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The Relationship Between Digital Addiction and Hedonic Eating Behavior in Adolescents: A Descriptive and Correlational Study

Ergenlerde Dijital Bağımlılık ve Hedonik Yeme Davranışı Arasındaki İlişki: Tanımlayıcı ve Korelasyonel Bir Çalışma

Sevilay ERGÜN ARSLANLI¹ , Bahar AKSOY² , Necla KASIMOĞLU³ , Hilal ALTUNDAL DURU⁴ **Yazarların ORCID numaraları / ORCID IDs of the authors:**S.E.A. 0000-0002-1068-4202; B.A. 0000-0003-0466-5918;
N.K. 0000-0001-9957-0959; H.A.D. 0000-0001-6186-0280¹Çankırı Karatekin University, Faculty of Health Science, Department of Midwifery, Çankırı, Türkiye²Akdeniz University, Kumluca Faculty of Health Sciences, Department of Child Health and Diseases Nursing, Antalya, Türkiye³Erzincan Binali Yıldırım University, Faculty of Health Science, Department of Child Health and Diseases Nursing, Erzincan, Türkiye⁴Çankırı Karatekin University, Faculty of Health Science, Department of Public Health Nursing, Çankırı, Türkiye**Sorumlu yazar / Corresponding author:**Sevilay ERGÜN ARSLANLI
E-posta: sevilayergun555@gmail.com**Geliş tarihi / Date of receipt:** 04.05.2026**Kabul tarihi / Date of acceptance:** 03.07.2026**Atf / Citation:** Ergün Arsanlı, S., Aksoy, B., Kasımoğlu, N., & Altundal Duru, H. (2026). The relationship between digital addiction and hedonic eating behavior in adolescents: A descriptive and correlational study. *UHS Journal of Nursing*, 8(2), 177-184. doi: 10.48071/sbuhemsirelik.1944291**ABSTRACT****Introduction:** The widespread use of digital technologies increases the risk of digital addiction in adolescents, and this is associated with various behavioral health problems. In recent years, the impact of digital media use on eating behaviors has been a growing area of research. However, studies examining the relationship between digital addiction and hedonic eating tendency in adolescents are limited.**Aim:** This study aimed to examine the relationship between digital addiction and hedonic eating tendency in adolescents.**Method:** This descriptive and correlational study was conducted between December 2025 and March 2026, with 346 adolescents attending one high school in the city center of eastern Türkiye. Data were collected using a Personal Information Form, the Digital Addiction Scale for Teenagers, and the Hedonic Eating Scale for Adolescents. Descriptive statistics, independent samples t-test, one-way ANOVA, Chi-square, Mann Whitney U, Kruskal-Wallis and correlation analyses were used.**Results:** Results showed a significant positive correlation between screen time and digital addiction ($r = 0.328$; $p < 0.01$). Furthermore, a significant positive correlation was found between digital addiction and hedonic eating tendency ($r = 0.351$; $p < 0.01$). Adolescents who stated that digital platforms may contribute to their eating habits had significantly higher scores for both digital addiction and hedonic eating tendency.**Conclusion:** The findings indicate a significant relationship between digital addiction and hedonic eating tendency in adolescents. Considering the potential effects of digital media use on adolescents' eating behaviors, these findings underscore the need for developing school-based interventions that include healthy screen use and mindful eating behaviors.**Keywords:** Adolescents; eating behavior; internet addiction.**Öz****Giriş:** Dijital teknolojilerin yaygın kullanımı, ergenlerde dijital bağımlılık riskini artırmakta ve bu durum çeşitli davranışsal sağlık sorunlarıyla ilişkilendirilmektedir. Son yıllarda, dijital medya kullanımının yeme davranışları üzerindeki etkisi giderek artan bir araştırma alanı olmuştur. Bununla birlikte, ergenlerde dijital bağımlılık ile hedonik yeme eğilimi arasındaki ilişkiyi inceleyen çalışmalar sınırlıdır.**Amaç:** Bu çalışma, ergenlerde dijital bağımlılık ile hedonik yeme eğilimi arasındaki ilişkiyi incelemeyi amaçlamıştır.**Yöntem:** Bu tanımlayıcı ve korelasyonel çalışma, Aralık 2025 ile Mart 2026 tarihleri arasında, Türkiye'nin doğusunda şehir merkezindeki bir lisede öğrenim gören 346 ergenle gerçekleştirilmiştir. Veriler, Kişisel Bilgi Formu, Ergenler için Dijital Bağımlılık Ölçeği ve Ergenler için Hedonik Yeme Ölçeği kullanılarak toplanmıştır. Tanımlayıcı istatistikler, bağımsız örneklem t-testi, tek yönlü ANOVA, Ki-kare testi, Mann Whitney U testi, Kruskal-Wallis testi ve korelasyon analizleri kullanıldı.**Bulgular:** Sonuçlar, ekran süresi ile dijital bağımlılık arasında anlamlı pozitif bir korelasyon olduğunu gösterdi ($r = 0,328$; $p < 0,01$). Ayrıca, dijital bağımlılık ile hedonik yeme eğilimi arasında da anlamlı pozitif bir korelasyon bulundu ($r = 0,351$; $p < 0,01$). Dijital platformların yeme alışkanlıklarını etkilediğini belirten ergenlerin hem dijital bağımlılık hem de hedonik yeme eğilim puanları anlamlı derecede daha yüksekti.**Sonuç:** Bulgular, ergenlerde dijital bağımlılık ile hedonik yeme eğilimleri arasında önemli bir ilişki olduğunu göstermektedir. Dijital medya kullanımının ergenlerin yeme davranışları üzerindeki potansiyel etkileri göz önüne alındığında, bu bulgular, sağlıklı ekran kullanımı ve bilinçli yeme davranışlarını içeren okul temelli müdahalelerin geliştirilmesi ihtiyacının altını çizmektedir.**Anahtar kelimeler:** Ergen; internet bağımlılığı; yeme davranışı.Bu eser, Creative Commons Atf-Gayri
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Introduction

