

Research Article

THE EFFECT OF SPORTS ON NOMOPHOBIA

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Abstract

The aim of this study is to compare the effects of individuals who do and do not do sports on nomophobia with various variables. The sample group consists of 359 volunteers in total, 199 women and 160 men who do or do not do sports in Yozgat province in 2021-2022. "Personal Information Form" created by the researcher as a data collection tool in the research, "Nomophobia Scale" developed by Yıldırım and Correia was used. The resulting data was loaded into the SPSS 25.0 program. As a result of the analyzes made; "Nomophobia Scale" skewness values are between 0.194/0.129, kurtosis values are between -0.790/0.257. According to these results, it was determined that the data exhibited normal distribution and parametric tests were used in statistical analysis. Post-hoc Tukey and LSD analyzes were performed for the differences detected in the variables of gender, age, monthly income, education level, living environment, duration of doing sports, duration of internet use, purpose of internet use, and internet use tool, which were examined by ANOVA and t-test. As a result of the analyzes made. It has been determined that there are gender differences in the scale of nomophobia and the levels of nomophobia variable was also found to be affected. *ASEAN Journal of Psychiatry, Vol. 27 (01) January, 2026; 1-13.*

Keywords: Sports; Nomophobia; Students; Scale; Psychology; Addicted

Introduction

The increasing use of the internet and mobile phones in the digitalised world has started to have great effects on the social, economic and even psychological conditions of individuals [1]. These effects can be exemplified as follows; nomophobia, netlessphobia and the fear of missing the developments that are the product of these. Such new disorders affect almost every individual, young and old, and this situation inevitably leads to some problems [2].

The occurrence of diseases such as Nomophobia, causes serious discomfort in individuals. Such new disorders affect especially the young generation, just like drug, alcohol, etc. addictions. In the research, it is aimed to compare such addictions of individuals with various variables.

When the literature is examined, there are limited studies on the effect of sport on nomophobia. The importance of this study is to examine nomophobia on developments with various variables and to reveal the differences between them. It is thought that these data and information to be obtained will contribute to the concepts of nomophobia by entering the literature and will shed light on future studies.

Nomophobia

Portable devices have become an indispensable product in human life thanks to the convenience they provide to life. Easy access to the internet from mobile phones and the increase in the technological features of these devices and the easy availability of these products increase the use of these devices. In particular, it is seen that young individuals easily adopt technological devices and at the same time the rate of use is higher than that of older individuals [3-5]. Again, it is seen that the rate of young population communicating with mobile phones is higher than the elderly population [6].

The term nomophobia was first introduced as a result of a study conducted by the UK Post Office in 2008. In the study, it was reported that 53% of the individuals felt uneasy when they lost their mobile phones, when their batteries ran out and their phones turned off or when the phone was out of range, and 58% of the men and 48% of the women participating in the study were concerned that they could not reach their phones for these reasons [7]. In 2012, in a study conducted in the UK on this subject, it was observed that the rate of those who were afraid of being away from their smartphones increased from 53% to 66%. At the same time, it was stated that 70% of women and 61% of men had nomophobia and the highest rate of nomophobia was 77% in the 18-24 age group [8].

The nomophobia scale developed by Yildirim and Corraera was translated into Turkish for the first time in 2015 and the prevalence of nomophobia among university students was measured for the first time in Turkey. Nomophobia was found in 42.6% of young adults and they stated that their biggest source of concern was not being able to access information. In this study, it was revealed that women exhibited more nomophobic behaviours than men, and it was observed that age and duration of phone use did not have any effect on nomophobia [9].

Materials and Methods

Research model

In this study, it was aimed to examine the effect of sport on nomophobia, netlessphobia, internet addiction and fear of missing developments. At the same time, it is aimed to examine whether there is a significant difference between gender, age, education level, living environment, purpose of spending time on the internet, internet usage tool and duration and nomophobia. Therefore, this research is a relational survey model. Relational survey model is used to determine the relationship between more than one

variable and the variable and the degree of the relationship. The study's Ethical Committee Approval was obtained from the Yozgat Bozok University Ethics Committee E-55135017-770-108445.

