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The Medical School Students' Habits of Video Game Playing and Social Media Using

Tıp Fakültesi Öğrencilerinin Video Oyunu Oynama ve Sosyal Medya Kullanma Alışkanlıkları

Özlem TEZOL[a], Ayşe TOLUNAY OFLU[b], Melda ÇELİK[c], Meltem DİNLEYİCİ[d], Sıdıka Songül YALÇIN[c]

[a]Mersin University Faculty of Medicine, Department of Pediatrics, Mersin, TURKEY
[b]Afyonkarahisar Health Sciences University Faculty of Medicine, Department of Pediatrics, Afyonkarahisar, TURKEY
[c]Hacettepe University Faculty of Medicine, Department of Social Pediatrics, Ankara, TURKEY
[d]Eskişehir Osmangazi University Faculty of Medicine, Department of Social Pediatrics, Eskişehir, TURKEY

ABSTRACT Objective: To find out the preferences and habits of medical school students' in video gaming and social media use, with determinant characteristics of their habits. **Material and Methods**: A descriptive questionnaire was conducted to the 4rd and 5th grade students of four different faculties of medicine in four cities. **Results:** Nine hundred thirty-two medical school students participated in this survey, 46.5% of them were males. The rate of playing video games was 60%, war games were the most favorite game types. The rate of playing video games was higher in males than females (p<0.001). Video gamers' mean screen time was longer than non-gamers' both on the weekdays and weekends (p=0.015; p<0.001, respectively). Video gamers' mean body mass index value was significantly higher than non-gamers' mean value (p<0.001), obesity and overweight rates were significantly higher in video gamers (p<0.001). Video games caused a decrease in lecture/sports event/ hobby time for 37% of the gamers. Playing video games caused confusion between reality-fantasy for 4.3%, and health problems for 13.9% of the gamers. Overall, using social media rate was 89.5%. The rate of social media use was similar between genders (p=0.283). Mean daily time of mobile phone use was significantly longer in the social media users (p<0.001). The rate of going to the cinema or theatre was significantly higher among social media users (p=0.003), while the rate of reading book was significantly higher among non-users (p=0.024). **Conclusion:** This large sample sized study focused on medical school students and showed that video game playing and/or social media use in youth can affect cultural life and health status. It is determined that obesity rate, screen time, book reading rate were affected adversely in video gamer and/or social media user students.

Keywords: Video games; social media; habits; medical school students

ÖZET Amaç: Tıp fakültesi öğrencilerinin video oyunu oynama ve sosyal medya kullanma alışkanlıkları ile bu alışkanlıkları belirleyici özelliklerin araştırılmasıdır. **Gereç ve Yöntemler:** Dört şehirde 4 farklı tıp fakültesinde öğrenim gören 4. ve 5. sınıf öğrencilere tanımlayıcı anket uygulandı. **Bulgular:** Çalışmaya katılan 932 öğrencinin %46,5'ini erkekler oluşturdu. Öğrencilerin %60'ının video oyunu oynadığı, en çok tercih edilen oyun türünün savaş oyunları olduğu görüldü. Erkeklerde oyun oynama oranı kızlara göre daha yüksek bulundu (p<0,001). Video oyunu oynayanların ortalama ekran süresinin, hem hafta içi hem hafta sonu günlerde daha uzun olduğu saptandı (p=0,015; p<0,001). Video oyunu oynayanların ortalama beden kitle indeksi değerinin oynamayanların ortalama değerinden daha yüksek olduğu (p<0,001), video oyunu oynayanlarda obezite ve fazla kiloluk oranının daha yüksek olduğu belirlendi (p<0,001). Video oyunu oynayanların %37'sinde video oyunlarının ders/spor/hobi zamanlarında azalmaya sebep olduğu belirlendi. Video oyunu oynamanın oyuncuların %4,3'ünde gerçek-fantazi ayrımında karışıklığa, %13,9'unda sağlık sorunlarına yol açtığı tespit edildi. Katılımcıların %89,5'inin sosyal medya kullandığı, sosyal medya kullanım oranının cinsiyetler arasında benzer olduğu görüldü (p=0,283). Sosyal medya kullanıcılarında günlük cep telefonu kullanma süresinin daha uzun olduğu saptandı (p=0,003). Sosyal medya kullananlarda sinemaya/tiyatroya gitme oranı daha yüksek bulundu (p=0,003), kullanmayanlarda kitap okuma oranı daha yüksek (p=0,024) bulundu. **Sonuç:** Bu geniş örneklemli çalışma tıp fakültesi öğrencilerine odaklandı ve video oyunu oynamanın ve/veya sosyal medya kullanmanın, gençlerde kültürel hayata ve sağlık durumuna etki edebileceğini gösterdi. Video oyunu oynayan ve/veya sosyal medya kullanan öğrencilerde obezite oranının, ekran süresinin, kitap okuma oranının olumsuz etkilendiği belirlendi.