In recent years, the increasing integration of digital technologies into every aspect of life has increased the risk of digital addiction, especially among adolescents (Toklu Baloglu & Caferoglu Akin, 2024). Excessive use of the internet, social media, and mobile devices can lead to many negative consequences such as distraction, unbalanced nutrition, decreased academic performance, emotional problems, and sleep disorders (Kuss & Griffiths, 2017; Karaaslan Eşer & Ayaz Alkaya, 2019; Lee, Tse, Wu, Mak & Lee, 2021; Zhou, Yan, Yang, & Hussain, 2023). Recent study in Türkiye have shown that adolescents with high levels of digital addiction also experience disturbances in their eating habits. In this context, digital addiction appears to be a multi-dimensional problem that can affect not only mental and social functioning but also an individual's eating habits (Dumlu Bilgin et al., 2024; Toklu Baloglu & Caferoglu Akin, 2024; Özbey, Sezer Efe, & Bayat, 2025).

Hedonic eating is defined as an individual's tendency to consume high-calorie and tasty foods for pleasure, regardless of their physiological state of hunger (Lowe & Butryn, 2007). Digital media, especially social media platforms and online food ordering applications, are rich in content that promotes this type of eating behavior. Previous studies have demonstrated a significant positive correlation between social media use time and hedonic hunger (Dumlu Bilgin et al., 2024; Özbey et al., 2025). Similarly, individuals with high levels of social media addiction show increased emotional and hedonic eating tendencies (Toklu Baloglu & Caferoglu Akin, 2024). Furthermore, digital environments may influence an individual's internal drives and be a determining factor in their eating behavior (Dumlu Bilgin et al., 2024; Özbey et al., 2025).

