

University Students' Problematic Mobile Phone Use

Üniversite Öğrencilerinin Problemlili Cep Telefonu Kullanımı

Gülşen ULAŞ KARAAHMETOĞLU, Zeynep ARABACI

ABSTRACT

It was aimed to examine the factors affecting problematic mobile phone use of university students ($n = 2,110$). The research was conducted as descriptive-cross-sectional. The study was conducted at a university in Türkiye between April and May 2018. When we look at the students' scale subscale score averages; addiction was found to be 13.91 ± 5.34 , social relations was 10.24 ± 3.58 , results were 12.76 ± 6.58 and the total score of the scale was 36.91 ± 12.33 . It was determined that the students' mobile phone addiction was above average, their social relationships were at an average level of deterioration, and they experienced problems as a result of mobile phone use. Scale scores of girl students' were found to be higher. It was determined that as the education level of the parents increased, the addiction scores of the students increased. It was found that students with higher grade point averages had lower scale scores. It is recommended to provide training to university students about problematic situations related to mobile phone use, raise awareness and take necessary precautions.

Keywords: Academic success, Addiction, Cell phone, Social relations, University students

ÖZ

Üniversite öğrencilerinin ($n=2.110$) problemlili cep telefonu kullanımına etki eden faktörlerin incelenmesi amaçlanmıştır. Araştırma, tanımlayıcı-kesitsel olarak yapılmıştır. Çalışma, Nisan-Mayıs 2018 tarihleri arasında Türkiye'de bir üniversitede yapılmıştır. Öğrencilerin ölçek alt boyutu puan ortalamalarına bakıldığında; bağımlılık $13,91 \pm 5,34$, sosyal ilişkiler $10,24 \pm 3,58$, sonuçlar $12,76 \pm 6,58$ ve ölçek toplam puanı $36,91 \pm 12,33$ olarak bulunmuştur. Öğrencilerin cep telefonu bağımlılığının ortalamanın üzerinde olduğu, sosyal ilişkilerinde ortalama düzeyde bozulma olduğu, cep telefonu kullanımı sonucu sorun yaşadıkları saptanmıştır. Kız öğrencilerin ölçek puanları daha yüksek bulunmuştur. Anne baba eğitim düzeyi arttıkça öğrencilerin bağımlılık puanlarının arttığı belirlenmiştir. Not ortalaması yüksek olan öğrencilerin ölçek puanlarının daha düşük olduğu saptanmıştır. Üniversite öğrencilerine cep telefonu kullanımı ile ilgili problemlili durumlar hakkında eğitimler verilmesi, farkındalığın artırılması ve gerekli önlemlerin alınması önerilmiştir.

Anahtar Sözcükler: Akademik başarı, Bağımlılık, Cep telefonu, Sosyal ilişkiler, Üniversite öğrencileri

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INTRODUCTION

Mobile phone use has become an essential part of daily life as technology has evolved in recent years. Mobile phones are used in many areas, including work, education, entertainment, communication, and shopping. Because mobile phones make people's lives easier for several reasons, they have become a necessity (Subramaniam et al., 2020).

The rapid increase in mobile phone use is quite remarkable. More importantly, mobile phones are frequently used by high school and university students, who are vulnerable to the over-use of technology due to development dynamics. The fact that the mobile phone has become an essential part of students in managing critical situations and maintaining social relationships has brought along concerns about the potential for problematic use and addiction in individuals (Gica et al., 2020).

The portability, ease of use, and personalization of mobile phones may cause mobile phone addiction to be more noticeable than computer and internet addiction. Recent studies show that mobile phone use and social media addiction are increasing, which causes many negative effects both physically and mentally (Aljomaa et al., 2016; Andreassen et al., 2017; Chen et al., 2020; Gica et al., 2020; Panova & Carbonell, 2018; Zheng et al., 2023). Excessive mobile phone use is a concern for the mental and physical health of young adults. (Daniyal et al., 2022).

According to the results of the study, symptoms such as headache, earache and feeling of heat were reported from excessive use of mobile phones (Chen et al., 2017; Demirci et al., 2015; Durusoy et al., 2017). In addition, many problems were observed, such as difficulty concentrating, fatigue, musculoskeletal problems, stress, sleep disorders, role conflicts, guilt, anxiety and depression. Although teenagers who use cell phones have behavioral problems such as irritability, distractibility, and laziness, these problems increase with mobile phone use at an early age (Chen et al., 2017; Daniyal et al., 2022; Demirci et al., 2015)

While using mobile phones, young people may encounter many negative effects related to their health, academic and social success. When they are distracted by mobile phones in class, their attention to the lessons shrinks. In addition, spending more time on the phone may prevent them from studying regularly and negatively affect their academic performance (Arefin et al., 2017; Daniyal et al., 2022).

