



Examination of Adolescents' Digital Addiction Levels in Terms of Various Variables: The Case of Kırşehir

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Abstract

Introduction: This study aims to determine the levels of digital addiction among adolescents living in Kırşehir province and to examine whether these levels differ in terms of various variables.

Methods: The population of this descriptive, cross-sectional, and exploratory study conducted in multiple centers consisted of secondary school students attending a school in a province located in the Central Anatolia Region of Turkey. Data were collected using a Personal Information Form and the Digital Addiction Scale. Data analysis involved the use of the Independent Sample t-test, One-way analysis of variance, and multiple linear regression analysis, and ethical principles were adhered to throughout the study.

Results: It was determined that 55% of adolescents with an average age of 12.88 ± 0.51 were female. It was concluded that the mean total score on the Digital Addiction Scale for adolescents was 61.82 ± 26.86 , the mean total score on the Interpersonal Relationships subscale was 29.63 ± 14.02 , and the mean total score on the Introverted Factors subscale was 32.19 ± 13.46 . It was determined that "gender, family status, mother's employment status, family income status, ownership of a game console, academic achievement, and activity status" had an effect on the Digital Addiction Scale for Children and sub-dimension total mean scores and that the difference was statistically significant ($p < 0.05$).

Discussion and Conclusion: It was concluded that adolescents' levels of digital addiction are moderate and are influenced by factors such as "gender, family status, mother's employment status, family income, ownership of a game console, academic achievement, and participation in activities." Special support programs should be developed to improve adolescents' levels of digital addiction.

Keywords: Adolescent; Behavioral addiction; Internet addiction; Smartphone addiction; Technology use

The use of digital technologies has continued to grow rapidly over the past century. As a result, tools such as the internet, computers, smartphones, and tablets have become an integral part of daily life.^[1] In our country, the

use of the internet and technological devices has also increased over the years. According to data from the Turkish Statistical Institute^[2] Survey on the Use of Information Technologies by Children, "Internet usage among children

Cite this article as: Tar Bolacalı E, Bayrak R, Işıtan B. Examination of Adolescents' Digital Addiction Levels in Terms of Various Variables: The Case of Kırşehir. Lokman Hekim Health Sci 2026;6(3):489–497.

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E-mail: edanurtar.1107@gmail.com **Submitted:** 07.10.2025 **Revised:** 17.01.2026 **Accepted:** 29.01.2026 **Available Online:** 06.08.2026



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aged 6–15 was 82.7% in 2021 and 91.3% in 2024,” and it was determined that 92.2% of boys and 90.3% of girls use the internet. About 97.4% of children stated that they use the internet regularly and reported that they use the internet “to watch videos (83.9%), for homework, learning, or participating in online classes (75.0%), and to play games (72.7%).”^[2] This increase in the use of digital technologies brings with it many benefits, such as quick access, easy sharing of information, problem solving, individual learning, efficient use of time, and ease of communication. However, alongside these benefits, unhealthy and excessive use of technology also brings certain harms.^[3] Some of these include obesity, sleep problems, eye and posture disorders, violent tendencies, anger and anxiety disorders, stress, fear and loneliness, decreased communication skills, decline in academic achievement, and alienation. Some of these harms stem from the fact that its use can reach addictive levels. This condition, known as technology addiction or digital addiction, affects many people.^[1,3]

Addiction is defined as the continued use of a substance or behavior despite its harmful effects on the individual and the loss of control over that substance or behavior. “Digital addiction” falls under the subheadings of behavioral addiction. Digital addiction encompasses diagnostic criteria such as the behavior becoming central to the person’s life and directing their thoughts and feelings (salience), changing their mood through this behavior (mood modification), increasing the duration of use to achieve the same effect (tolerance), experiencing negative emotional or physical symptoms when use is discontinued (withdrawal), conflicts with the individual or their environment (conflict), and a high level of relapse even after a long period of abstinence (relapse).