Adolescence is a critical developmental period characterized by intense psychological and physiological changes and increased sensitivity to environmental stimuli. Understanding the relationship between digital addiction and hedonic eating tendency is crucial for supporting the healthy development of young people (Mohsenpour, Karamizadeh, Barati-Boldaji, Ferns & Akbarzadeh, 2023; Özbey et al., 2025). Indeed, some studies show that variables such as body mass index (BMI), gender, and socioeconomic level may influence this relationship (Toklu Baloglu & Caferoglu Akin, 2024; Özbey et al., 2025). Accordingly, a more comprehensive and multidimensional approach to the relationship between adolescents' digital media use habits and eating behaviors is warranted for the development of preventive health policies. Currently, digital addiction is a significant risk factor negatively affecting the psychosocial development of adolescents. Similarly, hedonic eating leads individuals to develop unhealthy eating habits and is associated with serious health problems such as obesity, eating disorders, and metabolic diseases. While there is increasing evidence in the literature that digital media use affects eating behaviors, studies systematically examining the relationship between digital addiction and hedonic eating tendency in adolescent samples remain limited (Toklu Baloglu & Caferoglu Akin, 2024; Özbey et al., 2025). Therefore, this study aimed to examine the relationship between digital addiction and hedonic eating tendency in adolescents. Furthermore, evaluating the effects of gender, weight, and social media use duration on the relationship between digital addiction and hedonic eating tendency is among the sub-objectives of this study.

Research Questions

1. Is the digital addiction associated with hedonic eating tendency in adolescents?
2. Do digital addiction and hedonic eating tendency differ by gender and body weight status in adolescents?
3. Is the duration of social media use associated with hedonic eating tendency and the level of digital addiction in adolescents?

Method

Study Design

This study employed a descriptive and correlational design.

Study Setting and Participants

This study was conducted between December 2025 and March 2026 with a population of 547 adolescents attending one high school affiliated with the Ministry of National Education in a provincial center in eastern Türkiye. The sample size was calculated using a formula for a known population with a 95% confidence level and a 5% margin of error.

$t: 1.96$. $\alpha = 0.05$ is the t value at ∞ degrees of freedom.

N = Number of individuals in the population

n = Number of individuals to be sampled

p = Frequency (probability) of the event to be studied,

q = Frequency of the event not occurring ($1 - p$),

t = Theoretical value in the t -table at a certain degree of freedom and the determined error level,

$d = \pm$ deviation to be made according to the frequency of the event.

$$n = (N t^2 p q) / (d^2 (N - 1) + t^2 p q)$$

The required sample size was calculated as 226 using a sample size formula for a known population. In order to compensate for possible data attrition, the calculated sample size was increased by approximately 20%, setting the target number of participants at 271. During the data collection period, data were successfully collected from 346 adolescents. The inclusion criteria for the study were as follows: (a) aged between 13 and 18 years; (b) provided informed consent (both adolescents and their parents); (c) able to read and understand Turkish and (d) being able to independently complete data collection forms. The exclusion criteria for the study were as follows: (a) absence from school during the data collection period and (b) presence of communication or visual impairments.

Data Collection Tools

Personal Information Form: This form, consisting of 18 items on adolescents' sociodemographic characteristics, was developed by the researchers based on the relevant literature (Çeviker, 2022; Bağatarhan, 2023).

Digital Addiction Scale for Teenagers (DAST): The DAST was originally developed by Seema Heidmets, Konstabel and Varik-Maasik (2022) and adapted into Turkish by Bağatarhan (2023). The scale consists of 10 items and a single dimension assessing

adolescents' digital device use and related feelings. Responses are rated on a seven-point Likert scale ranging from 1 (never) to 7 (always). Total scores range from 10 to 70, with higher scores indicating greater levels of digital addiction (Seema et al., 2022). The scale contains no reverse-scored items. The original study reported a Cronbach's alpha of 0.87, while it was 0.85 in the present study.

Hedonic Eating Scale for Adolescents (HES-A): The HES-A was developed by Çeviker (2022) to assess hedonic eating behaviors in adolescents. The scale consists of 23 items rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). It includes two subdimensions: eating pleasure and controlled eating. Items 6, 10, 17, 18, 19, and 22 are reverse-scored. Total scores range from 23 to 115, with higher scores indicating greater levels of hedonic eating (Çeviker, 2022). The Cronbach's alpha coefficient was reported as 0.94 in the original study and was found to be 0.79 in this study.

