

**ASSESSMENT OF THE RELATIONSHIP
BETWEEN PHUBBING AND PERSONALITY
TYPES AMONG UNIVERSITY STUDENTS**

ÜNİVERSİTE ÖĞRENCİLERİ ARASINDA
SOSYOTELİZM VE KİŞİLİK TİPLERİ
ARASINDAKİ İLİŞKİNİN DEĞERLENDİRİLMESİ

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ABSTRACT

This study was conducted to determine the prevalence of phubbing among university students, review some variables that are believed to be associated and determine personality types. This cross-sectional study was conducted on all undergraduate students at a university in Ankara during the 2020-2021 spring semester. Data was collected online. It was targeted to reach the target population rather than calculating the sample. The study group consisted of 869 students who agreed to take part in the study. In this study, the Phubbing Scale was used to determine the level of phubbing and the 10-Item Personality Inventory was used to determine personality traits. Analyses were conducted with Chi-squared test and Logistic Regression Analysis. Statistical significance value was accepted as $p < 0.05$. The study group consisted of 654 (75.3%) female students and 215 (24.7%) male students. Their age ranged from 18 to 44 with a mean age of 21.37 ± 2.97 years. The prevalence of phubbing was found to be 7.9% in this study. Important risk factors for phubbing are being a woman, having an extended family, having an average duration of daily smartphone use of 6 hours and more and agreeableness personality trait. The most commonly used social media apps by the students were WhatsApp (29.6%), Instagram (25.9%) and YouTube (23.6%). In conclusion, more comprehensive studies are needed to reveal the relationship between personality types and sociotetelism.

ÖZ

Çalışma, üniversite öğrencileri arasında sosyotelizm sıklığının saptanması, ilişkili olduğu düşünülen bazı değişkenlerin incelenmesi ve kişilik tiplerinin belirlenmesi amacıyla yapılmıştır. Kesitsel tipte olan çalışma, 2020-2021 eğitim öğretim yılı bahar döneminde Ankara'daki bir üniversitede öğrenim görmekte olan tüm öğrenciler arasında gerçekleştirilmiştir. Veriler öğrencilerle çevirim içi (online) olarak toplanmıştır. Araştırmada örneklem hesabına gidilmemiş olup, evrene ulaşılması hedeflenmiştir. Çalışmaya katılmayı kabul eden 869 öğrenci çalışma grubunu oluşturmuştur. Çalışmamızda sosyotelizm düzeyinin değerlendirilmesi için Sosyotelizm Ölçeği, kişilik özelliklerinin belirlenmesinde ise On Maddeli Kişilik Ölçeği kullanılmıştır. Analizler Ki-kare testi ve Lojistik Regresyon Analizi ile yapılmıştır. İstatistiksel anlamlılık değeri olarak $p < 0.05$ kabul edilmiştir. Çalışma grubundakilerin 654'ü (%75.3) kadın, 215'i (%24.7) ise erkektir. Yaşları 18-44 arasında değişmekte olup, ortalama 21.37 ± 2.97 yıl idi. Çalışmada sosyotelizm sıklığı %7.9 olarak bulunmuştur. Sosyotelizm için önemli risk faktörleri arasında kadın olmak, geniş aile yapısına sahip olmak, günlük ortalama akıllı telefon kullanma süresinin 6 saat ve üzerinde olması ve yumuşak başlı kişilik tipine sahip olma özelliği bulunmaktadır. Öğrencilerin en çok kullandıkları sosyal medya uygulamaları sırasıyla; %29.6 ile whatsapp, %25.9 ile instagram ve %23.6 ile youtube idi. Sonuç olarak, kişilik tipleri ile sosyotelizm arasında saptanan ilişkinin ortaya konabilmesi için daha kapsamlı çalışmalara ihtiyaç vardır.

The approval of the university's non-interventional ethics committee was obtained (approval dated 15.03.2021 with number 23) to conduct the study. Required permissions were also obtained from the university management.