The repeated and intensive use of mobile phones, which have many negative effects on young people, has become more important during the COVID-19 pandemic. Because most of the day, students spend their free time on their phones since they cannot find any other activity due to lectures, homework, or quarantine (Çiçek et al., 2021).

It is believed that the awareness of students should be raised to use mobile phones correctly and at a level that will be least affected by their harm. As a result, we conducted this study to support the literature by working with a large sample group of undergraduate students from various regions of Türkiye.

Specifically, this study sought to answer the following questions:

1. Does the problematic mobile phone use of students differ according to their gender?
2. Do students' problematic cell phone use change according to their classes?
3. Is there a difference in the problematic mobile phone use of students based on where they live?
4. Does the problematic mobile phone use of students vary considering the educational status of their parents?
5. Is there a relation between students' problematic mobile phone use and their grade point averages?
6. Does the problematic mobile phone use of students change according to their usage time?
7. Is there a connection between students' problematic mobile phone use and the phone's age?

METHODS

Aim

This study aims to determine the factors affecting the problematic use of mobile phones, to determine the health issues that occur as a result of mobile phone use in students, and to determine the connection between academic achievement and problematic mobile phone use.

Study Design

This study was conducted as a descriptive cross-sectional study to investigate the factors influencing problematic cell phone use among university students.

Research Sample

The study was conducted at a university in Türkiye between the dates of April and May 2018. The research population consisted of 10,196 undergraduate students studying at the faculties and colleges of the university. The sample of the study was determined according to the frequency of occurrence formula when the universe is known ($n=370$). The sampling consisted of 2,110 students who wanted to participate in the study.

Data Collection Procedure

The research data was collected with the "Descriptive Characteristics Questionnaire" and the "Mobile Phone Problematic Use Scale". After explaining the study to the students and answering their questions, if any, their consent was obtained for their participation in the study. Questionnaire forms were applied to the students one-to-one by the researchers. The average application time of a questionnaire was determined as 10-15 minutes.

Descriptive Characteristics Questionnaire

There are 13 questions in the Introductory Characteristics Questionnaire prepared by the researchers, that contains the introductory characteristics of the students (gender, class,

mother and father education status, place of residence, grade point average) and mobile phone use (possession, duration of use, frequency of change, purpose of use, place of use, problems related to usage).

Mobile Phone Problematic Use Scale

The Problematic Mobile Phone Use Scale was developed by Augner and Hacker in Austria. Çiğdem Tekin conducted the validity and reliability study in Türkiye in 2012 (Tekin, Gunes, Colak, 2014). A five-point likert scale was used. Addiction (6 items), Social Relations (5 items) sub-dimensions (0=Strongly disagree, 1=Disagree, 2=No idea, 3=Agree, 4=Completely agree) and Results (9 items) sub-dimensions (0=Not at all), 1 = Rarely, 2 = Sometimes, 3 = Often, 4 = Very often) consists of three sub-dimensions. The total score for the entire scale ranges from 0 to 80. A high score may indicate that the person has a problematic cell phone usage. As a result of the reliability analysis, the Cronbach's Alpha value of the scale was found to be 0.729 for the Addiction sub-dimension, 0.603 for the Social Relations sub-dimension, 0.846 for the Results sub-dimension, and 0.854 for the total scale. When the Cronbach alpha values of the sub-dimensions of the scale were examined according to our study data; Addiction was 0.79, Social Relation 0.54, Outcomes 0.82, and total scale 0.85.

Ethics Approval Statement

Ethics committee permission (dated 21.02.2018 and numbered 2) was obtained from Scientific Research and Publication Ethics Committee in order to carry out the study. Permission to use the scale was obtained by e-mail from Çiğdem Tekin, who conducted the validity and reliability study of the scale in Türkiye (Tekin, Gunes & Colak, 2014).

Data Analysis

The number, percentage, mean and standard deviation were used as descriptive statistical methods for data evaluation. Normal distribution assumptions were taken into account in the application of the hypothesis tests. t-test was used to compare quantitative continuous data between two independent groups in data analysis, and ANOVA test was used to compare quantitative continuous data between more than two independent groups. The Scheffe test was used as an additional post-hoc analysis to determine differences after the ANOVA test.