^[1,3] Although digital addiction is not formally recognized as a distinct diagnostic category in the Diagnostic and Statistical Manual of Mental Disorders, it is conceptually discussed within the framework of behavioral addictions, particularly in relation to excessive internet and gaming use. Similarly, the International Classification of Diseases, 11th Revision, includes Gaming Disorder under disorders due to addictive behaviors, which is considered conceptually related to digital addiction. These classifications contribute to understanding digital addiction as a behavioral pattern with addictive characteristics.^[4,5] Digital addiction was first referred to as internet addiction, but with the advancement of technology, it has been subdivided into categories such as “internet addiction, smartphone addiction, digital gaming addiction, and social media addiction.”^[1]

The internet supports human life and provides benefits such as access to social media, playing digital games, enabling interaction between two strangers in distant parts of the world, and quickly accessing desired information. According to We Are Social^[6] data, 66.2% of the world’s population is internet users, while in Turkey this rate is 74.41%. Globally, people spend more than 6.5 h a day on online activities, which means that almost a third of human life is spent on the internet. Today, most adolescents start using the internet from early childhood (under the age of 5). Increased access to the internet from an early age and excessive internet use lead to addictive behaviors, paving the way for “internet addiction.”^[1–6] According to a report by We Are Social, there are 5.61 billion mobile device users worldwide.^[6] Smartphones, which have many functions such as accessing social media, conducting research, communicating, and playing games, have become an important part of our lives, and with the intensive use of smartphones, “smartphone addiction” is becoming widespread.^[7,8]

Access to digital games, which can be played individually or in groups in a virtual environment, is facilitated by numerous tools, ensuring continuous access to these games. The inability to quit digital games despite their negative effects on individuals is referred to as digital game addiction. Digital games, which are beginning to replace traditional games for children, can cause addiction and harm the physical and mental development of children and adolescents.^[1,9] The concept of “social media,” which encompasses online environments where people use to share messages, images, and communicate with each other, can have positive outcomes such as easily sharing ideas and meeting individuals who enjoy similar things, but it can also harm its users.^[9] Easy access to personal information, information overload, exposure to bullying and sexual content, and decreased exercise and academic achievement as a result of excessive use are among the harms that social media can cause. These negative situations that can occur during a sensitive period, such as adolescence, can adversely affect their development.^[7,8]

According to the World Health Organization (WHO), individuals aged 10–19 are considered adolescents (WHO, 2025),^[10] and it is known that “digital addiction” is more prevalent among adolescents than other age groups.^[11] Adolescence is a period in which individuals experience physical, psychological, and cognitive development; these changes and developments affect their relationships with the world and themselves. During this period, when socialization and relationships with the environment are

important, adolescents' conflicts with themselves and their environment can lead them to engage with technological devices. Excessive technology use that begins with this orientation can lead to negativity in an individual's life. Furthermore, the widespread use of technological devices by adolescents, whose use has increased over the years among children and young people, is one of the factors that makes them more vulnerable to addiction.^[11,12]

Increased digital addiction among adolescents can cause many physical and mental problems. Parallel to digital addiction, there may be an increase in aggression, a decline in academic achievement, difficulty socializing, a decrease in sleep quality, failure to fulfill responsibilities, a decrease in movement and exercise, dissatisfaction with life, fatigue, pain, reduced time spent with friends, conflicts with family and peers, decreased interest in hobbies, anxiety, excessive food consumption, inability to concentrate, weight gain, decreased cognitive development, depression, and a tendency toward mental illness.^[3,8,11,12] The fact that digital addiction leads to many negative situations in adolescents highlights the need to address it with sensitivity and conduct research on it. Pediatric nurses, who are in direct contact with children and adolescents, as well as all healthcare professionals, bear significant responsibility in this regard. Although a limited number of studies have been conducted on this subject in the literature, no study examining the levels of digital addiction among adolescents in Kırşehir has been found.^[11,12] Based on this, this study aims to determine the levels of digital addiction among adolescents living in Kırşehir and to examine whether these levels differ in terms of various variables.

Materials and Methods

Design

This study was designed as a descriptive, cross-sectional, correlational, and multicenter research study.

Research Population and Sample

The research population consists of adolescents attending five middle schools in a province in the Central Anatolia region of Turkey. The choice of province was influenced more by the feasibility of the research, the availability of institutional permissions, and opportunities for cooperation with schools than by the level of digital technology use. The research sample consists of adolescents enrolled in these schools who met the inclusion criteria and whose families and themselves agreed to participate in the research. The inclusion criteria for the study were adolescents aged

10–13 years attending the selected schools who provided informed consent. The sample size of the study was calculated by referring to the average digital addiction level score (56.74+19.02) of adolescents in a similar study.^[13] Calculations made using the G*Power 3.1 program determined that a total of 515 adolescents needed to be included in the study with 0.95 power, 0.05 error margin, and 0.145 effect size; to account for potential missing data, the sample size was increased by approximately 10%.^[14] The study sample was selected from adolescents who met the inclusion criteria using simple random sampling, one of the probability sampling methods.