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INTRODUCTION

It is known that some important changes occur in daily life in modern society. The problems such as addiction, behavior disorder and insomnia caused by long-term and extensive use of technological tools are the basis of these changes. A relatively recent phenomenon called phubbing is now included in these problems. Phubbing is defined as the practice of ignoring one's companions in a social setting in order to focus on one's smartphone without paying attention to interpersonal communication (Karadag et al., 2016). Individuals engaging in this behavior are called phubber. Phubbers and phubbees can be commonly seen everywhere in modern society (Chotpitayasunondh and Douglas, 2016).

As smartphones are involved in many aspects of daily life and provide assistance for anything in general, it is known that problematic use rate becomes a social issue. The smartphone use rate increases rapidly in Türkiye, particularly in “generation Z”. Increased smartphone use is associated with some negative effects on the general health and personality of individuals. These effects include psychological problems and feeling lonelier and shyer (Aktas and Yilmaz 2017). According to the results of correlation analysis in a study conducted on middle and high school students, it was found that there were significant negative relationships between psychological well-being and internet addiction, smartphone addiction and loneliness; and significant positive relationships between internet addiction and smartphone addiction and loneliness, and between smartphone addiction and loneliness (Topal et al., 2023). Furthermore, although this technology can provide comfort and benefit in all aspects of life, it may also cause changes in human behaviors, habits and judgment (Karadag et al., 2016).

Studies conducted determined that the majority of university students in Türkiye have a smartphone (Tekin, 2014; Uysal and Kanbul, 2020; Aygar et al., 2021) and they started using smartphones at early ages (Karaaslan and Budak, 2012; Aygar et al., 2021) There are studies in the literature suggesting that the duration of smartphone use and the use of social media increase smartphone addiction (Meral, 2017; Sozbilir, 2018).

It is known that there is a relationship between sociotetelism

and some mental problems. According to the results of a study examining the relationship between sociotetelism and the emotional states, self-esteem, life satisfaction and symptoms of anxiety, depression and stress of individuals over the age of 18; it was found that there was a significant and positive relationship between sociotetelism and the level of symptoms of mental disorders such as depression, anxiety and stress. Therefore, it can be said that increased sociotetelism in individuals increases the symptoms of depression, anxiety and stress (Karslı and Yavuz, 2024). As the studies conducted on phubbing are limited in Türkiye (Aygar et al., 2021; Isik and Kaptangil, 2018; Sönmez Sarı et al., 2023; Uzdil and Şimşek, 2023), it is required to focus on phubbing and personality types in studies to be conducted in the future and raise awareness to minimize the negative effects of this phenomenon on daily life. Therefore, this study aims to determine the prevalence of phubbing among university students, review some variables believed to be associated and determine personality types.

Research Questions

1. What is the level of phubbing of university students?
2. What personality types do university students have?
3. Does the phubbing level of university students differ according to various factors (such as gender, age, family type and duration of smartphone use)?
4. Are there significant relationships between sociotetelism and personality types of university students?

METHOD

Type of study and settings

This cross-sectional study was conducted on all undergraduate students at a university in Ankara during the 2020-2021 spring semester (March-September).

Study population and sample

The population of the study consists of all undergraduate students at a university in Ankara during the 2020-2021 academic year (N=17198). It was targeted to reach the target population without using any sample. The study group consisted of 869 students who agreed to take part in the study and answered the questions completely.

Data collection instruments

A questionnaire form was prepared by using the literature in line with the study objective (Goksun, 2019; Parmaksiz, 2019; Pirincci et al., 2019; Karadag et al., 2016). The questionnaire form included some socio-demographic characteristics of students (age, gender, number of siblings, family income, etc.), some variables believed to be associated with phubbing (age of starting to use a smartphone, time spend on a smartphone a day, applications used on a smartphone, etc.) and a total of 24 questions. Items of the Phubbing Scale and the 10-Item Personality Inventory were used as the scale.

Data Collection

Due to the COVID-19 pandemic, the questionnaire, created on https://www.google.com/intl/tr_tr/forms/about/, and the scales were sent to social media accounts (university e-mail or WhatsApp, Facebook, etc.) of the participants. The participants completed the questionnaire through online data collection method.