Data Collection

The research data were collected using a "Personal Information Form, DAST, and HES-A" prepared by the researcher based on a literature review. The researcher informed adolescents attending one high school affiliated with the Ministry of National Education in the center of a province in eastern Türkiye about the research and obtained written consent from them and their families. The written consents were conveyed to their families through the adolescents, and after obtaining both their and their families' consent, they were asked to fill out the data collection forms. One day after completing the data collection forms, the adolescents were asked to bring the forms back to school and submit them to the researchers. After explaining the purpose of the study to the adolescents, it was explained in detail how they should mark the option they thought was most relevant to the survey questions. Data collection took an average of 15-20 minutes per adolescent.

Data Analysis

The data were coded, analyzed, and evaluated using IBM SPSS Statistics for Windows, Version 22.0 (IBM Corp., Armonk, NY). Descriptive statistics, including frequency, mean, standard deviation, and percentages, were calculated. Normality was assessed using Kurtosis and Skewness coefficients. For normally distributed data, the Independent Samples t-test was applied to compare two groups, and One-way ANOVA was used for comparisons among multiple groups. For data that did not meet normality assumptions, the Mann-Whitney U test was used for comparisons between two independent groups, and the Kruskal-Wallis test was used for comparisons among more than two groups. Categorical variables were analyzed using the Chi-square (χ^2) test. Relationships between scale scores were examined using the Pearson correlation for normally distributed data and the Spearman correlation for non-normally distributed data. Reliability of the total scales and sub-dimensions was assessed using Cronbach's alpha (α) coefficient. Statistical significance was set at $p < 0.05$, with all results evaluated at a 95% confidence interval. Correlation strength was interpreted as follows: 0.00–0.10 (insignificant), 0.10–0.39 (weak), 0.40–0.69 (moderate), 0.70–0.89 (strong), and 0.90–1.00 (very strong) (Schober, Boer, & Schwarte, 2018).

Ethical Approval

Ethical approval was obtained from the Health Sciences Ethics Committee of a university (Approval No. 23; Date: November 13, 2025). Institutional permission for data collection was granted by the Ministry of National Education Research and Application Center (Approval No. MEB.TT.2025.037660.01; Date: December 11, 2025). Written informed consent was obtained from all participants, and permission to use the scales was secured via email from the developers prior to ethics approval. The study was conducted in accordance with the Helsinki Declaration and reported following the STROBE guidelines.

Results

The mean age of the adolescents was 15.86 ± 1.18 years, mean height was 1.69 ± 0.09 m, mean weight was 59.75 ± 13.60 kg, and mean BMI was 20.74 ± 3.40 kg/m². Among participants, 56.6% were female, 65% had a normal BMI, and 39.6% of mothers and 42.5% of fathers were high school graduates. Most adolescents (60.4%) perceived their income as equal to expenses, and 94.5% used social media. The mean daily screen time was 3.99 ± 2.31 hours, with 84.1% accessing social media via phones and Instagram being the most frequently used platform (34.4%). Furthermore,

Table 1: Distribution of Descriptive Characteristics of Adolescents (n = 346)

Variables	$\bar{X} \pm SD$
Age	15.86 ± 1.18
Height (m)	1.69 ± 0.09
Weight (kg)	59.75 ± 13.60
BMI (Kg/Height ²)	20.74 ± 3.40
Daily Screen Time (hours) Spent on Digital Platforms	3.99 ± 2.31
	n (%)
Gender	
Female	196 (56.6)
Male	150 (43.4)
BMI	
< 18.5 (Underweight)	88 (25.4)
18.5 – 24.9 (Normal/Healthy)	225 (65.0)
> 25.0 (Overweight or obese)	33 (9.6)
Mother's Education Level	
Primary school	80 (23.1)
Middle school	67 (19.4)
High school	137 (39.6)
University degree or higher	62 (17.9)
Father's Education Level	
Primary school	55 (15.9)
Middle school	49 (14.1)
High school	147 (42.5)
University degree or higher	95 (27.5)