Anahtar Kelimeler: Video oyunları; sosyal medya; alışkanlık; tıp öğrencileri

Correspondence: Özlem TEZOL
Mersin University Faculty of Medicine Department of Pediatrics, Mersin, TURKEY/TÜRKİYE
E-mail: ozlemtezol@hotmail.com

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We live in an age where 53% of the world's population (4.2 billion people) is using the internet. There are more than 2.5 billion video gamers and 3.2 billion social media users all over the world.[1,2] Seventy-two percent of the population use internet and 63.4% use social media, over 36.5% play video games in Turkey.[3]

The trend towards video games is increasing due to the widespread use of computers and the internet worldwide, rapid technological developments, and confined living spaces. Video games are being replaced with traditional gaming activities. Video games which are adopted as a part of today's' culture have users of all ages, especially young people.[4] Video game interest can cause positive and negative effects both socially and psychically on the young people who use technology closely. In addition to positive contributions such as abreaction and relaxation, there may be negative consequences such as problematic video gaming behavior and video game addiction. The habit of video gaming may vary according to the cultures.[5]

Social media is defined as social platforms in which information, interests and experiences are shared by users through the internet and mobile systems. Social media platforms which have a structure that puts the individual in the centre, are attractive for young people. University students can be social media enthusiast while overcoming the troublesome school life. Students can access many applications such as communication, information acquisition, search by using social sharing networks.[5]

Target population of the video games and social media platforms is mostly young people.[6] Increased screen time thus increased xerophthalmia or visual fatigue risks, sedentary life style, obesity, neck, wrist and back pains, limited sleep time, anxiety, depression, and digital addiction, impaired academic performance and socialization are reported to be several adverse effects of video gaming and social media use in youth.[7-9] Medical schools have more intensive curriculum, longer education period than other faculties, and medical undergraduate students are usually seen as a role model in society.[10] Therefore medical school students as a specific population have more academic and sociologic challenges. From the idea that video gaming and social media using habits may differ among university students from every stage of life, in this study we aimed to investigate the frequency of video gaming and social media using among medical school students, their relationship with sociodemographic characteristics, digital platform diversity, and students' experiences.

MATERIAL AND METHODS

STUDY DESIGN

The study was performed by the authors who are subjects to the same social paediatrics doctoral programme. A descriptive survey was conducted to the 4th and 5th grade students of four different faculties of medicine in which the authors work. The study was carried out between March and June 2018. Ethical committee of Hacettepe University approved the study (06/02/2018, GO 18/177-17). In-house study authorizations were received from the university administrations. The design and conduct of the study was in accordance with the general principles outlined in the Decleration of Helsinki.

PARTICIPANTS

The participants were recruited by including medical school students of authors' own affiliations. The purpose and procedures of the survey were described to the students and signed consent was obtained from the participants. Nine hundred thirty-two volunteer medical school students were included in the study, the inclusion criteria were as follows: students aged between 21-24 years and attended 4th and 5th grade. The survey questionnaire that consists of thirty-six questions were fulfilled by the participants. Sociodemographic data included age, gender, residence, family structure, the income and working situation. Birth places classified according to the Nomenclature of Territorial Units for Statistics (NUTS). The amount of time spent in front of a monitor and the daily amount of time spent on physical activities, the school success were questioned. The age of first access to the internet, the usage of social media and the characteristics of video gaming were identified. The participants who are video gamers were questioned about the age of onset of video gaming, the daily amount of

time spent on video games, the digital platform they owned, the types of games they preferred, the situation of attending in-game chat and shopping. Participants were asked whether they thought the video games were beneficial or not; if yes, they were asked to indicate the topics that they thought were useful. Body weight and height were asked as anthropometric data, and body mass index value was calculated (kg/m^2).