The Phubbing Scale was developed by Karadag et al. in 2015 and consists of 10 items on a 5-point Likert scale. The factors are Communication disorder (five items; $\alpha=.87$) and Cell Phone Passion (five items; $\alpha=.85$). The participants were asked to give their answers as “always” (5), “often” (4), “sometimes” (3), “rarely” (2) “never” (1). The scores to be obtained from the scale range from 1 to 50 and those with a score of 40 and above are considered to “have phubbing” (Karadag et al., 2016). In this study, the Cronbach's Alpha was found as 0.81.

10-item Personality Inventory was developed by Gosling et al. in 2003 (Gosling et al., 2003) and its validity and reliability study in Turkey was conducted by Atak in 2013 (Atak, 2013). The Cronbach alpha internal consistency coefficient of the scale was found to be 0.83 for "Openness to Experience", 0.81 for "Agreeableness", 0.83 for "Emotional Stability", 0.84 for "Conscientiousness", and 0.86 for "Extraversion" in the Turkish validity and reliability study. This 10-item inventory is used to assess Big Five personality dimensions: Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience. It is scored on a 7-point Likert scale with 2 items in each dimension. Items 5 and 10 are related to Openness to Experience, 3 and 8 to

Conscientiousness, 1 and 6 to Extraversion, 2 and 7 to Agreeableness, and 4 and 9 to Emotional Stability. As for the scoring, the personality trait of the dimension for which the highest score was obtained is considered the dominant personality trait of that individual. In this study, it was found as 0.44 for "Openness to Experience", 0.38 for "Agreeableness", 0.69 for "Emotional Stability", 0.47 for "Conscientiousness" and 0.65 for "Extraversion".

Family income was assessed by the students as “low”, “average” and “high” based on their statements. Students' statements were taken as basis for their height and weight. Those with a Body Mass Index of 25 and above were considered “overweight/obese”. Students who smoke at least 1 cigarette a day regularly were defined as “smokers”. Those who consume 30 g of ethyl alcohol at least one time a week were defined as “alcohol consumers”. Students who perform physical activity corresponding to 20-minute brisk walking every day were considered to “have regular physical exercise”.

Data analysis

The data obtained was evaluated with the SPSS (version 15.0) Statistical Package Program on computer. Chi-squared test and Logistic Regression Analysis were used to analyze the data. Statistical significance level was accepted as $p < 0.05$. Compliance of measurable data with normal distribution was done by kolmogorow-simirnov test.

Ethical dimension of the study

The approval of the university's non-interventional ethics committee was obtained (approval dated 15.03.2021 with number 23) to conduct the study. Required permissions were also obtained from the university management.

Verbal consent was obtained from the participants in the research by stating that the participation was completely voluntary.

RESULTS

The study group consisted of 654 (75.3%) female students and 215 (24.7%) male students. Their age ranged from 18 to 44 with a mean age of 21.37 ± 2.97 years. The prevalence of phubbing was found to be 7.9% (n=69 students) in this study. The distribution of students with or without phubbing in the study group by some socio-demographic characteristics is given in Table 1.

Table 1. The Distribution Of Students With Or Without Phubbing in The Study Group By Some Socio-Demographic Characteristics

Some socio-demographic characteristics	Phubbing			Test value <i>X²; p</i>
	No n (%)*	Yes n (%)*	Total n (%)**	
Sex				
Female	593 (90.7)	61 (9.3)	654 (75.3)	6.212; 0.013
Male	207 (96.3)	8 (3.7)	215 (24.7)	
Age group				
20 and below	351 (90.7)	36 (9.3)	387 (44.5)	2.392; 0.395
21	166 (94.3)	10 (5.7)	176 (20.3)	
22	113 (91.9)	10 (8.1)	123 (14.2)	
23 and above	170 (92.9)	13 (7.1)	123 (14.2)	
Year				
2 and below	498 (92.1)	43 (7.9)	541 (62.3)	0.000; 1.000
3 and above	302 (92.1)	26 (7.9)	328 (37.7)	
Living with parents				
Living with parents	632 (92.7)	50 (7.3)	682 (78.5)	1.243; 0.265
Not living with parents	168 (89.8)	19 (10.2)	187 (21.5)	
Number of siblings				
0	46 (86.8)	7 (13.2)	53 (6.1)	2.291; 0.318
1	273 (91.9)	24 (8.1)	297 (34.2)	
2 and above	481 (92.7)	38 (7.3)	519 (59.7)	
Family type				
Nucleus	731 (92.6)	58 (7.4)	789 (90.8)	4.069; 0.044
Extended	69 (86.3)	11 (13.8)	80 (9.2)	
Family income status				
High	152 (94.4)	9 (5.6)	161 (18.5)	1.983; 0.371
Average	580 (91.8)	52 (8.2)	632 (72.7)	
Low	68 (89.5)	8 (10.5)	76 (8.7)	
Smoking				
Non-smoker	661 (90.9)	66 (9.1)	727 (83.7)	6.961; 0.008
Smoker	139 (97.9)	3 (2.1)	142 (16.3)	
Alcohol consumption				
No	747 (92.1)	64 (7.9)	811 (93.3)	0.801***
Yes	53 (91.4)	5 (8.6)	58 (6.7)	