Study group

The study group of the research consists of 359 people who do and do not do sports living in different provinces. Demographic information of the participants is given in Table 1. According to this, 55.4% of the study group is female and 44.6% is male. The age group of 15-19 years is in the first place with 23.1% of the participants. The majority of the participants ranked bachelor's degree level in the first place with 36.8% according to their educational status, province with 61.6% according to their living environment, 9501 TL and above with 36.5% according to their monthly income, I do not do sports at all with 35.7% according to the duration of weekly sports, I spend time on the internet for 2-3 hours with 38.4%, I spend time on the internet for 2-3 hours with 38.4%, I spend time on social media platforms with 88.9% and I spend time on social media platforms with 59.1%.

Table 1. Frequency and percentage distributions of demographic characteristics of the participants.

Variable	Category	Frequency (f)	Percentage (%)
Gender	Female	199	55.4
	Male	160	44.6
Age	15-19	83	23.1
	20-24	76	21.2
	25-29	73	20.3
	30-34	44	12.3
	35-39	44	12.3
	40+	39	10.9
Education	Primary school	28	7.8
	High school	116	32.6
	Licence	49	13.6
	Associate degree	132	36.8
	Master's degree	34	9.5
Environment	Village	30	8.4
	Town	18	5
	District	90	25.1
	Province	221	61.6
Income	5500 and below	105	29.2
	5501-7500	77	21.4
	7501-9500	46	12.8
	9501 and above	131	36.5

Duration of exercise	Never	128	35.7
	1-2 days	11	30.9
	3-4 days	95	26.5
	5-6 days	18	5
	7 days	7	1.9
Internet usage time	1 hour or less	27	7.5
	2-3 hours	138	38.4
	4-6 hours	128	35.7
	8 hour and over	66	18.4
Internet usage tool	Mobile phone	319	89.1
	Computer tablet	33	9.2
	Other	7	1.7
Purpose of internet	Use playing games	15	4.2
	Purpose of internet use	213	59.2
	Playing games	48	13.4
		32	8.9
		51	14.2

Demographic characteristics of the participants are presented in Table 1. Participants were asked to respond to 9 different demographic characteristics. When Table 1 is analysed, there are 199 female and 160 male participants. The age variable was divided into 6 categories as 15-19 years, 20-24 years, 25-29 years, 30-34 years, 35-39 years and 40 years and over. In the age variable, there are 88 participants aged 15-19, 76 participants aged 20-24, 73 participants aged 25-29, 44 participants aged 30-34, 44 participants aged 35-39 and 39 participants aged 40 and over. The education variable was divided into 5 categories as primary school, high school, associate degree, bachelor's degree and master's degree. In the study, 28 primary school graduates, 116 high school graduates, 49 undergraduate graduates, 132 associate degree graduates and 34 graduate degree graduates were included. The answers given by the participants to the environment they live in are as follows; 30 people living in the village, 18 people living in the town, 90 people living in the district and 221 people living in the province. When the income variable is examined, the number of participants earning 5500 TL consists of 105 people, the number of participants earning 5501-7500 TL consists of 77 people, the number of participants earning between 7501-9500 TL consists of 46 people and the number of participants earning 9500 TL and above consists of 131 people and the income variable is divided into 4 categories. When the duration of doing sports of the participants was analysed; 128 participants answered that they do not do sports at all, 11 participants do sports 1 to 2 days a week, 95 participants do sports 3 to 4 days a week, 18 participants do sports 5 to 6 days a week and 7

participants do sports 7 days a week. When the internet usage of the participants is analysed; 27 participants stated that they use the internet for 1 hour or less per day, 138 participants stated that they use the internet for 2-3 hours per day, 128 participants stated that they use the internet for 4-6 hours per day and 66 participants stated that they use the internet for more than 8 hours per day. 319 participants stated that they use mobile phones, 33 participants stated that they use computers and 7 participants stated that they use tablets or other internet access devices. 15 participants stated that they play games, 213 participants stated that they spend time on social media platforms, 48 participants stated that they use the internet to watch TV series and films, 32 participants stated that they use the internet for communication purposes, and 51 participants stated that they use the internet for work, research and information.