RESULTS

It was determined that 73.7% of the students participating in the study are women, 33.7% of them are studying in the third year, the father of 35.0% and the mother of 53.5% of them are primary school graduates, and 52.8% of them live in state dormitories. The grade point average of 63.9% of the students is between 2-3, out of 4. 99.3% of the participants have a mobile phone, 61.5% use a mobile phone between 6-10 years, 39.7% change their phone between 2-4 years and 39.3% use the phone more than 5 hours a day.

When the areas where students use their mobile phones the most were examined, 71.1% of the students stated that they use mobile phones in restaurants/cafes, 73.6% in public transport, 70.0% on the street and 94.9% at home/dormitory (Figure 1).

When the scale sub-dimension mean scores of the participants were examined; addiction was 13.91 ± 5.34 , social relations 10.24 ± 3.58 , results were 12.76 ± 6.58 and total scale mean score was 36.91 ± 12.33 (Table 1).

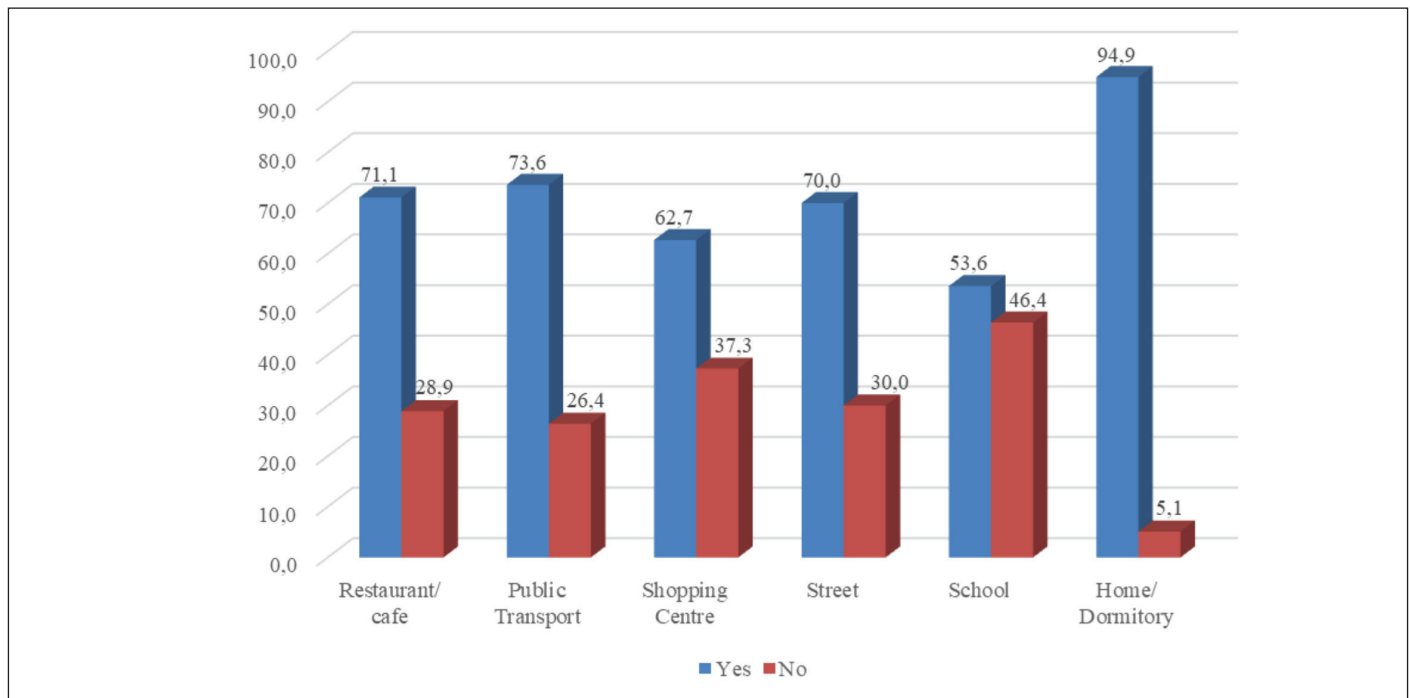


Figure 1: Areas where students use mobile phones the most.

Table 1: Mean Scale Scores and Cronbach Alpha Values of Students

Sub-Dimension	N	M±SD	Min - Max	Cronbach Alpha Value
Addiction	2110	13.91±5.34	0 - 24	0.79
Social Relations	2110	10.24±3.58	0 - 20	0.54
Results	2110	12.76±6.58	0 - 36	0.82
Total Mean Score	2110	36.91±12.33	0 - 80	0.85

When the sub-dimension mean scores of the scale were examined according to the gender of the students, the girls' addiction, social relations and total scale mean scores were found to be statistically significantly higher than boys' ($p<0.05$) (Table 2).