Table 1: Distribution of Descriptive Characteristics of Adolescents (n = 346) (continued)

Perceived Income Status	
Income less than expenses	12 (3.5)
Income equal to expenses	209 (60.4)
Income greater than expenses	125 (36.1)
Social Media Usage Status	
Yes	327 (94.5)
No	19 (5.5)
Social Media Tools Used*	
Instagram	209 (34.4)
TikTok	139 (22.9)
YouTube	162 (26.7)
Twitter/X	41 (6.8)
Other (Facebook, Snapchat, Pinterest, WhatsApp, Telegram, Discord)	56 (9.2)
Primary Device for Social Media Use	
Phone	291 (84.1)
Tablet	30 (8.7)
Laptop/Computer	25 (7.2)
Daily Screen Time on Digital Platforms	
0 - 1 hours	93 (26.9)
2 - 3 hours	90 (26.0)
4 - 5 hours	96 (27.7)
6 hours and above	67 (19.4)
Duration of Digital Platform Use	
Day	29 (8.4)
Night	317 (91.6)
Impact of Digital Platforms on Eating Behaviors	
Yes	54 (15.6)
No	292 (84.4)
Presence of Digital Screen Addiction	
Yes	129 (37.3)
No	217 (62.7)
Issues Associated with Digital Platform Use*	
Time management problems	195 (26.8)
Sleep problems (e.g., delayed sleep onset, insomnia)	144 (19.8)
Decreased academic performance / school achievement	132 (18.2)
Feelings of happiness or relaxation	91 (12.5)
Improvement in friendships	69 (9.5)
Feelings of loneliness	41 (5.6)
Problems in communication with social circles	37 (5.1)
Deterioration of friendships	18 (2.5)

*Multiple answers; $\bar{X}$: mean; SD: standard deviation**Table 2: Comparison of Adolescent BMI Classification by Gender and Screen Time (n = 346)**

Variables	BMI			Test (χ^2)	p
	Underweight n (%)	Normal/ Healthy n (%)	Overweight or Obese n (%)		
Gender					
Female	61 (31.1)	122 (62.2)	13 (6.7)	10.292	0.006*
Male	27 (18.0)	103 (68.7)	20 (13.3)		
Daily Screen Time on Digital Platforms					
0 - 1 hours	25 (26.9)	61 (65.6)	7 (7.5)	12.743	0.047*
2 - 3 hours	28 (31.1)	56 (62.2)	6 (6.7)		
4 - 5 hours	19 (19.8)	70 (72.9)	7 (7.3)		
6 hours and above	16 (23.9)	38 (56.7)	13 (19.4)		

* $p < 0.05$

37.3% reported digital screen addiction, with the most common problems being time management (26.8%), sleep disturbances (19.8%), and decreased academic performance (18.2%).

Table 2 shows gender and screen time according to BMI. Males had a higher prevalence of overweight than females ($\chi^2 = 10.292$, $p = 0.006$). Adolescents with daily screen time ≥ 6 hours had higher rates of overweight/obesity (19.4%), with a significant difference between groups ($\chi^2 = 12.743$, $p = 0.047$).

Table 3 presents DAST and HES-A scores according to descriptive characteristics. Females had significantly higher digital addiction scores than males ($t = 2.951$, $p = 0.003$). Social media users scored higher on DAST than non-users (Mann-Whitney $U = 1922.00$, $p = 0.005$). Increased daily screen time was associated with higher DAST scores ($F = 17.590$, $p = 0.001$) and HES-A ($F = 3.200$, $p = 0.024$) scores. Adolescents reporting that digital platforms affected their eating habits had higher DAST ($t = 6.419$, $p < 0.001$)

Table 3: Comparison of Adolescents' Descriptive Characteristics with Their Total DAST and HES-A Scores (n = 346)