History of any disease requiring constant drug use				
No	703 (91.8)	63 (8.2)	766 (88.1)	0.424; 0.515
Yes	97 (94.2)	6 (5.8)	103 (11.9)	
Blood type				
A	361 (93.3)	26 (6.7)	387 (44.5)	4.425; 0.219
B	136 (93.2)	10 (6.8)	146 (16.8)	
AB	64 (86.5)	10 (13.5)	74 (8.5)	
0	239 (91.2)	23 (8.8)	262 (30.1)	
Overweight/obese				
No	633 (91.9)	56 (8.1)	689 (79.3)	0.060; 0.806
Yes	167 (92.8)	13 (7.2)	180 (20.7)	
Total	800 (92.1)	69 (7.9)	869 (100.0)	

*: Line percentage, **: Column percentage***:Fisher

Of the students, 367 (42.2%) reported having regular physical exercise, 290 (33.4%) reported engaging in art activities, and 538 (61.9%) reported reading newspaper/book regularly. The age of starting to use a smartphone ranged from 7 to 30 with a mean age of 14.6 ± 2.6 years. While the number of students with an average duration of daily smartphone use of 1 hour or less was 89 (10.2%), 147 students (16.9%) had an average duration of daily smartphone use of 6 hours and above. The distribution of students with or without phubbing in the study group by some characteristics believed to be associated with phubbing is given in Table 2.

Table 2. The Distribution of Students with or without Phubbing in the Study Group by Some Characteristics Believed to Be Associated with Phubbing

Some characteristics associated with phubbing	Phubbing			Test value χ^2 ; p
	No n (%) [*]	Yes n (%) [*]	Total n (%) ^{**}	
Regular physical activity				
No	464 (92.4)	38 (7.6)	502 (57.8)	0.223; 0.637
Yes	336 (91.6)	31 (8.4)	367 (42.2)	
Engagement in art activities				
No	530 (91.5)	49 (8.5)	579 (66.6)	0.452; 0.501
Yes	270 (93.1)	20 (6.9)	290 (33.4)	
Reading newspaper/book regularly				
No	296 (89.4)	35 (10.6)	331 (38.1)	5.074; 0.024
Yes	504 (93.7)	34 (6.3)	538 (61.9)	
Age of starting to use a smartphone				
12 and below	125 (88.7)	16 (11.3)	141 (16.2)	12.339; 0.015
13	105 (86.1)	17 (13.9)	122 (14.0)	
14	179 (93.7)	12 (6.3)	191 (22.0)	
15	171 (92.9)	13 (7.1)	184 (21.2)	
16 and above	220 (95.2)	11 (4.8)	231 (26.6)	
Average duration of daily smartphone use (hour)				
1 and below	86 (96.6)	3 (3.4)	89 (10.2)	42.811; 0.001
2-3	343 (96.3)	13 (3.7)	356 (41.0)	
4-5	254 (91.7)	23 (8.3)	277 (31.9)	
6 and above	117 (79.6)	30 (20.4)	147 (16.9)	
Internet access on a smartphone				
Through mobile data	145 (92.9)	11 (7.1)	156 (18.0)	0.084; 0.772
Through wireless connection	655 (91.9)	58 (8.1)	713 (82.0)	
Total	800 (92.1)	69 (7.9)	869 (100.0)	

*: Line percentage, **: Column percentage

In the study group, 273 students (31.4%) had Emotional Stability and 92 students (10.6%) had Openness to Experience personality trait. The distribution of students with and without phubbing by some personality types is given in Table 3.