A statistically significant difference was found between the mean scores of all sub-dimensions of the scale and the class variable ($p<0.05$). In the addiction sub-dimension, the mean scores of the fourth-grade students were found to be lower than the scores of the second and third-grade students. In the social relations sub-dimension, the mean scores of the fourth-grade students were found to be lower than the scores of the first, second and third-grade students, and the mean scores of the third-grade students were found to be lower than the scores of the second-grade students. In the results sub-dimension, the mean scores of the fourth-year students were determined to be lower than the scores of the second-year students. When the total scale mean scores were examined, the mean scores of the fourth grade students were found to be lower than the scores of the first, second and third grade students (Table 2).

When the sub-dimension mean scores of the scale were examined according to the students' fathers' educational status, no statistically significant difference was found between the social relations, results, and total scale mean scores and the father's educational status ($p>0.05$). However, a statistically significant difference was found in the addiction sub-dimension ($p<0.05$). The mean score of the students whose fathers were literate was found to be lower than the scores of the students whose fathers were primary school, secondary school, high school, and university graduates, and the mean scores of the students whose fathers were primary school graduates than those of the students whose fathers were high school graduates (Table 2).

When the sub-dimension point averages of the scale were examined according to the mother's educational status of the students, no statistically significant difference was found between the social relations, results and general scale point averages and the mother's educational status ($p>0.05$). However, a statistically significant difference was found in the addiction sub-dimension ($p<0.05$). The mean scores of the students whose mothers were illiterate were found to be lower than the scores of the students whose mothers were literate, primary, secondary and high school graduates (Table 2).

A statistically significant difference was found between the mean scores of all sub-dimensions of the scale and the places of residence ($p<0.05$). Addiction and social relations mean scores of students staying in public or private dormitories were found to be higher than those of students living in a dormitory or with their families. Results and general scale point averages of students living with their families were found to be lower than the scores of students living in state dormitories, private dormitories, or student houses (Table 2).

A statistically significant difference was found between the mean scores of all sub-dimensions of the scale and the grades ($p<0.05$). Addiction, results and general scale mean scores of the students whose grade point average is between 3.00 and 4.00 were lower than the scores of the students whose grade point average was 2.00 – 2.99, and social relations mean scores were found to be lower than the scores of the other students (Table 3).

When the purposes of using mobile phones of the students were examined, it was determined that 89.5% of the students used mobile phones for communication, 78.2% for messaging, 82.5% for receiving information and 80.1% for following social media (Figure 2).

A statistically significant difference was found between the students' duration of using mobile phones and the mean scores of addiction, social relations and results sub-dimensions ($p<0.05$). In the addiction dimension, the average score of the students using mobile phones for 5 years or less was found to be lower than the scores of students using mobile phones for 6-10 years. In the dimension of social relations, the average score of those who use mobile phones for 6-10 years is compared to the scores of those who use mobile phones for 5 years or less; The mean scores of those who used mobile phones between 11-15 years were found to be lower than those of those who used mobile phones for 5 years or less or 6-10 years. Results sub-dimension score averages of those who have been using mobile phones for 16 years or more were found to be lower than those of those using mobile phones between 6-10 or 11-15 years (Table 4).

A statistically significant difference was found between the mean scores of all sub-dimensions of the scale and the frequency of changing mobile phones ($p<0.05$). In the addiction and social relations dimension, the average score of those who used the same phone for more than 37 months was found to be lower than the scores of students who changed their phones every 13-24 or 25-36 months. The average score of those who

Table 2: Sub-Dimension and Total Score Averages of the Scale According to the Descriptive Characteristics of the Students