STATISTICAL ANALYSIS

The data were analyzed by SPSS 23 statistics program. Frequency and percentage values were given for the categorical variables. Chi-square test was used for checking the relation between two categorical variables. Independent-Samples T test was used to compare two independent groups of normally distributed continuous variables. Statistical significance level was accepted as $p<0.05$.

RESULTS

Nine hundred thirty-two medical school students participated in this survey. The average (SD) age of the students was 22.9 (1.4) years, 46.5% of them were males. Table 1 shows general characteristics and comparisons of descriptive characteristics in terms of video gaming and social media use habits. Obesity rate was 3.6%, overweight rate was 21% among participants. The mean (SD) activity time on weekdays was 1.6 (1.4) hours, on weekends 1.8 (1.6) hours. Table 2 shows overall activity and biopsychosocial status, and comparisons. The average (SD) age they started using internet was 12.3 (3.1) years. The average (SD) age of getting first mobile phone was 13.3 (1.9) years. The mean (SD) time of daily mobile phone usage was 3.2 (2.3) hours. Table 3 shows overall screen media use characteristics and

TABLE 1: General descriptive characteristics and comparisons between video gamers and social media users.

	Overall	Video gamers	Non-gamers	p	Social media users	Non-users	p
n	932	561	371	-	835	97	-
Age, yr (mean±SD)	22.9±1.4	22.9±1.3	23.0±1.5	0.153	22.9±1.2	23.0±1.5	0.420
Male (%)	46.5	62.7	21.8	**<0.001**	45.5	54.6	0.157
Birthplace (NUTS regions, %)							
Level 1	20.9	23.7	16.7		21.3	17.5	
Level 2	23.1	19.4	28.3		22.4	28.9	
Level 3	37.3	38.7	35.3		38.3	28.9	
Level 4	5.7	5.9	5.4	**0.001**	4.8	13.4	0.022
Level 5	9.8	9.8	9.7		9.8	9.3	
Abroad	3.2	2.5	4.6		3.4	2.0	
Family structure (%)							
Nuclear family	92.5	93.4	91.1		92.7	90.8	
Extended family	3.6	2.7	5.1	0.994	3.5	5.1	**0.006**
One parent family	3.9	3.9	3.8		3.8	4.1	
Living style (%)							
With family	28.4	27.6	29.6		27.3	38.1	
At student home	26.0	27.5	23.7	**0.014**	27.2	15.5	0.080
At dormitory	25.9	22.8	30.5		25.9	25.8	
Alone at student home	19.7	22.1	16.2		19.6	20.6	
Working and income (%)							
Refundable college loan	37.3	36.9	38.0	0.180	37.2	38.3	0.823
Non-refundable college loan	22.8	23.0	22.4	0.763	22.9	21.7	0.622
Allowance from family	36.9	37.6	36.0	0.789	37.6	30.4	0.072
Working occasionally	2.3	2.1	2.4	0.691	1.6	8.7	**<0.001**
Working with a regular income	0.7	0.4	1.2	0.096	0.7	0.9	0.596

NUTS: Nomenclature of territorial units for statistics.

TABLE 2: Activity and biopsychosocial status and comparisons between video gamers and social media users, mean±SD/%.