Table 3. The Distribution of Students with and without Phubbing by Some Personality Types

Personality type	Phubbing		
	No n (%)*	Yes n (%)*	Total n (%)**
Openness to experience	85 (92.4)	7 (7.6)	92 (10.6)
Agreeableness	211 (87.2)	31 (12.8)	242 (27.8)
Emotional stability	252 (92.3)	21 (7.7)	273 (31.4)
Conscientiousness	113 (95.8)	5 (4.2)	118 (13.6)
Extraversion	139 (96.5)	5 (3.5)	144 (16.6)
Total	800 (92.1)	69 (7.9)	869 (100.0)

*: Line percentage, **: Column percentage $X^2=14.034; p=0.007$

The most commonly used social media apps by the students in this study included WhatsApp (29.6%), Instagram (25.9%) and YouTube (23.6%). The distribution of social media apps used by the students is given in Table 4.

The results of the Logistic Regression Analysis generated with variables determined to be associated with phubbing. Table 5 presents gender, family type, smoking, average duration of daily smartphone use, average duration of daily smartphone use and personality type. Important risk factors for phubbing in this study were having an extended family type, non-smoking, having an average duration of daily smartphone use of 6 hours and more, and agreeableness personality type.

Table 4. Social Media Apps Used by the Students

Social media apps	n	%
WhatsApp	859	29.6
Facebook	243	8.4
Instagram	753	25.9
YouTube	685	23.6
Pinterest	264	9.1
TikTok	57	2.0
Other	41	1.4
Total	2902	100.0

*Numbers are based on responses rather than people.

Table 5. The Results of the Logistic Regression Model Generated with Variables Determined to Be Associated with Phubbing in the Study Group

Variables	β	SE ^a	p	OR ^b	95% CI ^c
Gender (reference: male)					
Female	0.933	0.402	0.020	2.542	1.155-5.595
Family type (reference: nucleus)					
Extended	1.159	0.406	0.004	3.187	1.439-7.059
Smoking (reference: smoker)					
Non-smoker	1.378	0.615	0.025	3.968	1.189-13.240
Average duration of daily smartphone use (reference: 1 hour or less)					
2-3 hours	0.012	0.662	0.985	1.023	0.277-3.704
4-5 hours	0.884	0.644	0.170	2.420	0.685-8.545
6 and above	2.121	0.637	0.001	8.341	2.392-29.086
Personality type (reference: extraversion)					
Conscientiousness	0.132	0.663	0.842	1.141	0.311-4.182
Openness to experience	0.653	0.627	0.298	1.922	0.562-6.572
Emotional stability	0.764	0.527	0.147	2.148	0.765-6.030
Agreeableness	1.213	0.519	0.019	3.362	1.222-9.252
Constant	-6.200	0.959	0.000	-	-

SE^a: Standard error, OR^b: Odds ratio, CI^c: Confidence interval

DISCUSSION

This study is intended to determine the prevalence of phubbing among university students, review some variables that are believed to be associated and determine personality types. The prevalence of phubbing was found to be 7.9% in this study. The prevalence of phubbing was 37.6% in the study of Karki et al. in Nepal (Karki et al., 2020) and 12.7% in the study of Aygar et al. (2021) on the faculty of medicine students. These different results may be associated with different diagnostic methods and diverse socio-cultural characteristics in the countries where the studies were conducted.

In our study, it was determined that the prevalence of phubbing was 2.542 times higher in female students than in male students. A study conducted in China by Chen et al. reported no difference in the prevalence of smartphone addiction between male and female students (30.3% in male and 29% in female students, $p > 0.05$) (Chen et al. 2017). Considering the studies conducted in Türkiye, while Kumcagiz et al. (2020) reported no significant difference between gender and total mean score obtained from the Smartphone Addiction Scale (SAS), Demirci et al. (2015) determined that SAS scores were significantly higher in female students than in male students (SAS scores were 80.50 and 66.59, respectively, $p < 0.001$). Based on the literature review, while there are results that are consistent with our findings, some results are inconsistent with our findings (Chen et al. 2017, Kumcagiz et al., 2020; Demirci et al., 2015). It can be suggested that smartphone addiction may be observed in both male and female university students. However, it is thought that the reason for the high level of smartphone addiction in female students in our study is due to the fact that social media use is at an earlier period and at a higher level than male students. For this reason, it may be recommended to conduct more comprehensive studies to determine the reasons why students use smartphones, the characteristics of the phone and the differences according to gender.