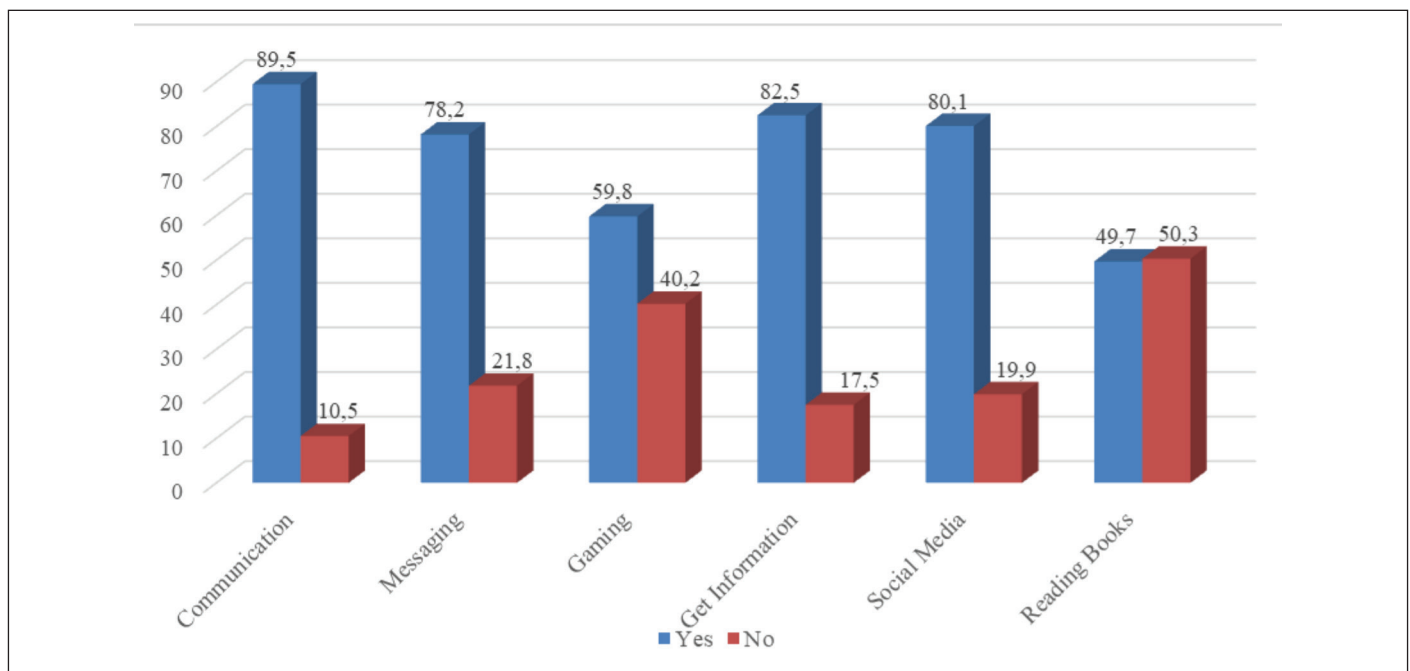
Descriptive Features	n	Addiction	Social Relations	Results	Total
Gender					
Male	554	12.79±5.45	9.62±3.76	12.82±6.97	35.23±12.90
Female	1556	14.30±5.24	10.46±3.49	12.74±6.43	37.50±12.06
t / p		-5.768 / 0.00	-4.770 / 0.00	0.227 / 0.821	-3.744 / 0.00
Grade					
1	531	13.74±5.27	10.50±3.63	12.75±6.70	36.99±12.29
2	425	14.19±5.45	10.68±3.25	13.31±6.19	38.18±11.67
3	712	14.23±5.19	10.21±3.56	12.92±6.79	37.36±12.46
4	442	13.32±5.50	9.54±3.78	11.99±6.38	34.84±12.56
F / p		3.243 / 0.02	8.884 / 0.00	3.177 / 0.02	6.027 / 0.00
		2>4, 3>4	1>4, 2>3, 2>4, 3>4	2>4	1>4, 2>4, 3>4
Fathers' Educational Status					
Illiterate	32	12.94±6.58	10.75±3.57	16.41±6.38	36.09±12.79
Literate	89	11.97±5.83	10.75±4.66	13.89±8.43	36.61±15.71
Primary school	738	13.74±5.36	10.34±5.58	12.57±6.61	36.65±12.36
Secondary school	450	14.08±5.26	10.05±3.45	12.94±6.43	37.07±11.54
High school	463	14.53±5.01	10.15±3.44	12.67±6.43	37.36±12.03
University	338	13.77±5.44	10.20±3.63	12.81±6.35	36.78±12.68
F / p		4.151 / 0.01	0.933 / 0.459	0.751 / 0.585	0.246 / 0.94
		3>2, 4>2, 5>2, 6>2, 5>3			
Mothers' Educational Status					
Illiterate	183	12.49±5.70	10.04±3.79	12.48±6.97	35.01±12.78
Literate	148	13.81±5.56	10.55±4.14	13.77±7.45	38.13±14.47
Primary school	1129	14.12±5.16	10.34±3.55	12.73±6.44	37.19±12.00
Secondary school	325	13.82±5.42	9.95±3.40	12.26±6.32	36.02±12.35
High school	249	14.25±5.47	10.18±3.37	12.93±6.32	37.36±11.61
University	76	13.61±5.44	10.08±3.76	13.51±7.56	37.20±13.33
F / p		3.219 / 0.01	0.972 / 0.433	1.385 / 0.23	1.685 / 0.14
		2>1, 3>1, 4>1, 5>1			
Place Of Residence					
State Dormitory	1115	14.08±5.38	10.36±3.54	12.85±6.55	37.29±12.42
Private Dormitory	402	14.33±5.14	10.56±3.61	13.11±6.61	38.00±12.42
Student House	357	13.40±5.45	9.80±3.55	13.16±6.48	36.36±12.00
Family	178	13.15±5.15	9.68±3.62	10.81±6.52	33.64±11.78
Living Alone	58	13.10±5.32	10.07±4.03	12.19±6.80	35.36±11.82
F / p		2.941 / 0.02	3.604 / 0.06	4.702 / 0.01	4.608 / 0.01
		1>3, 1>4, 2>3, 2>4	1>3, 1>4, 2>3, 2>4	1>4, 2>4, 3>4	1>4, 2>4, 3>4