Data collection tools

Questionnaire data collection tool was preferred for collecting the data of the research because it is easily applicable and quicker to reach a high number of people. The questionnaire part of the research consists of 2 stages. In the first part, the demographic information form (DBF) (gender, age, educational status, living environment, monthly income level, duration of sports, daily internet usage time, internet usage purpose, internet usage tool) was used to determine the personal and social characteristics of the participants, while in the second part, the nomophobia scale developed by Yıldırım and Correia was used to determine the nomophobic levels of the

participants [9].

Personal information form

In the personal information form created by the researcher, questions about gender, age, income level, education level, doing sports, living environment, daily internet usage time, purpose of internet usage, internet usage tool and purpose of spending time on the internet were prepared.

Data on age level were organised in six categories as 15-19, 20-24, 25-29, 30-34, 35-39, 45+. Education level was compiled in 5 categories as primary school, high school, associate degree, bachelor's degree, master's degree. Living environment is divided into 4 categories as village, town, district and province. Data on monthly income level were collected under four categories as 5500 and below, 5501-7500, 7501-9500, 9501 and above. The level of doing sports weekly was divided into 5 categories: I do not do sports at all, I do sports 1 or 2 days a week, I do sports 3 or 4 days a week, I do sports 5 or 6 days a week, I do sports 7 days a week. Daily internet usage time was divided into 5 categories as 1 hour or less per day, 2-3 hours per day, 4-6 hours per day, 7-8 hours per day, 9 hours or more. Internet usage device; mobile phone, computer, tablet or other communication devices are divided into 3 categories. The purpose of spending time on the Internet is divided into five categories: Playing games, using social media, watching TV series or films, communication match, work-research-information.

Nomophobia scale

In the study, the nomophobia scale, which is referred to as 'no mobile phobia' in English and translated into our language as 'fear of being separated from mobile phone', developed by Yildırım and Correia and adapted into Turkish by Yildırım et al. Consisting of 20 items, the measurement tool has a 7-point scale [9]. The evaluation

of the scale is calculated on sub-dimensions. It consists of four sub-dimensions: Inability to be online, loss of communication, lack of device and inability to access information. It consists of 4 sub-dimensions as: (1) Not being online, (2) Losing communication, (3) Lack of device, (4) Not being able to access information and 20 items in total. The Cronbach Alpha reliability coefficient of the scale was found to be .94 and the adapted version of the scale into Turkish was found to be .92. The scale is a 7-point Likert scale (1: Strongly disagree; 7: Strongly agree).

Analysing the data

The data obtained in the research were uploaded to SPSS 25.0 programme. Statistical analysis of the data obtained in the research should be made preliminary preparation. This is why skewness and kurtosis values are important in the first process. The fact that the skewness coefficient is not greater than 3 and the kurtosis coefficient is not greater than 10 indicates that the distribution is normal. According to the data obtained in this study, the skewness values of the skewness values of the nomophobia scale were between 0.194/0.129 and kurtosis values were between -0.790/0.257. According to these results, it was determined that the data exhibited normal distribution and parametric tests were used in statistical analyses.

Results

In this section of the research, tables and comments regarding the findings obtained as a result of statistical analyses are presented.

When Table 2 is examined, the t-test results of the nomophobia scale according to the gender variable are presented. In the sub-dimension of inability to access information, the t-test results according to the gender variable showed no significant difference between the average scores of female and male participants.

Table 2. T-test results of the nomophobia scale by gender variable.

Factor	Gender	N	X	Sd	t	p
Inability to access information	Female	199	1.06	0.42	1.593	0.112
	Male	160	0.999	0.4		
Deprivation of the device	Female	199	0.776	0.36	3.83	.000**
	Male	160	0.635	0.32		
Losing communication	Female	199	0.75	0.31	3.805	.000**
	Male	160	0.624	0.31		
Being unable to be online	Female	199	0.597	0.36	1.775	0.077
	Male	160	0.531	0.33		
Note: p* <.05						

According to the ANOVA test results of the age variable for the sub-dimension of the nomophobia scale related to inability to access information, a significant difference was found between the groups. The average score obtained by individuals in the 20-24 age group on the test was found to be significantly higher than the average score obtained by individuals in the 15-19 age group. The

average score of individuals in the 25-29 age group on the test was found to be significantly higher than the average score of participants in the 15-19 age group. Individuals in the 25-29 and 20-24 age groups experience negative emotions when they cannot access information, compared to individuals in the 15-19 age group (Table 3).