Data Collection Tools

Data were collected using the "Personal Information Form" and the "Digital Addiction Scale."

Personal Information Form

The "Personal Information Form," prepared by researchers in line with the literature,^[9,13,15] consists of a total of 13 questions. The first seven questions aim to determine adolescents' age, gender, family status, parents' employment status, and perceived economic status. The remaining six questions are aimed at determining digital device usage characteristics (ownership of a game console, computer, tablet, or smartphone), academic achievement, and activity levels.

Digital Addiction Scale for Children (DASC)

The scale was designed by Hawi et al.^[16] to measure the level of digital addiction among children aged 10–14. It consists of 25 items on a 5-point Likert scale ranging from 1=Never to 5=Always. Kaçmaz et al.^[17] adapted the scale into Turkish. The scale consists of two subscales: Interpersonal factors (4, 6, 9, 10, 13, 16, 17, 18, 19, 20, 22, 23 and 25. item) and intrapersonal (1, 2, 3, 5, 7, 8, 11, 12, 14, 15, 21 and 24. item). The lowest possible score on the scale is 25, and the highest possible score is 125, with higher scores indicating a higher risk of digital addiction.^[17] In the Turkish validity and reliability study of the scale, Cronbach's Alpha internal consistency reliability coefficient was found to be $\alpha=0.90$,^[17] and in this study, Cronbach's Alpha value was found to be 0.96.

Data Collection

Permission to conduct the study was obtained from the Provincial Directorate of National Education, allowing access to the selected schools without requiring individual school-level approvals. Before data collection, the school

administration and teachers were consulted, and the necessary explanations about the study were provided to the adolescents. Informed consent forms were sent to the students' families. The data collection schedule was determined in consultation with the school principal and guidance counselors. Adolescents who agreed to participate in the study were also given an informed consent form, and the students' informed consent was obtained. The research data were collected by the researchers between January and May 2025 in the classroom environment under the supervision of the researchers in a manner that did not disrupt the flow of lessons. All adolescents present on the day of data collection and meeting the inclusion criteria were invited to participate. The researchers answered the adolescents' questions, and the data collection process took approximately 15–20 min.

Statistical Analysis

The data obtained were analyzed using IBM Statistical Package for the Social Sciences Statistics 29 (IBM Corporation, Armonk, New York, USA) software. Descriptive statistical methods (mean, standard deviation) and tests appropriate for data distribution were used to compare quantitative data when evaluating the findings obtained in the study. The normality of the variables used in the study was determined by examining "skewness and kurtosis values, histograms, and Q-Q plot graphs," and the data were found to be normally distributed. The "Independent Sample t Test" and "One-Way ANOVA" tests were used to compare categorical and continuous data. Multiple linear regression analysis was conducted as an exploratory analysis, with DASC Total as the dependent variable and selected variables related to adolescents' digital addiction levels (gender, family income, academic achievement, and activity status) as independent variables, to examine the extent to which these variables explain digital addiction levels. For the multiple linear regression analysis, the normality of residuals was evaluated using histogram and normal P–P plots. Visual inspection indicated that the residuals were normally distributed, and the assumptions of linearity and homoscedasticity were met. The significance level was accepted as $p < 0.05$ in all statistical analyses.

Ethical Principles

Before starting the study, ethical approval was obtained from the Scientific Research and Publication Ethics Committee of Kırşehir Ahi Evran University Faculty of Social and Human Sciences, dated 21.03.2024, and

numbered 2024/03/23. In addition, permission to collect data was obtained from the Provincial Directorate of National Education, and permission to use the Digital Addiction Scale was obtained by contacting the authors who adapted the scale into Turkish. Before the data collection process, informed consent was obtained from adolescents and their parents through an Informed Consent Form. The study was conducted in accordance with the principles outlined in the Helsinki Declaration on Human Rights.