	Overall	Video gamers	Non-gamers	p	Social media users	Non-users	p
Body mass index (kg/m²)	23.1±3.2	23.7±3.4	21.9±3.1	<0.001	22.9±3.3	23.4±3.8	0.240
Weight status (%)							
Low weight	5.6	3.2	9.2		5.6	5.1	
Normal	69.8	65.6	76.0	<0.001	70.4	63.9	0.308
Overweight	21.0	26.2	13.2		20.6	24.8	
Obese	3.6	5.0	1.6		3.4	6.2	
Activity time on weekdays, hr	1.6±1.4	1.7±1.4	1.5±1.3	0.073	1.6±1.4	1.7±1.4	0.815
Activity time on weekends, hr	1.8±1.6	1.9±1.6	1.7±1.5	0.221	1.8±1.6	1.9±1.8	0.668
Daily sleep time, hr	6.8±0.9	6.8±1.0	6.8±0.9	0.846	6.8±0.9	6.9±1.1	0.283
Going to the cinema or theatre in the last 3 months (%)	84.7	85.6	83.3	0.394	86.1	72.1	**0.003**
Reading book (novel, story) in the last 3 months (%)	66.5	63.6	70.9	**0.023**	65.4	76.3	**0.024**
School success (%)							
Good	33.5	32.4	35.0		33.4	34.0	
Moderate	62.4	63.3	61.2	**0.688**	62.7	60.9	0.723
Poor	4.1	24.3	3.8	"	3.9	5.1	
Failing the class or course (%)	23.5	24.6	21.8	0.344	23.1	24.7	0.692
Receiving psychological help in the last year (%)	11.1	10.9	11.3	0.832	11.5	7.2	0.107
Using antidepressant in the last year (%)	9.4	9.6	9.2	0.909	9.8	6.2	0.252

comparisons in terms of video gaming and social media use habits.

VIDEO GAME PLAYING CHARACTERISTICS

Sixty percent of the students declared they were playing video games and average (SD) age to start playing games was 11.1 (3.5) years. The rate of playing video games was higher in males than females (p<0.001). Birthplace region and living style were detected to be significantly different in video gamers and non-gamers (p=0.001, p=0.014) (Table 1). Video gamers' mean body mass index value was significantly higher than non-gamers' mean value (23.7±3.4 vs 21.9±3.1, p<0.001). Obesity and overweight rates were significantly higher in video-gamers (p<0.001). The rate of reading book in the last three months was significantly higher in non-gamers group (p=0.023) (Table 2). Video gamers' mean age of first internet access was seen to be significantly younger than non-gamers (12.1±3.1 vs 12.6±3.0 yr, p=0.014). Mean ages of first mobile phone possession were similar in gamers and non-gamers (13.3±1.8 vs 13.4±2.0 yr, p=0.186). Video gamers' mean screen time was longer than non-gamers' both on the weekdays and weekends (p=0.015, p<0.001, respectively). The frequencies of watching TV series, music, magazine, health programs were significantly higher in the non-gamers group (p<0.001, p=0.008, p=0.001, p=0.032, respectively) while the rates of watching newcasts, sports programs, talk shows/panels were significantly higher in the video gamers group (p=0.044, p<0.001, p=0.027) (Table 3). Mean (SD) value of daily video game playing time was 1.8 (0.8) hours, 1 of every 5 students was playing video games minimum two hours a day. The most owned video game platform was computer (43.8%). When the most favorite games of participants were analyzed, top four were war (47.5%), sport (37%), car-racing (34.4%), and casual (33.8%) games. Seventy-four percent of the gamers considered the video games as beneficial; the most stated benefits were about forming strategy (47%), quick thinking (45%), improving foreign lan-

TABLE 3: Screen media use characteristics and comparisons between video gamers and social media users, mean±SD/%.