Table 3. ANOVA test results of the nomophobia scale by age variable.

Factor	Age	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Inability to access information	15-19	83	.89	.38	Among the groups	5	3.64	.03*	15-19<20-24 15-19<25-29
	20-24	76	1.12	.37					
	25-29	73	1.13	.40	Among groups	353			
	30-34	44	1.05	.44					
	39-39	44	1.03	.43					
	40+	39	.99	.46					
Deprivation of the device	15-19	83	.61	.31	Among the groups	5	3.57	.04*	15-19<20-24 15-19<25-29
	20-24	76	.80	.36					
	25-29	73	.78	.35	Among groups	353			
	30-34	44	.69	.33					
	39-39	44	.70	.33					
	40+	39	.63	.38					
Losing communication	15-19	83	.60	.30	Among the groups	5	3.54	.04*	15-19<25-29 25-29>40+
	20-24	76	.73	.31					
	25-29	73	.78	.31	Among groups	353			
	30-34	44	.69	.31					
	39-39	44	.70	.31					
	40+	39	.63	.32					
Being unable to be online	15-19	83	.44	.29	Among the groups	5	4.27	.001**	15-19<20-24
	20-24	76	.67	.36					
	25-29	73	.61	.35	Among groups	353			
	30-34	44	.62	.37					
	39-39	44	.55	.38					
	40+	39	.48	.32					
Note: p* <.05									

According to the ANOVA test results of the education variable of the nomophobia scale in Table 4, a significant difference was found in the average scores obtained by the groups. The average score obtained by participants with an associate degree was found to be significantly higher than the average score obtained by individuals with a high school education. Individuals with an associate degree experience a higher sense of deprivation when they cannot

access information compared to individuals with a high school education. The average score obtained by individuals with a bachelor's degree on the test was found to be statistically higher than the average score obtained by individuals with a high school education. Individuals with a bachelor's degree experience higher negative emotions when they cannot access information compared to individuals with a high school education.

Table 4. ANOVA test results of the nomophobia scale by education variable.

Factor	Education	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Inability to access information	Elementary school	28 116	.99 .91	.42 .40	Among the groups	5	4.88	.001**	2<3, 2<4

	High school	49	1.17	.40	Among	353			
	License	132	1.09	.39	groups				
	Associate degree	34	1.06	.45					
	Master's degree								
Deprivation of the device	Elementary school	28	.58	.34	Among the groups	5	7.62	.000**	1<4 2<4<3
	High school	116	.62	.32					
	License	49	.91	.37	Among groups	353			
	Associate degree	132	.75	.34					
	Master's degree	34	.70	.30					
Losing communication	Elementary school	28	.54	.29	Among the groups	5	5.29	.000**	1<4,1<5 2<4
	High school	116	.63	.31					
	License	49	.81	.33	Among groups	353			
	Associate degree	132	.70	.30					
	Master's degree	34	.78	.27					
Being unable to be online	Elementary school	28	.37	.26	Among the groups	5	6.74	.000**	1<4,1<5 2<5
	High school	116	.47	.30					
	License	49	.63	.38					
	Associate degree	132	.63	.36	Among groups	353			
	Master's degree	34	.67	.36					
Note: p* <.05									

According to the ANOVA test results of the nomophobia scale's inability to access information sub-dimension, there is no significant difference in the average scores obtained by the groups. The nomophobia scale's fear of losing communication sub-dimension, there is a significant difference in the average scores obtained by the groups. The average score of individuals living in the district on the test is significantly higher than the average score of individuals living in the village and town.

Individuals living in the district experience a more intense fear of losing communication compared to those living in the village and town. In the sub-dimension of fear of losing communication, the average score of individuals living in the city on the test is significantly higher than the average score of individuals living in the village and town. Individuals living in the city experience a greater fear of losing communication compared to those living in villages and towns (Table 5).

Table 5. ANOVA test results of the nomophobia scale according to the living environment variable.