Results

The study was completed with 575 adolescents. The average age of adolescents was 12.88 ± 0.51 . It was determined that 55% of them were female, 72.5% lived in a nuclear family, 39.7% had two siblings, 69.0% had a mother who did not work, 90.8% had a father who worked, and 51.5% had a family income that equals expenses. Of the adolescents, 48.5% reported owning a game console, 53% a computer, 46.3% a tablet, and 79.7% a smartphone. Of the adolescents, 74.4% stated that they had received commendation in the previous term, 59.1% stated that they exercised regularly, and 23.8% stated that they preferred soccer as a physical activity (Table 1).

Group comparisons were conducted for both the total DASC score and its two subscales (interpersonal and intrapersonal factors), as defined in the original scale structure. It was determined that characteristics such as "number of siblings, father's employment status, and ownership of a computer, tablet, or smartphone" had no effect on the mean total scores for DASC and its subscales ($p > 0.05$). "Gender, family status, mother's employment status, family income status, game console ownership, academic achievement, and activity participation" were found to have an effect on the mean total scores of the DASC and its subscales, and the difference between them was statistically significant ($p < 0.05$). The analyses revealed that male participants had statistically significantly higher ($p < 0.05$) DASC and subscale total scores than female participants, participants whose mothers worked had statistically significantly higher ($p < 0.05$) DASC and subscale total scores than those whose mothers did not work, participants whose family income exceeded expenses had statistically significantly higher ($p < 0.05$) DASC and subscale total scores than those whose income equaled expenses, and participants who owned a game console had statistically significantly higher ($p < 0.05$) DASC and subscale total scores than those who did not own a game console (Table 1).

Table 1. Comparison of the digital addiction scale and subscale total mean scores according to the descriptive characteristics of adolescents (n=575)

Characteristics	n (%)	Mean±SD		
		Interpersonal factors	Intrapersonal factors	Total digital addiction
Gender				
Female	316 (55.0)	28.04±12.97	30.97±12.88	59.019±25.185
Male	259 (45.0)	31.57±15.01	33.69±14.03	65.255±28.452
Test value, p-value		t=-2.98; p=0.003	t=-2.39; p=0.017	t=-2.752; p=0.006
Family status				
Nuclear	417 (72.5)	28.41±13.52 ^a	31.26±13.09 ^a	59.66±25.93 ^a
Extended	118 (20.5)	32.15±14.74 ^{ab}	34.03±14.01 ^{ab}	66.18±28.26 ^{ab}
Non-intact	40 (7.0)	34.95±15.11 ^b	36.60±14.62 ^b	71.55±28.26 ^b
Test value, p-value		F=6.49; p= 0.002	F=4.29; p= 0.014	F=5.61; p=0.004
Number of siblings				
1	150 (26.1)	29.09±14.51	31.99±13.60	61.09±27.60
2	228 (39.7)	29.69±14.18	32.46±13.55	62.16±27.15
3	134 (23.3)	28.95±13.20	31.54±12.90	60.49±25.23
4 or above	63 (11.0)	32.14±14.00	33.11±14.25	65.25±27.71
Test value, p-value		F=0.85; p=0.465	F=0.24; p= 0.865	F=0.50; p= 0.681
Mother's employment status				
Working	279 (31.0)	33.91±15.72	35.75±14.50	64.58±29.18
Not working	296 (69.0)	27.71±12.75	30.60±12.68	59.24±24.25
Test value, p-value		t=4.62; p<0.001	t=4.09; p<0.001	t=2.38; p=0.018
Father's employment status				
Working	522 (90.8)	29.60±14.14	32.18±13.49	61.78±27.02
Not working	53 (9.2)	29.94±12.92	32.40±13.34	62.34±25.48
Test value, p-value		t=-0.17; p= 0.865	t=-0.11; p=0.910	t=-0.15; p=0.884
Family income status				
Income exceeds expenses	83 (48.5)	30.86±15.22	33.71±14.48	64.58±29.18
Income equals expenses	492 (51.5)	28.47±12.70	30.77±12.29	59.24±24.25
Test value, p-value		t=2.04; p= 0.042	t=2.62; p=0.009	t=2.38; p=0.018
Own a game console				
Yes	83 (14.4)	32.63±14.74	35.59±13.23	68.22±27.42
No	492 (85.6)	29.13±13.85	31.62±13.43	60.75±26.64
Test value, p-value		t=2.11; p=0.035	t=2.49; p=0.013	t=2.35; p=0.019
Own a computer				
Yes	305 (53.0)	29.76±13.95	32.62±13.03	62.38±26.30
No	270 (47.0)	29.49±14.13	31.72±13.95	61.21±27.52
Test value, p-value		t=0.23; p=0.814	t=0.79; p=0.427	t=0.52; p=0.603
Own a tablet				
Yes	266 (46.3)	29.69±14.20	32.50±13.54	62.20±27.12
No	309 (53.7)	29.58±13.89	31.93±13.42	61.51±26.68
Test value, p-value		t=0.10; p=0.924	t=0.51; p=0.612	t=0.30; p=0.761
Own a smartphone				
Yes	458 (79.7)	29.59±13.92	32.42±13.34	62.01±26.62
No	117 (20.3)	29.79±14.46	31.32±13.98	61.12±27.89