Table 3: Sub-Dimension and Total Score Averages of the Scale According to the Grade Averages of the Students

Grade Average	n	Addiction	Social Relation	Results	Total
1.99 and below	168	13.81±5.12	10.86±3.42	12.94±6.18	37.61±11.27
2.00 – 2.99	1348	14.13±5.42	10.33±5.57	13.14±6.70	37.61±12.50
3.00 – 4.00	594	13.42±5.19	9.86±3.63	11.84±6.31	35.12±12.03
F / p		4.011 / 0.07	4.445 / 0.04	5.672 / 0.01	6.698 / 0.00
		2>3	1>3, 2>3	2>3	2>3

Table 4: Sub-Dimension and Total Score Averages of the Scale According to the Mobile Phone Usage Status of the Students

Characteristics	n	Addiction	Social Relation	Results	Total
Mobile Phone Usage (Year)					
5 and less	659	13.45±5.52	10.56±3.72	12.59±6.94	36.60±13.15
6 -10	1298	14.14±5.21	10.17±3.51	12.86±6.37	37.17±11.81
11-15	132	14.27±5.42	9.45±3.60	13.17±6.92	36.89±13.21
16 and more	21	11.76±5.66	9.19±2.48	9.43±4.13	30.38±9.51
F / p		3.781 / 0.01 2>1	4.683 / 0.00 1>2, 1>3, 2>3	2.230 / 0.04 2>4, 3>4	2.303 / 0.08
Mobile Phone Changing Frequency					
6 months and ↓	57	13.67±6.31	10.33±4.34	14.35±7.61	38.35±14.21
Every 7 - 12 months	103	13.19±5.71	9.69±3.68	13.23±6.43	36.12±13.24
Every 13 – 24 months	541	14.60±5.50	10.58±3.63	13.73±6.72	38.91±12.25
Every 25 - 36 months	837	14.35±4.96	10.33±3.42	12.70±6.28	37.37±11.63
37 months and ↑	572	12.76±5.36	9.88±3.64	11.70±6.63	34.33±12.61
F / p		11.041 / 0.00 3>2, 3>5, 4>5	3.461 / 0.01 3>2, 3>5, 4>5	7.740 / 0.00 1>5, 2>5, 3>4, 3>5, 4>5	10.595 / 0.00 1>5, 3>4, 3>5, 4>5
Daily Mobile Phone Usage					
Less than 1 hour	149	10.58±5.44	8.69±3.88	8.71±6.23	27.98±12.02
1 - 2 hours	402	12.38±5.32	9.35±3.68	10.66±6.40	32.39±12.08
3 - 4 hours	729	13.87±4.90	10.16±3.43	12.60±6.06	36.63±11.31
Over 5 hours	830	15.27±5.24	11.02±3.41	14.65±6.51	40.94±11.71
F / p		51.956 / 0.00 2>1, 3>1, 4>1, 3>2, 4>2, 4>3	32.169 / 0.00 3>1, 4>1, 3>2, 4>2, 4>3	60.104 / 0.00 2>1, 3>1, 4>1, 3>2, 4>2, 4>3	82.364 / 0.00 2>1, 3>1, 4>1, 3>2, 4>2, 4>3

**Figure 2:** Students' mobile phone use purposes.

changed their phones every 7-12 months was found to be lower than the scores of those who changed their phone every 13-24 months. In the results and total scale dimensions, the mean scores of those who used the same phone for more than 37 months were found to be lower than the scores of other students. The average score of the students who changed their phones every 25-36 months was lower than the scores of the students who changed their phone every 13-24 months (Table 4).

