobia among youth. Vulnerable Children and Youth Studies, 14(3), 242–247. https://doi.org/10.1080/17450128.2019.1614709
- Bartwal, J., & Nath, B. (2019). ScienceDirect Evaluation of nomophobia among medical students using smartphone in north India. Medical Journal Armed Forces India, xxxx, 1–5. https://doi.org/10.1016/j.mjafi.2019.03.001
- 6. Betoncu, O., & Ozdamli, F. (2019). The disease of 21st century: Digital disease. TEM Journal, 8(2). https://doi.org/10.18421/TEM82-37
- Bhattacharya, S., Bashar, M., Srivastava, A., & Singh, A. (2019a). NOMOPHOBIA: NO MObile PHone PhoBIA. Journal of Family Medicine and Primary Care, 8(4), 1297. https://doi.org/10.4103/jfmpc.jfmpc_71_19
- 8. Davie, N., & Hilber, T. (2017). Nomophobia: Is smartphone addiction a genuine risk for mobile learning? Proceedings of the 13th International Conference on Mobile Learning 2017, ML 2017, 2016, 100–104.
- Dixit.s, Shukla H, Bhagwat A, Bindal, A. Goyal, A.K. Zaidi, (2010). A study to evaluate mobile phone dependence among students of a medical college and associated hospital of central India.Indian Journal of Community Medicine., 35 (2) (2010), p. 339, 10.4103/0970-0218.66878

- Doctor, R. M., Adamec, C. A., Kahn, A. P., Doctor, R. M., Adamec, C. A., Kahn, A. P. (2008). The Encyclopedia of Phobias, Fears, and Anxieties. United States: Facts On File, Incorporated.
- 11. Enez, O. (2022). The Phobia of the Modern World : Nomophobia Conceptualization of Nomophobia and Investigation of Associated Psychological Constructs (Issue January).
- Essel, H. B., Vlachopoulos, D., & Tachie-Menson, A. (2021). The relationship between the nomophobic levels of higher education students in Ghana and academic achievement. PLoS ONE, 16(6 June). https://doi.org/10.1371/ JOURNAL. PONE.0252880
- Fryman, S., & Romine, W. (2020). Measuring Nomophobia and Exploration of Consequences and Comorbidities. Symposium of Student Research, Scholarship, and Creative Activities Materials. https://corescholar.libraries.wright.edu/ urop_ celebration/38
- 14. Guvey Aktay, E., & Pinar Kuscu, H. (2019). Primary School Teacher Candidates and Nomophobia international technology and educational journal vol.3
- Hasmawati, F., Samiha, Y. T., Razzaq, A., & Anshari, M. (2020). Understanding Nomophobia among Digital Natives: Characteristics and Challenges. Journal of Critical Reviews, 7(13), 122–131. https://doi.org/10.31838/ jcr.07.13.22
- 16. İŞÇİTÜRK, G. B. (2020). Examining Pre-Service Teachers' Nomophobia Levels in Terms of Several Variables. Journal of Education and Learning, 9(6), 21. https://doi.org/10.5539/jel.v9n6p21
- 17. Jwaifell, M., Kraishan, O. M., Waswas, D., & Salah, R. O. (2019). Digital competencies and professional attitudes as predictors of universities academics' digital technologies usage: Example of al-hussein bin talal. International Journal of Higher Education, 8(6), 267–277. https://doi.org/10.5430/ijhe.v8n6p267
- 18. Maheshwari, S., & Mukherjee, T. (2021). How does academic performance increase virtual popularity? A case of facebook usage among Indian college students. Contemporary Educational Technology, 13(1), 1–11. https://doi.org/10.30935/cedtech/8709
- 19. Manion, L., Cohen, L., Morrison, K., Manion, L., Cohen, L., Morrison, K. (2017). Research Methods in Education. United Kingdom: Taylor & Francis.
- 20. Moreno-Guerrero, A. J., López-Belmonte, J., Romero-Rodríguez, J. M., & Rodríguez-García, A. M. (2020). Nomophobia: impact of cell phone use and time to rest among teacher students. Heliyon, 6(5). https://doi.org/10.1016/j.heliyon.2020.e04084
- 21. Multan, U., Batool, I., Zakariya University Multan, B., & Zahid, A. (2019). Nomophobia an Emerging Fear: An Experimental Exploration among University Students. Peshawar Journal of Psychology and Behavioral Sciences, 5(1), 67–82. https://doi.org/10.32879/picp.2019.5.1.67
- 22. Muralidhar, M., & Gopi, A. (2017). Nomophobia and its determinants among the students of a medical college in Kerala. January. https://doi.org/10.5455/ ijmsph.2017.0203115022017

- 23. Navarro-Martinez, O., & Peña-Acuña, B. (2022). Technology Usage and Academic Performance in the Pisa 2018 Report. Journal of New Approaches in Educational Research, 11(1), 130–145. https://doi.org/10.7821/NAER.2022.1.735
- 24. Nomophobic Rate of Higher Secondary Level Students A Pilot Study. (2021). 13(19), 11–15.
- 25. Pavithra MB, Suwarna Madhukumar, M. M. (2015). a Study on Nomophobia Mobile Phone Dependence , Among Students of a Medical. National Journal of Community Medicine, 6(2), 340–344.
- 26. Rodr, A., & Moreno-guerrero, A. (2020). Nomophobia-An-individuals-growing-fearof-being-without-a-smartphonea-systematic-literature-review2020International-Journal-of-Environmental-Research-and-Public-HealthOpen-Access.pdf. Environmental Research and Public Health Review.
- 27. 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. In International Journal of Environmental Research and Public Health (Vol. 17, Issue 2). https://doi.org/10.3390/ijerph17020580
- 28. S, A. K., Bhavani, U., & Maragatham, R. S. (2017). NOMOPHOBIA An Insight into Its Psychological Aspects in India. 4(2).
- 29. Shankar, V., Singh, K., & Jangir, M. K. (2018). NOMOPHOBIA : Detection and Analysis of Smartphone Addiction in Indian Perspective. 13(14), 11593–11599.
- 30. 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
- 31. Yildiz Durak, H. (2019). Investigation of nomophobia and smartphone addiction predictors among adolescents in Turkey: Demographic variables and academic performance. Social Science Journal, 56(4), 492–517. https://doi.org/10.1016/j.soscij.2018.09.003
- 32. Yildiz, E. P., Çengel, M., & Alkan, A. (2020). Investigation of Nomophobia Levels of Vocational School Students According to Demographic Characteristics and Intelligent Phone Use Habits. 10(1), 132–143. https://doi.org/10.5539/ hes.v10n1p1322.018