Table 1 (cont.). Comparison of the digital addiction scale and subscale total mean scores according to the descriptive characteristics of adolescents (n=575)

Characteristics	n (%)	Mean±SD		
		Interpersonal factors	Intrapersonal factors	Total digital addiction
Test value, p-value		t=-0.14; p=0.888	t=0.78; p=0.433	t=0.32; p=0.750
Academic achievement				
Certificate of achievement	428 (74.4)	28.99±13.90 ^a	31.58±13.06 ^a	60.57±26.37 ^a
Certificate of recognition	112 (19.5)	29.38±13.29 ^a	32.18±13.85 ^a	61.55±26.28 ^a
None	35 (6.1)	38.26±15.35 ^b	39.77±15.12 ^b	78.03±30.10 ^b
Test value, p-value		F=7.24; p<0.001	F=6.09; p=0.002	F=6.98; p<0.001
Activity status				
None	235 (40.9)	30.80 ±13.88 ^a	33.48±13.44 ^a	64.28±26.60 ^a
Soccer	137 (23.8)	29.85±15.6a ^b	32.01±14.42 ^{ab}	61.86±29.67 ^{ab}
Volleyball-Basketball	111 (19.3)	25.77±11.92 ^b	28.59±12.14 ^b	54.36±23.45 ^b
Other	92 (16.0)	30.75±13.41 ^b	33.38±12.96 ^b	64.13±25.56 ^b
Test value, p-value		F=3.42; p=0.009	F=3.09; p=0.016	F=3.39; p=0.009

Mean±SD: Mean±Standard deviation; t: Student t-test; F: One-way analysis of variance (ANOVA); p<0.05; a<b<c.

Table 2. Digital addiction scale and subscale total mean scores

Scale	Mean±SD	Min-max	Cronbach's Alfa
Interpersonal factors	29.63±14.02	13–65	0.934
Intrapersonal factors	32.19±13.46	12–60	0.940
Total digital addiction scale	61.82±26.86	25–125	0.966

Mean±SD: Mean±standard deviation; Min-Max: Minimum-maximum.

Following statistically significant one-way ANOVA results, post hoc Tukey analyses were performed to identify the groups responsible for the observed differences in the total scores of the DASC and its subscales according to family status, academic achievement, and activity participation status. For family status, adolescents from non-intact families had significantly higher mean total scores on the DASC and its subscales compared to those from nuclear families ($p<0.05$). Regarding academic achievement, adolescents who did not receive any achievement certificates had significantly higher DASC total and subscale scores than those who received Certificates of Appreciation or Thanks ($p<0.05$). With respect to activity participation, adolescents who did not participate in any activities had significantly higher DASC total and subscale scores than those who participated in volleyball or basketball activities ($p<0.05$) (Table 1).

The total DASC scores range from 25 to 125, with an average of 61.82 ± 26.86 , while the average total score for the Interpersonal Relationships Subscale is 29.63 ± 14.02 and the average total score for the Introversion Factors Subscale is 32.19 ± 13.46 . The Cronbach's Alpha for the

Table 3. Relationship between digital addiction scale score and some variables

Variables	Family income		Academic achievement		Activity status	
	r	p	r	p	r	p
Gender	0.028	0.505	0.042	0.312	-0.020	0.639
Family income			0.195	<0.001	-0.004	0.932
Academic achievement					0.009	0.827

r: Pearson's correlation coefficient.