Variables	DAST Total $\bar{X} \pm SD$	HES-A Total $\bar{X} \pm SD$
Gender		
Female	36.41 $\pm$ 11.09	75.30 $\pm$ 14.69
Male	32.80 $\pm$ 11.48	73.20 $\pm$ 13.34
t/p	2.951 / 0.003*	1.370 / 0.172
BMI		
<18.5 (Underweight)	34.51 $\pm$ 13.06	73.13 $\pm$ 15.81
18.5 – 24.9 (Normal/Healthy)	34.81 $\pm$ 10.59	74.85 $\pm$ 13.48
> 25.0 (Overweight or obese)	36.00 $\pm$ 12.13	74.60 $\pm$ 14.06
F/p	1.062 / 0.368	0.471 / 0.625
Mother's Education Level		
Primary school	35.37 $\pm$ 9.40	76.25 $\pm$ 13.46
Middle school	35.83 $\pm$ 11.93	74.34 $\pm$ 13.69
High school	33.91 $\pm$ 13.02	72.91 $\pm$ 15.85
University degree or higher	35.16 $\pm$ 9.12	75.33 $\pm$ 11.09
F / p	0.704 / 0.940	1.053 / 0.369

Table 3: Comparison of Adolescents' Descriptive Characteristics with Their Total DAST and HES-A Scores (n = 346) (continued)

Father's Education Level		
Primary school	34.09 ± 10.11	71.63 ± 14.97
Middle school	33.51 ± 10.92	73.89 ± 14.45
High school	35.32 ± 12.12	76.34 ± 14.44
University degree or higher	35.24 ± 11.23	73.23 ± 12.75
F /p	1.008 / 0.466	1.879 / 0.133
Perceived Income Status		
Income less than expenses	39.91 ± 11.05	78.25 ± 12.50
Income equal to expenses	35.46 ± 11.08	74.27 ± 14.24
Income greater than expenses	33.33 ± 11.77	74.23 ± 14.16
KW /p	4.325 / 0.115	1.568 / 0.456
Social Media Usage Status		
Yes	35.21 ± 11.31	74.61 ± 14.03
No	28.63 ± 11.22	70.57 ± 15.85
MU/p	1922.00/0.005*	2716.50/0.357
Primary Device for Social Media Use		
Phone	35.03 ± 11.35	74.05 ± 14.28
Tablet	34.70 ± 13.37	76.40 ± 13.91
Laptop/Computer	32.88 ± 9.24	76.00 ± 12.90
KW /p	0.980 / 0.613	0.893 / 0.640
Daily Screen Time on Digital Platforms		
0-1 hours	29.93 ± 10.99	71.52 ± 13.11
2-3 hours	32.23 ± 9.82	73.11 ± 14.42
4-5 hours	38.28 ± 10.37	77.30 ± 14.54
6 hours and above	40.26 ± 11.58	75.94 ± 13.85
F /p	17.590 / 0.001*	3.200/0.024
Duration of Digital Platform Use		
Day	34.82 ± 12.69	72.37 ± 13.73
Night	34.85 ± 11.28	74.58 ± 14.18
MU/p	4442.00 / 0.764	4249.50/0.501
Impact of Digital Platforms on Eating Behaviors		
Yes	43.50 ± 12.03	79.31 ± 14.34
No	33.25 ± 10.53	73.48 ± 13.94
t-test/p	6.419/p < 0.001*	2.810 / 0.005
Presence of Digital Screen Addiction		
Yes	41.93 ± 10.84	77.95 ± 13.39
No	30.63 ± 9.47	72.28 ± 14.18
t-test/p	10.161/p < 0.001*	3.672/p < 0.001*

$\bar{X}$: mean; SD: standard deviation; p: significance level; KW: Kruskal-Wallis test; t: Independent sample t-test; F: One-way ANOVA test; MU: Mann-Whitney U test; *p < 0.05

and HES-A (t = 2.810, p = 0.005) scores. Similarly, those with digital screen addiction had higher DAST (t = 10.161, p < 0.001) and HES-A (t = 3.672, p < 0.001) scores. DAST and HES-A scores showed no significant differences by BMI, parental education level, perceived income status, primary device type used for social media, or time of digital platform use (day/night) (p > 0.05).