A statistically significant difference was found between the mean scores of all sub-dimensions of the scale and the daily use of mobile phones ($p < 0.05$). The mean scores of those who used the phone for less than one hour a day were found to be lower than the scores of other students in all sub-dimensions. The mean scores of those who used the phone for more than five hours a day were higher than the scores of other students in all sub-dimensions (Table 4).

Due to long-term use of mobile phones, 59.0% of the students stated that they had time loss, 46.1% had insomnia, 45.0% had burning eyes and 42.2% had headaches (Figure 3).

DISCUSSION

The purpose of this work is to find out the factors affecting the problematic use of mobile phones, to find out the health problems that appear in students as a result of the use of mobile phones, and to find out the relationship between academic success and problematic. to use using a mobile phone.

The students who participated in the study were found to have a moderate level of mobile phone addiction, a moderate level of deterioration in social relations, having problems as a result of using a mobile phone below the average, and using problematic mobile phones. When the literature was examined, similar results were found regarding mobile phone addiction (Subramaniam et al., 2020; Tükel, 2020). The unmanageable use of mobile phones, for which they receive support in many areas, can be explained as the reason for this situation.

This study, girls' addiction, social relationships and total scale scores were found to be higher. There are studies (Demirci et al., 2015; Gökçearslan et al., 2018; Hawi & Samaha, 2016) supporting our findings. In one study, it was determined that male students had a higher level of smartphone addiction than female students (Kaya & Kaya, 2020). Some studies did not find a significant difference in terms of gender (Chen et al., 2017; Tükel, 2020; Kwon & Paek, 2016; Ertemel & Ari, 2020). There are quite different results regarding gender in the literature. Even though all the studies were conducted with university students, these differences can be clarified with studies that will evaluate the purpose of use and similar factors.

This study, addiction, social relations, results and total scale scores of fourth grade students were found to be lower than those of lower grades. With the decrease in the average age, getting acquainted with mobile phones earlier can increase the negative behavior and addiction situation. Works can be done by extending the class variable with different properties.

This study, it was determined that the increase in the educational status of the parents escalated the mobile phone addiction of the students. Ertemel & Ari's study results support our findings. As a result of the increase in the educational status of the parents, the improvement in financial opportunities may lead to an increase in the opportunities of young people to reach mobile phones. Easy accessibility can be considered as a factor that increases mobile phone addiction (Ertemel & Ari, 2020)

The addiction and social relations mean scores of the students staying in the dormitory were higher than the scores of the students living in the dormitory or with their families. The results and total scale mean scores of the students living with their families were found to be lower than the others. Studies support our findings about addiction (Gökçearslan, et al., 2018; Mohammadbeigi et al., 2016). The fact that the students staying in the dormitory do not have adequate environments