	Overall	Video gamers	Non-gamers	p	Social media users	Non-users	p
Age of first mobile phone possession, yr	13.3±1.9	13.3±1.8	13.4±2.0	0.186	13.3±1.9	13.4±2.0	0.558
Age of first internet access, yr	12.3±3.1	12.1±3.1	12.6±3.0	0.014	12.3±3.1	12.2±3.2	0.674
Daily mobile phone use time, hr	3.2±2.3	3.4±2.4	3.4±2.2	0.863	3.5±2.4	2.3±1.4	<0.001
Screen time on weekdays, hr	2.9 ±2.3	2.9±2.1	2.6±1.9	0.015	2.8±2.0	2.8±2.3	0.782
Screen time on weekends, hr	3.6 ±2.6	3.9±2.4	3.2±2.1	<0.001	3.6±3.8	2.3±2.8	0.378
Television programme preferences (%)							
TV series	43.5	38.1	51.5	<0.001	44.3	36.0	0.362
Music programe	42.0	38.1	47.7	0.008	44.3	21.6	<0.001
Newscast	38.5	40.8	23.2	0.044	37.7	45.3	0.036
Films	31.3	29.6	33.9	0.146	32.9	17.5	<0.001
Training and culture programs	29.2	26.9	27.1	1.00	29.9	29.9	0.254
Sports programs	26.7	37.4	26.4	<0.001	26.3	22.7	0.214
Talk shows, panels	19.2	21.4	16.0	0.027	18.0	28.9	0.006
Magazine program	11.8	8.7	16.4	0.001	11.9	11.3	0.862
Real life programs	7.4	7.0	8.1	0.525	7.3	8.2	0.521
Programs for women	4.5	3.7	5.7	0.150	4.2	7.2	0.121
Programs for children	2.7	2.1	3.5	0.398	2.1	7.2	0.005
Religious programs	2.5	2.9	1.9	0.395	2.5	2.0	1.00
Advertisement demo videos	1.6	1.3	2.2	0.299	1.2	5.2	0.002
Health programs	1.2	0.5	2.2	0.032	1.3	0.0	0.613
Social media use (%)	89.5	90.7	90.2	0.819	-	-	-
Facebook	83.9	86.3	80.3	0.037	-	-	-
Instagram	80.9	77.8	85.7	0.004	-	-	-
Twitter	50.6	53.0	46.9	0.056	-	-	-
Snapchat	36.6	34.4	40.0	0.091	-	-	-
Pinterest	8.9	8.5	9.6	0.534	-	-	-
Google Plus	6.1	7.3	4.3	0.077	-	-	-
Periscope	3.7	5.1	1.5	0.008	-	-	-
Linkedin	3.3	13.2	3.6	0.699	-	-	-
Video game playing (%)		-	-	-	60.4	58.7	0.819

guage level (42.6%). Thirty-seven percent of the gamers declared that video games caused a decrease in their lecture/sports event/ hobby time. Playing video games had caused confusion between reality-fantasy for 4.3%, and health problems for 13.9% of the gamers. For 46.3% of the gamers, at least one of the people whom they were living together was playing video games. Remarkable characteristics of video gamer students are shown in Table 4.

SOCIAL MEDIA USING CHARACTERISTICS

Overall, 89.5% of the participants were using social media, Facebook (83.9%), Instagram (80.9%), Twitter (50.6%), and Snapchat (36.6%) were the most preferred platforms. The rates of social media use were similar between genders (p=0.157). Birthplace region and family structure were significantly different between social-media users and non-users (p=0.022, p=0.006). The rate of working occasionally was significantly higher in the social-media users group (p<0.001) (Table 1). The rate of going to the cinema or theatre was significantly higher among social-media users (p=0.003), while the rate of reading book was significantly higher among non-users (p=0.024) (Table 2). Mean daily time of mobile phone use was significantly longer in the social-media users group (3.5±2.4 vs 2.3±1.4 hr, p<0.001). The rates of watching music programs and films were significantly

TABLE 4: Characteristics of video gamer students, n=561.

Variables	mean±SD/%	Effects of video gaming	%
Weekly video game playing frequency (day)	3.8±2.1	Decrease in video gaming influence on lecture, sport, and hobby events time	37.4
Daily video game playing time (hour)	1.8±0.8	Confusion between reality-fantasy	4.3
The first age of playing video games (year)	11.1±3.5	Having health problems because of video gaming	13.9
Owned video game platforms (%)		Video gaming influence on addicitve drug using	
Computer games	43.8	I don't use	75.7
Mobile games	35.0	I reduced using	0.7
Console games	11.6	I started using	1.0
On-line games (independent from device)	89.4	I enhanced using	3.2
Video games preferences (%)		No influence	19.4
War	47.5	Think of video gaming is benefical	74.1
Sport	37.0	Domains that video games are benefical to	
Car racing	34.4	Forming a strategy	47.0
Casual	33.8	Quick thinking, analysing	45.0
Multiplayer war	29.7	Improving foreign language level	42.6
Strategy	28.8	Having fun, winning prize	39.3
Multiplayer network	21.0	Improving prediction skills	36.0
Management, construction	20.1	Technologic knowledge and skill acquisition	32.0
Adventure	16.3	Doing more than one business at the same time	27.6
Action-adventure	15.1	Stress and anger reduction	25.6
Fight	13.7	Improving teamwork and cooperation abilities	24.0
Vehicle simulation	11.5	Creativity, self reliance	22.2
Role playing	10.3	Map reading, direction finding	20.8
Platform	8.7	Endearing sport, teaching sport rules	10.8
Card, family games	7.3	Improving reading and mathematics	10.6
Buying video games (%)	48.4	Increasing physical activity	3.7
Going to internet cafe for video gaming (%)	15.8	Playing with gamers among various nations, religions	54.7
Shopping among the gamers (%)	28.1	Video gaming habit of the person living together	46.3
Conversations among the gamers (%)		Video gaming habit of home mate	29.0
Entertaining, cooperative	17.9	Video gaming habit of sibling	25.6
Containing profanity, threat, insult	35.6	Video gaming habit of mother	4.2
No chatting	46.5	Video gaming habit of father	3.7