This study determined no relationship between the prevalence of phubbing and age groups as well as education years ($p > 0.05$ for each). Kuyucu (2017) reported no statistically significant relationship between

the addiction levels of the students and their gender, age and smartphone use characteristics. However, it was determined in the same study that the individuals in the age group 21-23 years ascribed more positive meaning to their smartphones than individuals aged 27 years and above in “positive anticipation” dimension in the analyses of the Smartphone Addiction Scale dimensions. Another study in the literature showed similar results among university students (Minaz and Bozkurt, 2017). The absence of the impact of age on smartphone use may be explained by the fact that smartphone use is very common in individuals from all age groups.

In our study, having an extended family was found to be an important risk factor for phubbing (Table 5). Extended family, in other words having a high number of family members, reflects the traditional characteristic of domestic relations. There is a patriarchal structure in the traditional Turkish family type and it may be difficult to establish open communication in families in some cases (Ozguven, 2010). It can be suggested that this fact increases smartphone use by young people. Furthermore, young people spending too much time on the internet and social media is considered quite normal by some families (Unlu, 2018). Lee and Lee (2017) reported that higher family interaction is correlated with lower smartphone addiction. Strong family relationships may protect individuals from phubbing which is harmful to social life.

In this study, no relationship was determined between the prevalence of phubbing and family income. As the use of smartphones and social media becomes very common and provides many opportunities, internet becomes an important resource for daily life. Therefore, a major part of the family budget is reserved for smartphone and internet access regardless of family income. Kayri and Gunuc (2016) reported that children of families with higher socioeconomic status are more likely to develop internet addiction. The result of the study supports that socioeconomic factors are not the only factors that affect the internet access of young people (Kayri and Gunuc, 2016).

When the level of phubbing is assessed by smoking and alcohol consumption in the study group, it was found that

the prevalence of phubbing is higher among non-smoker students than smoker students and that there was no difference in the prevalence of phubbing among students who consume and do not consume alcohol. Similarly, in a high school study, it was found that there was no relationship between smoking and internet addiction, but students who were addicted to the internet had more alcohol use problems (Choi et al., 2009). Minaz and Bozkurt (2017) found that when the students who participated in their study were asked if they had any addiction, 57.9% replied as none, approximately 26% replied as smoking and 12.2% replied as smartphone addiction. When these findings are evaluated, it is thought that more detailed and comprehensive studies explaining the relationship between smartphone addiction and smoking-alcohol addiction in different age groups are needed.

In our study, no difference in terms of the prevalence of phubbing was found between students who make and do not make regular physical exercise and between students who engage in and do not engage in art activities. Balli and Dogan (2020) reported that there was a statistically significant difference in terms of the prevalence of phubbing among university students when evaluated by leisure time activity. The study results showed that the mean score of phubbing was higher in students who play video games than those who read book and engage in sports. In our study, the prevalence of phubbing was found to be higher in students who do not read newspaper/book regularly. The Logistic Regression Analysis showed that this difference was eliminated. Balli and Dogan determined that there was a statistically significant difference in the prevalence of phubbing among university students by the number of books read in a week and that the mean score of phubbing was lower in students who read more than one book a week than those who read less than one book a week (Balli and Dogan 2020). With easier access to smartphones, tablets and computers as well as higher and irrational use of this technology, it can be suggested that reading and engagement in physical or art activities may be affected negatively.

In the study group, the prevalence of phubbing was higher in students whose age of starting to use a smartphone

was 13 and lower than the students in other age groups (Table 2). Although not included in the table, the logistic regression analysis showed that this difference was eliminated. Smartphones that create addiction in many people of all ages are indispensable for youth. This finding supports the fact that the level of addiction increases with lower age of starting to use a smartphone (Noyan et al., 2015; Bal and Balci, 2020).