Factor	Environment	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Loss of control	Village	30	1.02	.38	Among the groups	4	.311	.81	
	Town	18	.97	.44					
	District	90	1.06	.43	Among groups	355			
	Province	221	1.03	.41					
Desire to stay online more	Village	30	.59	.31	Among the groups	4	2.16	.09	
	Town	18	.59	.36					
	District	90	.74	.36	Among groups	355			
	Province	221	.72	.35					
Negativity in social relationships	Village	30	.57	.57	Among the groups	4	3.82	.01*	District>Village District>Kasaba
	Town	18	.50	.52					

	District Province	90 221	.70 .72	.70 .72	Among groups	355			District>Village District>Kasaba
Being unable to be online	Village Town District Province	30 18 90 221	.41 .36 .62 .58	.41 .36 .62 .58	Among the groups	4	4.63	.003**	Village<Town District<Province
					Among groups	355			
		Note: p* <.05							

When Table 6 is examined, the ANOVA test results of the nomophobia scale according to the income variable are presented. As a result of the tests conducted, no significant

differences were found in the average scores of the groups in the four sub-dimensions.

Table 6. ANOVA test results of the nomophobia scale by income variable.

Factor	Income	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Loss of control	5500 and below	105	1.05	.37	Among the groups	4	.339	.79	
	5501-7500	77	1.01	.42	Among groups	355			
	7501-9500	46	1.07	.42					
	9501 and above	131	1.02	.44					
Desire to stay online more	5500 and below	105	.72	.33	Among the groups	4	.118	.95	
	5501-7500	77	.71	.35	Among groups	355			
	7501-9500	46	.68	.36					
	9501 and above	131	.71	.36					
Negativity in social relationships	5500 and below	105	.68	.30	Among the groups	4	.425	.73	
	5501-7500	77	.70	.31	Among groups	355			
	7501-9500	46	.65	.32					
	9501 and above	131	.70	.33					
Being unable to be online	5500 and below	105	.53	.31	Among the groups	4	.761	.51	
	5501-7500	77	.56	.34	Among groups	355			
	7501-9500	46	.61	.37					
	9501 and above	131	.58	.38					

When Table 7 is examined, the ANOVA test results of the nomophobia scale according to the duration of sports activity variable are presented along with its sub-dimensions. In the sub-dimensions of fear of not being

able to access information, fear of losing communication, and fear of not being able to go online, no significant differences were found in the average scores of the groups.

Table 7. ANOVA test results of the nomophobia scale according to the duration of exercise variable.

Factor	Exercise duration	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Loss of control	Never	128	1.07	.40	Among the groups	5	.808	.52	
	1-2 days	111	.98	.41					

	3-4 days 5-6 days 7 days	95 18 7	1.02 1.06 1.12	.42 .47 .25	Among groups	354			
Desire to stay online more	Never	128	.79	.35	Among the groups	5	2.95	.02*	Never> 1-2 days
	1-2 days	111	.64	.33					
	3-4 days	95	.67	.36					
	5-6 days	18	.71	.34	Among groups	354			
	7 days	7	.76	.28					
Negativity in social relationships	Never	128	.74	.31	Among the groups	5	1.98	.09	
	1-2 days	111	.64	.30					
	3-4 days	95	.69	.32					
	5-6 days	18	.59	.35	Among groups	354			
	7 days	7	.75	.27					
Being unable to be online	Never	128	.57	.32	Among the groups	5	.348	.08	
	1-2 days	111	.53	.36					
	3-4 days	95	.58	.37					
	5-6 days	18	.58	.39					
	7 days	7	.64	.34	Among groups	354			
Note: p* <.05									

When Table 8 is examined, the ANOVA test results of the nomophobia scale according to the internet usage duration variable are presented. In the sub-dimension of inability to access information, significant differences were found in the average test scores of the groups. The average score of participants with 8 hours or more of internet usage was found to be significantly higher than the average scores of participants with 1 hour or less of internet usage and those with 2-3 hours of internet usage. The average score of participants with an internet usage duration of 4-6 hours on the test was found to be significantly higher than the

average score of participants with an internet usage duration of 1 hour or less per day and those with an internet usage duration of 2-3 hours. Participants who use the internet for 8 hours or more experience negative emotions when they cannot access information, compared to participants who use the internet for 2-3 hours daily and those who use it for 1 hour or less daily. The negative emotions experienced by participants who use the internet for 4-6 hours daily when they cannot access information are higher compared to those who use the internet for 1 hour or less and those who use it for 2-3 hours.