higher in the social-media users group ($p<0.001$, $p<0.001$, respectively), while the rates of watching newscast, talk show/panel, children programs, advertisement demo videos were significantly higher in the non-users group ($p=0.036$, $p=0.006$, $p=0.005$, $p=0.002$, respectively) (Table 3).

DISCUSSION

Advancement in internet technology and numerous electronic devices have facilitated the daily life. Internet use accelerated information transfer and provided innovations in terms of social entertainment. Video games and social media platforms remain in the forefront and are prioritized among these innovations. The fact that 68% (5.13 billion people) of the world population using smartphones increased the rates of playing video games and social media use by facilitating internet access. Once demographic characteristics and features are reviewed, frequency of playing video games and using social media are determined to be higher for the age group between 18-29 with respect to other age groups.[1,2]

The studies encompassing university students are significantly important as updated information

concerning young adults, the most important part representing the attitudes and habits of the population in countries can be rapidly obtained and the results can be compared with previous years. In this survey, medicine faculty students are the study group, because they are expected to be medical advisor and role model to society in future.

In the study we have conducted, 60% of medical school students were observed to play video games. When the previous research studies including students from different faculties are reviewed, it is seen that rate of video game playing has been increasing over years. In our country as of year 2005, two studies revealed that 27.1% and 51.7% of university students and as of 2014 56.5% of university students were playing video games.[11,12] According to a research study conducted in 2009 one out of every three people above 15-years-old were video gamers, 34% of the gamers were 18-24 years of age, and 47.3% of the 18-24 years of age group were playing video games.[13] Besides in 2009, it was observed that 86.9% of video gamers preferred computers, 44.7% game consoles, and 11.8% mobile phones as platforms for gaming. In our study we observed that computers and game consoles have been preferred at a lower rate whereas mobile phones have been preferred at a higher rate (35%) than the previous studies. This result is consistent with the decrease in the rate of personal computer use for gaming related to the increasing rate of mobile phone use to access the internet all over the world.[1] The use of smartphones increases access to video games while providing access to the internet.

In our study, approximately 2/3 of the video gamers are male and the rate of video gaming is 41.8% among female students. These rates are 67.5% and 40.2%, respectively according to Gökkaya et al.[13] These findings obtained on the basis of gender are very similar to our study results. It is known that men play video games more regularly and begin to play at an earlier age.[14] According to our results, the first access to the internet, the first mobile phone possession and the beginning of video gaming is before the age of 14 years. This situation can be explained by the growth of students within the computer age. On average, students have been playing video games for more than 11 years and this period is long enough to reinforce the video game habits. Significant variance in distribution of students who play video games and students who do not play video games with respect to the university they study in, classification of birth places based on NUTS, life styles and the first age they have accessed to internet demonstrate that video game playing habits are affected by socio-cultural and economic diversities. One of the interesting findings of our study is that television programme preference differ from situations in which the student prefer to play video games. Data is not available to explain this variance in the literature. We think that socio-cultural and psychological dynamics which pave the wat for tendency to play video games create this variance. New research studies are needed for this particular subject. In the meantime, it was found that Facebook, Instagram and Periscope usage is significantly high among the students who play video games. This can be explained with that access to single and multi-player games is easier via Facebook.[15]