Table 4 presents correlation analyses. Age showed a weak positive correlation with BMI (r = 0.210, p < 0.01) and HES-A scores (r = 0.114, p < 0.05). BMI was weakly correlated with screen time (r = 0.172, p < 0.01), and screen time correlated with DAST scores (r = 0.328, p < 0.01). A weak positive correlation was also found between DAST and HES-A scores (r = 0.351, p < 0.01). In summary, higher age was associated with increased BMI and hedonic eating tendency, longer screen time with higher digital addiction and BMI, and greater digital addiction with increased hedonic eating tendency.

Discussion

This study investigated the relationship between digital addiction and hedonic eating tendency in adolescents, and the findings showed that digital media use may be related to adolescents' behavioral health outcomes. According to the research results, the average daily screen time spent by adolescents on digital platforms was 3.99 ± 2.31 hours, and it was determined that the vast majority of participants used social media. The analysis results revealed that as screen time increased, digital addiction scores also increased, and a statistically significant weak positive correlation was found between digital addiction and hedonic eating tendency. These findings are consistent with previous studies demonstrating that increased digital media use is associated with changes in eating behaviors. For example, Dumlu Bilgin et al. (2024) and Özbey et al. (2025) reported that longer social media use was positively associated with hedonic hunger and emotional eating. Similarly, Toklu Baloglu and Caferoglu Akin (2024) found that individuals with higher levels of social media addiction exhibited greater tendencies toward pleasure-oriented eating. However, some studies have reported weaker or non-significant relationships between digital media use and eating behaviors (Ceylan, 2025), suggesting that this relationship may not be uniform across all populations. These inconsistencies may be explained by differences in sample characteristics, cultural context, or the type and purpose of digital media use. It has been reported that with the increase in social media and smartphone use, individuals' food preferences and pleasure-oriented eating behaviors can change (Bayram & Ozturkcan, 2025; Ceylan, 2025). Furthermore, the frequent visual presentation of high-calorie foods on digital platforms and the prevalence of content that can stimulate the reward system may be link to pleasure-oriented eating behavior independently

Table 4: Correlation Analysis Between Variables (n = 346)

Variables	Age	BMI	Daily Screen Time	DAST total	HES-A total
Age	-	0.210**	-0.033	0.097	0.114*
BMI	0.210**	-	0.172**	0.081	0.054
Daily Screen Time	-0.033	0.172**	-	0.328**	0.090
DAST Total	0.097	0.081	0.328**	-	0.351**
HES-A Total	0.114*	0.054	0.090	0.351**	-

*p < 0.05; **p < 0.01.

of physiological hunger (Mohsenpour et al., 2023; Dumlu Bilgin et al., 2024; Özbey et al., 2025). In the present study, the positive relationship between digital addiction and hedonic eating may be explained by adolescents' frequent exposure to highly palatable food content and reward-driven stimuli in digital environments, which can promote eating behaviors driven by pleasure rather than physiological need.

In our study, the fact that adolescents who stated that digital platforms may be associated with their eating habits had higher scores for both digital addiction and hedonic eating tendency also supports this relationship. Food content, advertisements, and aesthetically pleasing presentations frequently encountered in digital environments can increase individuals' desires, especially for energy-dense foods. This situation may be related to hedonic hunger and emotional eating behaviors. Studies in the literature reporting positive relationships between social media use time and hedonic hunger and emotional eating behaviors support this finding (Dumlu Bilgin et al., 2024; Özbey et al., 2025). In addition, similar findings have been reported in studies indicating that exposure to food-related digital content increases cravings and impulsive eating behaviors among adolescents. Furthermore, there are studies showing that increased time spent on digital platforms strengthens addiction-like usage behaviors (Kuss & Griffiths, 2017; Montag, Wegmann, Sariyska, Demetrovics & Brand, 2021). In this context, research findings indicate that digital media use is not only limited to psychosocial effects but is also a significant factor that can influence adolescents' eating behaviors.