Table 8. ANOVA test results of the nomophobia scale according to the internet usage duration variable.

Factor	Internet usage time	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Loss of control	1 hour or less	28	.81	.36	Among the groups	4	6.15	.000**	1.<4,1<3 2<3,2<4
	2-3 hours	138	.96	.44					
	4-6 hours	128	1.10	.36	Among groups	355			
	8 hour and over	66	1.25	.45					
Desire to stay online more	1 hour or less	28	.48	.25	Among the groups	4	8.33	.000**	1<3,1<4 2<3
	2-3 hours	138	.63	.3					
	4-6 hours	128	.79	.34	Among groups	355			
	8 hour and over	66	.82	.36					
Negativity in social relationships	1 hour or less	28	.61	.31	Among the groups	4	2.89	.02*	4>1,4>2 3>1
	2-3 hours	138	.63	.32					
	4-6 hours	128	.74	.31	Among groups	355			
	8 hour and over	66	.74	.30					

Being unable to be online	1 hour or less	28	.38	.32	Among the groups	4	7.11	.000**	1<2,1<3,1<4 2<3,2<4
	2-3 hours	138	.48	.36					
	4-6 hours	128	.65	.37					
	8 hour and over	66	.64	.39	Among groups	355			
Note: p* <.05									

When examining Table 9, the ANOVA test results for the internet usage purpose variable of the nomophobia scale are presented. No statistically significant difference was

found among the average scores of the groups in the four sub-dimensions.

Table 9. ANOVA test results of the nomophobia scale according to the internet usage tool variable.

Factor	Internet usage tool	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Loss of control	Mobile phone	319	1.04	.42	Among the groups	3	.198	.82	
	Computer	33	.99	.40					
	Tablet and other	7	1.05	.34	Among groups	355			
Desire to stay online more	Mobile phone	319	.72	.34	Among the groups	3	1.82	.16	
	Computer	33	.60	.37					
	Tablet and other	7	.77	.33	Among groups	357			
Negativity in social relationships	Mobile phone	319	.69	.32	Among the groups	3	.081	.92	
	Computer	33	.67	.31					
	Tablet and other	7	.67	.21	Among groups	355			
Being unable to be online	Mobile phone	319	.56	.35	Among the groups	3	.212	.80	
	Computer	33	.60	.36					
	Tablet and other	7	.60	.33	Among groups	355			

According to the ANOVA test results of the nomophobia scale's fear of losing communication sub-dimension, there is a significant difference between the average scores obtained by the groups. The average score obtained by individuals whose purpose of internet use is communication was found to be statistically higher than

the average score obtained by individuals whose purpose of internet use is playing games. Individuals whose primary purpose for using the internet is communication experience a more intense fear of losing communication compared to those whose primary purpose is playing games (Table 10).

Table 10. ANOVA test results of the nomophobia scale according to the purpose of internet use variable.

Factor	Internet usage tool	N	X	Sd	Variance squared	Sd	f	p	Significant difference
Loss of control	Mobile phone	15	1.00	.40	Among the groups	4	.062	.99	
	Computer	212	1.04	.41					
	Tablet and other	48	1.01	.42	Among groups	353			
		32	1.04	.47					
		51	1.04	.25					
Desire to stay	Mobile phone	15	.56	.35	Among the groups	4	1.55	.18	
	Computer	212	.74	.33					

online more	Tablet and other	48 32 51	.67 .71 .65	.36 .34 .28	Among groups	353			
Negativity in social relationships	Mobile phone	15	.48	.31	Among the groups	4	2.63	.034*	Communication>playing games
	Computer	212	.71	.30					
	Tablet	48	.64	.32	Among	353			
	and other	32 51	.76 .67	.35 .27	groups				
Being unable to be online	Mobile phone	15	.40	.32	Among the groups	4	1.91	.10	
	Computer	212	.58	.36					
	Tablet	48	.48	.37	Among	353			
	and other	32 51	.60 .61	.39 .34	groups				
Note: p* <.05									