DASC is 0.966, the Cronbach's Alpha for the Interpersonal Relationships Subscale is 0.934, and the Cronbach's Alpha for the Introversion Subscale is 0.940 (Table 2).

Before the regression analysis, correlations among the independent variables were examined (Table 3). The correlation coefficients ranged from -0.020 to 0.195, indicating weak relationships and no evidence of multicollinearity among the independent variables. These findings are consistent with the VIF values reported in Table 4.

In the study, a multiple linear regression model was used to examine the relationship between adolescents' level of digital addiction and factors such as gender, family income status, academic achievement, participation in activities, and DASC, yielding an AdjR² value of 0.050. This result indicates that all factors in the model together explain 5% of the variation in the DASC total score (R^2 : 0.061, AdjR²: 0.050, $p<0.001$) (Table 4).

Table 4. Relationship between digital addiction scale score and some variables

Factors associated with DASC	DASC total					
	β^1 (95% CI)	SE	β^2	t	p	VIF
Constant	58.025 (50.056–65.994)	4.051		14.323	<0.001	
Gender	6.199 (-0.836–13.234)	3.576	0.115	1.733	0.084	1.580
Family income status	-7.046 (-12.696--1.396)	2.872	-0.130	-2.453	0.015	1.006
Academic achievement	23.128 (10.246–36.010)	6.549	0.188	3.532	<0.001	1.008
Activity status	1.186 (-5.970–8.342)	3.638	0.022	0.326	0.745	1.575

F: 5.458 R: 0.247 R²: 0.061 Adj. R²: 0.050 p<0.001. CI: Confidence interval; SE: Standard error; VIF: Variance inflation factor; DASC: Digital addiction scale for children.

Discussion

With the widespread use of digital technologies today, digital addiction among adolescents is on the rise. Digital addiction causes many physical and mental problems in adolescents. Therefore, digital addiction among adolescents must be addressed and studied with sensitivity. This study determined the levels of digital addiction among adolescents living in the province of Kırşehir and examined whether these levels differed in terms of various variables, presenting an evidence-based perspective on digital addiction among adolescents. The results obtained from the research findings indicate that the levels of digital addiction among the adolescents included in the study were moderate. When studies on the subject are examined,^[15,18–20] it is seen that, similar to our findings, the literature also indicates that adolescents' digital addiction is at a moderate level.

According to research findings, it has been determined that the level of digital addiction is higher in men than in women. In a study by Gürarslan Baş and Karatay^[12] examining technology use and addictive behaviors in adolescents, it was found that men had higher levels of digital addiction. Similarly, a study conducted by Lin^[11] with adolescents in Taiwan found that males had higher levels of internet addiction. Similar studies in the literature have also determined that males have higher levels of digital addiction,^[19,21,22] these results are consistent with our findings. On the other hand, studies by Ünal and Korkmaz^[23] and Fişekçioğlu and Denктаş^[24] found that digital addiction does not differ by gender. In this study, it is thought that the lower level of digital addiction among women may be due to girls being raised in a more controlling manner, interacting more in social environments, more restrictions being placed on girls, and girls being able to devote less time to themselves.^[1,25,26]

This study found that adolescents from non-intact families have higher levels of digital addiction than those from intact families, which is consistent with the literature.^[3,25] A study by

Taylan et al.^[25] determined that adolescents whose parents were separated spent more time on digital games than those whose parents were deceased or alive and together. A study by Deniz et al.^[3] also found that adolescents whose parents were divorced had higher levels of digital game addiction than other groups. This study found that adolescents whose mothers worked had higher levels of digital addiction than those whose mothers did not work. A study conducted by Altınok^[15] with high school students also found that adolescents whose mothers worked had higher levels of digital addiction than those whose mothers did not work, which is similar to the findings of this study. This situation is thought to be an indication of the positive effect of the time allocated to the child by the family on addiction. Arslan et al.^[26] concluded in their study that family income does not affect the level of digital addiction. In Altınok's^[15] study, it was found that family income is related to digital addiction, and that adolescents with good and very good family income have higher levels of digital addiction than adolescents with medium family income. This study also found that those with family income exceeding their expenses had higher levels of digital addiction than those with family income equal to their expenses. This situation may be due to adolescents with good family income having greater access to technological tools, owning their own technological devices, and thus being able to spend more time on them.^[18]