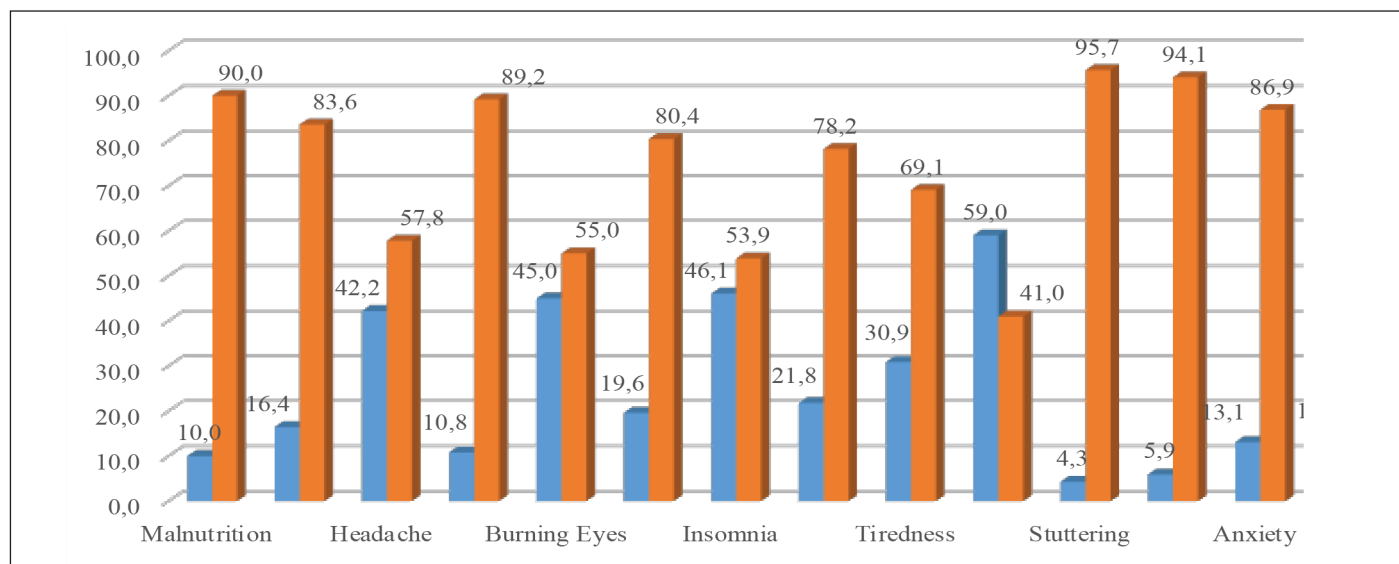


Figure 3: Problems related to long-term use of mobile phones.

for social activities and students' being a bad example to each other by their uncontrolled use of mobile phones may have caused these results. In addition, the reason why students living with their families are less affected by the negative effects of mobile phones may be due to the correct guidance of their parents.

This study, high-scoring students scored lower than low-average students on all scale subdimensions. The literature reveals that there is a negative relationship between smartphone addiction and academic education (Aktürk et al., 2015; Gica et al., 2020; Rozgonjuk et al., 2018; Samaha & Hawi, 2016). In line with these results, it is important to note that the low academic performance of students is due to cell phone use. Since the increase in the usage time of smartphones may shorten the study period, it may negatively affect the interest and focus on the lesson and reduce academic success (Subramaniam et al., 2020; Jumoke et al., 2015). In addition, the reason why students with high grade point averages do not have problems with social relations and are less affected by the negative situations caused by mobile phones may be because they spend limited time with mobile phones.

This study, the addiction scores of students who used their mobile phones for 5 years or less were found to be lower. It was determined that as the duration of mobile phone use increased, students' social relations scores decreased. The increase in the usage time of the mobile phone has caused the problems related to the phone to be seen more. All sub-scale scores of the students who changed their phones less frequently were found to be low. It can be thought that the students are less interested in the phone because of their problematic mobile phone usage situations. The mean scores of those who used the phone for less than one hour a day were lower than the scores of other students in all sub-dimensions. The mean scores of those who used the phone for more than five hours a day were higher than the scores of other students in all sub-dimensions. Other studies support our findings on addiction. The longer students spend time on a smartphone, the more likely they are to become addicted (Aktürk et al., 2015; Kaya & Kaya, 2020; Suliman et al., 2016).

This study, it was determined that students experienced loss of time, insomnia, burning eyes and headaches due to long-term use of mobile phones. Studies have found a relation between sleep problems and misuse of mobile phones (Ghosh et al., 2021; Özcan & Acimis, 2021; Zhang & Wu, 2020). In addition, in this study many problems have been identified such as, stress, depression, headache, irritability, eyestrain, body aches, loss of appetite, weight loss, easy fatigue, hearing problems, digital fingers, inattention, tinnitus, lack of concentration and having an accident due to the inability to hear / see vehicles on the road while using mobile phones (Subramaniam et al., 2020). Mobile phones, which they have made the most important part of their lives and seen as their best friends, can negatively affect the health, relationships and even the lives of young people.

CONCLUSION

The study shows that students have an above-average level of mobile phone addiction, moderate level of deterioration in social relations, having issues as a result of below-average mobile phone use and problematic mobile phone use. It seems that female students have more problematic mobile phone use, and fourth grade students are more conscious about this issue. The high level of education of the parents increases the mobile phone addiction of the students. It seems that the problem of using mobile phones by the students staying in the dormitory is high. There is a negative connection between academic success and problematic mobile phone use. The increase in the duration of using the mobile phone and frequent phone switching increases problematic mobile phones use. An increase in this situation may cause insomnia, deterioration in health, difficulties in social relations, psychological problems and decrease in academic performance in students.

The findings obtained from the research offer a new perspective to young people, parents, educators and those working in this field. In this regard, training programs can be organized for young people and their families regarding problematic mobile phone use. All competent institutions can lead in this regard for the future of society. Studies on the subject will contribute to the academic field and may be important in examining the causal factors that explain university students' problematic mobile phone use and how this situation can be prevented.

Limitations

The limitation of this study is that the research results are based only on the students who agreed to participate in the research and their responses to the survey.

Conflict of Interest Statement

All the authors declare that there are no conflict of interests.

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Author Contributions

GUK; designed the study, did data collection, data entry, data interpretation and statistical analysis, edited the article, revised the article for intellectual content, critically reviewed, read and approved the final article.

ZA; edited the article, revised the article for intellectual content, critically reviewed, read and approved the final article.

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