Discussion

In this study, it was aimed to investigate the effect of sports and various variables on nomophobia. As a result of the data obtained from the study, significant differences were identified between individuals who engage in sports and those who do not. Significant differences were found in the average scores of female and male participants according to the t-test results of the device deprivation subscale of the nomophobia scale. The average score of female participants is significantly higher than the average score of male participants. Female participants experience device deprivation more intensely than male participants. The communication loss subscale of the nomophobia scale, the average score of women was found to be significantly higher than the average score of men. Female participants experience a greater fear of losing communication compared to male participants. The nomophobia scale's inability to be online sub-dimension, there is no significant relationship between the average score of female participants and the average score of male participants. In both sub dimensions of the scale, the average scores of female participants were found to be significantly higher than the average scores of male participants. The nomophobia levels of female participants are higher than those of male participants. In literature review, it was noted in a study by Adnan and Sezgin that the level of nomophobia among women was higher than that of male participants. In the studies conducted, it has been noted that the average scores and nomophobia levels of female participants were high. Again, the studies conducted by Pavithra and Madhukumar, Hoşgör et al. and Prasad et al. support our study, as these studies also indicate that the nomophobia levels of female participants are higher than those of male

participants. However, in a study conducted by Çolak on middle school students, it was stated that there was no significant difference between female and male participants according to the gender variable results of the nomophobia scale. According to the results of many studies, as in our study, women's levels of nomophobia have been found to be high.

It has been determined that there is a statistically significant difference in the scores obtained by the groups in the test results of the nomophobia scale's age variable. In the sub-dimension of inability to access information, the average score of individuals in the 20-24 age group was found to be significantly higher than the average score of individuals in the 15-19 age group. The average score of individuals aged 25-29 on the test was found to be statistically significantly higher than the average score of participants aged 15-19. Individuals aged 25-29 and 20-24 experience negative emotions when they cannot access information, compared to individuals aged 15-19. Test results of the nomophobia scale's device deprivation sub-dimension by age variable, there was a significant difference in the average scores obtained by the groups. Based on the age variable, significant differences were found in the average scores of the groups in the online unavailability sub-dimension of the nomophobia scale. According to the results of the ANOVA test, the average score of individuals in the 20-24 age group was found to be significantly higher than the average score of individuals in the 15-19 age group. Individuals in the 20-24 age group experience a greater fear of not being able to be online compared to individuals in the 15-19 age group. The average scores of the groups increase with age. When conducting a literature review, it was noted that in a study conducted by Aykaç and Yıldırım, there was no

statistically significant difference in nomophobia levels according to the age variable. In the study conducted by Chotpitayasunondh and Douglas, it was observed that individuals aged 16-20 were nomophobic. In Adnan and Gezgin's study, it was stated that 77% of individuals in the 18-24 age group and 68% of individuals in the 25-34 age group were nomophobic. Our study contradicts these works in the literature. In a study conducted by Aksu and Doğan, it was found that as the age level increases, the level of nomophobia decreases. "Significant differences were identified between groups in terms of the age variable for the sub-dimensions of nomophobia, such as inability to access information, sacrificing comfort, and losing online connection, as well as the overall average levels of nomophobia." For the inability to communicate sub-dimension, it was stated that there was no significant difference in the average levels of nomophobia in terms of the age variable. In a study conducted by Ekşi on teachers, it was stated that, parallel to our study, nomophobia levels increased with age. In many studies, it is emphasized that young people form a risk group with high levels of nomophobia. However, many studies in the literature have age limits. In this context, the increase in age level and the easier access to technological devices by adults in a globalizing world may have led to higher levels of nomophobia among older individuals compared to younger ones. It was noted in a study by Burucuoğlu that the nomophobia levels of associate degree students were high, and this study parallels our own research.

In summary, statistically significant differences were found between the scores of the groups in all four sub-dimensions of the nomophobia scale according to the education variable test results. As the education level increases, the scores obtained by the groups on the test significantly rise. Generally, the scores obtained by individuals with a primary school education level were found to be significantly lower than the average scores of participants with a higher education level. This situation may suggest that participants with lower education levels have more difficulty adapting to technological devices and internet usage compared to individuals with higher education levels. This situation is caused by the differing relationships and levels of knowledge that generations have with technology. The fact that Generation Z belongs to a period of intensive technology use, Generation Y's mastery of technological developments, and Generation X experiencing more problems compared to these two groups has caused. The test results of the nomophobia scale based on the environmental variable individual's experience, there is no significant difference in the average scores of the groups in the sub-dimensions of inability to access information and device deprivation.