Our study showed that having an average duration of daily smartphone use of 6 hours and more is an important risk factor for phubbing (Table 5). In a study conducted in Greece, it was determined that university students use their smartphones approximately 4 hours a day (Economides and Grousopoulou 2008). Another study conducted in Türkiye on university students showed that approximately half of the university students use a smartphone and social networks for about 1 hour a day (Isik and Kaptangil 2018). The result of the study supports that young people constitute the risk group for smartphone and internet addiction as they use internet and smartphone the most (96.7%) (TUIK, 2021).

Social media that is increasingly used by university students through smartphones is a frequently used and indispensable factor in daily life. It is stated that this fact causes addiction problems and can be associated with personality traits of individuals (Isik and Kaptangil, 2018). The prevalence of phubbing was found to be 3.362 times higher in people having agreeableness trait in our study (Table 5). Isik and Kaptangil (2018) reviewed the relationship between personality traits and smartphone addiction levels as well as social media use of 343 university students. It was concluded that while there are statistically significant relationships between the personality traits of the students and social media use as well as smartphone addiction, social media use increases smartphone addiction (Isik and Kaptangil, 2018). Another study concluded that Extraversion, Agreeableness and Openness to Experience from the Big Five personality domains do not predict phubbing at a statistically significant level. However, Conscientiousness and Neuroticism predict phubbing at a statistically significant level (Erzen et al., 2019). Balta et al. (2018) reviewed the direct and indirect associations of neuroticism, trait

anxiety, and trait fear of missing out with phubbing via state fear of missing out and problematic Instagram use among individuals aged 14 to 21 years. Findings indicated that females had higher scores of fear of missing out, problematic Instagram use, trait anxiety, and neuroticism, which is associated with phubbing.

In our study, the most commonly used social media apps by the students were WhatsApp (29.6%), Instagram (25.9%) and YouTube (23.6%), respectively. In their study conducted on 10 university students through semi-structured in-depth interviews to determine phubbing trends of digital natives, Yildirim and Unalan (2020) found that all students had Instagram, Twitter and Facebook accounts and they used their Instagram accounts the most. Furthermore, it was determined that the students used their accounts to follow their friends and celebrities and spent 3 to 4 hours on average on social media. Uysal and Kanbul (2020) found that almost all students (99.63%) had smartphones and 81.55% of them used their technological devices for educational purposes with Facebook (83.03%) and Instagram (90.77%) used the most. Ozdemir (2021) conducted a study to determine the situational mediating role of phubbing in the relationship between fear of missing out and social exclusion and determined that the most commonly used social media platforms were Instagram (53.3%), WhatsApp (31.2%) and Twitter (15.2%) with an average duration of use of 4.36 h (SD_{duration}=3.32). Considering the results of the study, it can be concluded that most of the students use smartphones and social media accounts frequently, which may cause some problems.

LIMITATIONS

The limitations of the study may include the facts that it is a cross sectional study, it was conducted only on students at a single university and data was collected online. At the same time, the fact that data was collected during the COVID-19 pandemic when social distancing was practiced and technology was used more frequently may have an impact on these results.

CONCLUSION AND SUGGESTIONS

The prevalence of phubbing was found to be 7.9% in this study. Being a woman, having an extended family,

having an average duration of daily smartphone use of 6 hours and more and agreeableness personality trait are among important risk factors for phubbing. The most commonly used social media apps by the students were WhatsApp (29.6%), Instagram (25.9%) and YouTube (23.6%). It would be advantageous to provide information and consultancy to university students regarding the rational use of smartphones in line with their actual needs. More extensive studies are required to demonstrate the relationship between phubbing and personality traits.

With advancing technology used more commonly and in many aspects of life, it can be suggested that students may experience more problems. It can be suggested that studies should be conducted on more extensive samples with different variables in the future.

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Author Contribution Rate

Researchers contributed equally to this entire study. The researchers have no conflict of interest didn't report.

Ethical dimension of the study

The approval of the university's non-interventional ethics committee was obtained (approval dated 15.03.2021 with number 23) to conduct the study. Required permissions were also obtained from the university management.