Research findings indicate that adolescents who own a game console have significantly higher levels of digital addiction compared to those who do not own one. The high visual quality, level of interaction, and social connectivity offered by console games can lead users to spend more time playing, which in turn can pave the way for the emergence of addiction components. Ownership of a game console can increase the risk of addiction, particularly by increasing the opportunity for online or prolonged gaming. Similarly, the literature emphasizes that easy access to digital gaming platforms reinforces addictive behaviors.^[20,27]

Dikmen et al.^[28] found a negative relationship between academic achievement and digital game addiction in a study conducted with adolescents. A study by Delebe and Hazar^[20] found that digital game addiction leads to a decline in academic achievement. The findings of this study, in line with the literature, concluded that adolescents with low academic achievement had higher levels of digital addiction than those with high academic achievement. A study conducted by Fişekçioğlu and Denктаş^[24] with adolescents concluded that adolescents who play sports have lower levels of digital addiction than adolescents who do not play sports. In a study by Hazar et al.,^[27] it was also found that adolescents who did not exercise regularly had higher levels of digital game addiction than adolescents who exercised regularly. In this study, similar to the literature, it was determined that adolescents who did not engage in any activities had higher levels of digital addiction than adolescents who regularly played volleyball or basketball. It is thought that this situation may stem from students who devote their time to sports, spending less time with technology. Therefore, the findings obtained as a result of this study, which show the significant relationships between adolescents' levels of digital addiction and certain variables, highlight the importance of studies on the conscious and balanced use of technology. One important outcome of this study is that some variables related to adolescents' level of digital addiction were found to be statistically associated with the DASC total score; however, their overall contribution to explaining variation in digital addiction was limited. The regression model accounted for approximately 5% of the variance, indicating that these variables provide a partial perspective on adolescents' digital addiction. Accordingly, the regression findings should be interpreted within an exploratory framework. This result underscores the multifactorial nature of digital addiction and suggests that adolescents' digital behaviors are influenced by a broader set of psychological, social, and contextual factors beyond those included in the present model. On the other hand, it is thought that there is a significant gap in the literature regarding adolescents' level of digital addiction and the factors that influence it, and that new studies are needed to define this gap.

Limitations

This study has some limitations. First, the use of self-report instruments may have introduced response biases, such as social desirability or inaccurate recall. Second, the cross-sectional design limits the ability to infer causal relationships between digital addiction and associated

factors. Finally, although the study sample was carefully selected, it only included adolescents from the schools where the study was conducted, which may limit the generalizability of the results to the wider adolescent population.

Conclusion

It was concluded that adolescents' levels of digital addiction are moderate and are influenced by factors such as "gender, family status, mother's employment status, family income, ownership of a game console, academic achievement, and participation in activities." Based on the study results, it is recommended that educational programs be organized to reduce adolescents' risk of digital addiction, parental awareness be increased, adolescents be directed toward different activities, psychosocial support be provided, intervention studies be conducted, and guidelines and policies be developed. It is recommended that studies be conducted across different age groups, socioeconomic levels, and cultural contexts to increase the generalizability of the results. Furthermore, it is recommended that nurses and other health professionals play an active role in preventing digital addiction and mitigating its negative effects by engaging in school-based health education, family counseling, early identification of at-risk groups, and promoting healthy lifestyle habits.

Ethics Committee Approval: The Kırşehir Ahi Evran University Faculty of Social and Human Sciences Research and Publication Ethics Committee granted approval for this study (date: 21.03.2024, number: 2024/03/23).

Informed Consent: Written informed consent was obtained.

Conflict of Interest: None declared.

Financial Disclosure: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Use of AI for Writing Assistance: During the preparation of this work, the authors used Grammarly and DeepL programs in order to language editing. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

Authorship Contributions: Concept: ETB, RB, BI; Design: ETB, RB, BI; Supervision: ETB, RB, BI; Resource: ETB, RB, BI; Materials: ETB, RB, BI; Data Collection or Processing: ETB, RB, BI; Analysis or Interpretation: ETB, RB, BI; Literature Search: ETB, RB, BI; Writing: ETB, RB, BI; Critical Review: ETB, RB, BI.

Acknowledgments: The authors would like to express their sincere gratitude to the adolescents and their families who voluntarily participated in this study, as well as to the school administrators and teachers for their support during the data collection process.

Peer-review: Double blind peer-reviewed.

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