According to the test results of the nomophobia scale, there are significant differences between the scores of the

groups in all four sub-dimensions based on the variable of internet usage duration. According to the test results, as the duration of internet use increases, the scores obtained from the nomophobia test significantly rise. When conducting a literature review, many studies support this information. In the study conducted by Büyükçolpan, it was stated that users with an internet usage duration of more than 5 hours had significantly higher nomophobia scores compared to users with an internet usage duration of less than 3 hours. Again, Yildirim and Correia stated that as the duration of smartphone use increases, the levels of nomophobia may also rise. In the literature, studies also indicate that the duration of phone use increases the level of nomophobia. In a study conducted with students by Minaz and Bozkurt, it was stated that the duration of smartphone use ranged from 2 to 6 hours per day, and that smartphone addiction was quite high among students who used their phones at this intensity. In Canoğulları's study, it was found that adolescents who used the internet for 2 to 7 hours had a higher level of internet addiction. When the literature is examined, it is noted that in many studies, an increase in internet usage time also leads to an increase in the level of nomophobia.

The idea that individuals who use devices for gaming purposes tend to engage in enjoyable activities in the online environment rather than communication could suggest this difference. When the literature is examined, Taştan stated in his study that there was no differentiation in the nomophobia levels of the groups based on the test results related to the purpose of internet use. Celep and Çorumlu stated in their study that social media usage increases the level of nomophobia. In our study, although social media users were more numerous than other users, no statistically significant difference was found in the scores they received on the test. In his 2020 study, Taştan reported that the level of internet addiction among those who use smartphones for browsing social media is higher than the level of internet addiction among those who use smartphones for other purposes, and that the level of nomophobia among those who use smartphones for browsing social media is higher than the level of nomophobia among those who use smartphones for making calls/sending messages. Işık and Kaptangil stated in their study that the increase in social media usage has led to an increase in smartphone addiction. In a study conducted by Yilmaz et al. on communication faculty students, it was found that communication faculty students see smartphones as tools for communication, information, and news reading, and their anxiety, worry, and restlessness increase when they cannot perform these functions on the device.

Suggestions

Based on the results obtained within the scope of the

study, the following recommendations for the future are presented below. It is believed that sports play an important role in reducing one of the greatest addictions of our time, Internet addiction. Encouraging individuals of all ages to engage in sports can help reduce addiction. Encouraging initiatives for sports can be undertaken by politicians. Especially considering the high prevalence of internet addiction among young individuals, encouraging children to engage in sports could be a preventive factor for families. It is observed that individuals prefer using their mobile phones for internet access. In light of this situation, individuals' preference for low-data internet packages on their mobile phones may reduce internet usage.

As a purpose of internet use, it is observed that individuals mostly use the internet to spend time on social media platforms. Downloading fewer social media apps can help prevent internet addiction. The time spent on the internet is very important in internet usage. Gradually reducing internet usage time can help prevent internet addiction. In cases of excessive use, detox can be effective. Raising awareness about internet addiction among individuals at a young age and promoting conscious internet use is thought to have a significant impact on influencing internet addiction.

Smartphone addiction is directly related to internet usage. In an era where games, communication, and watching series and movies are all done through phones, it is believed that reducing internet usage will directly affect nomophobia addiction as well. If individuals reduce the frequency of checking their phones by stopping the habit of checking them without any notifications, nomophobia may also decrease. Reducing smartphone usage time and instead engaging in sports and artistic activities during leisure time can mitigate the effects of nomophobia. Especially for young individuals, educational programs should be provided to raise awareness. Considering that children are introduced to phones during infancy, postponing the age of introduction to later times can reduce the likelihood of encountering nomophobia by not distracting children during their childhood with mobile phones.

Conflict of Interest Statement

The authors declare that they have no conflict of interest. The care and use of laboratory animals were conducted in accordance with all institutional and national guidelines.

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