In our study, the war games were determined to be the most frequently preferred among the video games. It was stated that first choices of university students in 2005 and 2014 were adventure-themed plays.[13,14] In Finland, students mostly prefer ordinary games.[16] In recent years, chaotic conditions, conflict environment and wars that have developed in our close geographical area may have affected the young people's preferences. Violent games are the best-selling games in the world and the most preferred game types for men and adolescents. It is common to fear that violent video games will promote aggression and reduce empathy on part of the players, and their psychological impact is an urgent challenge for society, given the popularity of these games.[17] Such games pose a risk in terms of problematic gaming habits and game addiction. Data about young people’s problematic and addictive digital games habits are limited in our country.[18,19] Multi-player games are online games that also allow players to socialize with forum-like applications. In our study, half of the participants were playing multiplayer games. The majority of the participants in the conversations between the players reported the presence of threats, insults, profane language uttered conversations. This result suggests that

such games may have positive effects such as socialization yet negative effects as well in terms of communication and behaviour problems. Young people play video games mostly for letting off steam and to be motivated by taking place in a competitive environment.[20] In our study, when the students were asked about the benefits of video games, the most common ones specified were about strategy development, rapid thinking and foreign language development. As the students with high scores could enter to medical school in our country, it is not surprising that the benefits they expect from video games are intelligence and language-enhancing features.

Playing video games is a sedentary behaviour. The fact that mean daily screen time, mean body mass index value and overweight and obese student ratio are higher for students who play video games in comparison to students who do not play video games supports this assertion. Recent studies have shown a complex and indirect relationship between being overweight and playing video games. The consumption of sweet beverages during video game sessions is one of the reasons for excess weight.[21] The role of video games in approach to obesity, which is the most dangerous chronic disease of our age, should be examined carefully and in detail.

When we look at the numerical data about social networks, it was reported that 82% of university students used social media in 2007.[22] Balcı et al. found that social media networks ranked first among university students' most visited websites.[23] In our country, there are studies which have investigated the social media usage habits of university students in different universities. Nearly all of the university students used social media according to these nationalwide studies.[24-27] According to our results, almost 90% of medical school students use social media. The most frequently used social media platform is Facebook, which is similar to the results of previous studies.[25,27] When evaluating the results, it should be taken into consideration that we have not questioned the use of Youtube and Whatsapp.

Significant variance in distribution of students who use social media and students who do not use social media with respect to the university they study in, classification of birth places based on NUTS, family structure and employment status demonstrate that social media use habits are effected by socio-cultural and economic diversities in addition to probability of effecting the television programme preferences. For example, it may be thought that those who use social media to follow news bulletins at a lesser rate may suggest that they use social media as a means of receiving information. The connection to social media is mostly done by smartphones.[25,27] This tendency explains the long duration of daily mobile phone usage in social media users.

Depression is associated with a combination of biological, psychological and social factors, and the incidence peaks in early adulthood. In adolescent studies, media exposures such as video games, television, films, internet have been associated with the development of depression.[28] Social media has been associated with depressive symptoms and a decrease in well-being on part of young adults.[29,30] In this study neither playing with video games nor using social media platforms were found to be associated with getting psychological support and taking antidepressant drugs. Not having evaluated students' mental health by using a depression scale is the constraint and limitation of our study. We have tried to prevent biased and prejudiced answers by asking the students to fill in the survey anonymously. Our study is based on voluntariness. We cannot comment on the situation of those who do not want to participate. Case control studies of students receiving psychological support may clarify this situation.

As our study was conducted in 4 different universities in 4 different cities, it gives valuable hints on the current status of university youth about video games and social media use throughout the country. The presented study paid special attention to medical school students. These are the strengths of the study. This is the first time that such a comprehensive assessment has been conducted on this issue as it can be seen in Turkey.

CONCLUSION

Our study constitutes the basis for new studies investigating the problematic digital play habits. Video game playing and / or use of social media in young people can impair cultural life by reducing

the time and interest invested for hobbies. In this study, the students who do not play video games and / or do not use social media, more frequently go to the cinema or theatre and have a higher reading ratio which supports our assertion. Young people should be informed about the importance of cultural accumulation, and convinced that hobbies that contribute to their personal development should be replaced with video games or social media. It also seems quite important that the game developers should consider the positive impacts on especially the young players.

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Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

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