When the gender variable was examined in the study, it was determined that female adolescents had significantly higher digital addiction scores than male adolescents. This finding is consistent with studies showing that social media use is more common among female adolescents and that this may be related to factors such as body image perception, social comparison, and the need for online interaction (Yurtdaş – Depboylu, Kaner & Özçakal, 2022; Glaser, Jansma & Scholten, 2024). However, there are also studies in the literature reporting that digital addiction levels may be higher in male adolescents, especially due to game-based digital activities (Lee et al., 2021; Zhou et al., 2023). This discrepancy in the literature suggests that digital addiction may manifest differently depending on the type of digital activity, with females more engaged in social media and males in gaming environments. It is also stated that smartphone use and digital addiction can differ according to gender, and this situation can negatively affect not only eating behaviors but also sleep quality (Kurudirek, Gürarslan Baş & Arkan, 2024). On the other hand, some studies report that gender is not a determining factor between social media addiction and hedonic eating tendency (Ceylan, 2025). These results suggest that the relationship between digital addiction and eating behaviors should be evaluated not only with gender but also with multidimensional factors such as the purpose of use and the type of content.

In the study, while low - level positive correlations were found between age and BMI and hedonic eating tendency, a significant relationship was also found between BMI and screen time. This finding is consistent with research showing that long-term screen use can contribute to a sedentary lifestyle, decreased physical activity,

and increased risk of weight gain (Nagata et al., 2023; Zhang, Cui & Sun, 2025). In the present study, the higher digital addiction scores among females may be related to more frequent engagement with visually stimulating and socially interactive content, which may also indirectly influence eating behaviors. However, the lack of a direct significant relationship between BMI and digital addiction and hedonic eating scores indicates that weight status in adolescents cannot be explained solely by digital media use. This finding differs from some studies reporting a direct association between problematic digital use and higher BMI, suggesting that additional mediating variables may play a role. The literature also emphasizes that many variables, such as socio-cultural factors, psychological characteristics, physical activity level, and dietary habits, should be evaluated together (Verduyn, Ybarra, Résibois, Jonides & Kross, 2017; Przybylski & Weinstein, 2019). Therefore, the relationship between digital addiction and physical health outcomes such as BMI may be indirect and influenced by multiple behavioral and environmental factors. In conclusion, this study reveals a significant relationship between digital addiction and hedonic eating tendency, and screen time can reinforce this relationship. These findings highlight the importance of addressing digital media use and eating behaviors together in terms of protecting adolescent health. Increasing digital media literacy, developing healthy screen use habits, and supporting mindful eating behaviors in school-based health programs can be among the important intervention areas. Within this context, school health nurses have a key role in the planning and implementation of school-based interventions targeting both digital media use and eating behaviors. Nurses can provide education, counseling, and early risk assessment for adolescents, as well as guide families and teachers in promoting healthy lifestyle behaviors. Strengthening the active involvement of nurses in school settings may contribute to the prevention of digital addiction and the development of healthy eating habits among adolescents. Moreover, the findings of this study contribute to the literature by providing evidence from a specific adolescent population and highlighting the behavioral mechanisms linking digital exposure and eating tendencies. In addition, nurses should support and educate parents about healthy screen use in children (Aksoy, Cırık & Bektaş, 2023). Future longitudinal and large-sample studies may contribute to the development of preventive strategies by better elucidating the causal mechanisms of the relationship between digital addiction and hedonic eating tendency.

Strengths and Limitations

This study has several strengths. Firstly, it contributes to the literature by examining the relationship between digital addiction and hedonic eating tendency in adolescents. Furthermore, the relatively sufficient sample group from one high school and the fact that the Turkish validity and reliability studies of the measurement tools used have been completed enhance the methodological strength of the study. However, the study also has some limitations. The cross-sectional design of the research does not allow for the determination of the causal aspect of the relationship between digital addiction and hedonic eating tendency. The effects of variables such as sleep, psychological state, and physical activity on digital addiction and pleasure-seeking eating tendencies in adolescents have not been

evaluated. The use of self-report scales for data collection may also lead to recall bias and social desirability bias. Additionally, the fact that the research was conducted only in one high school in a province in eastern Türkiye may limit the generalizability of the findings. Future multicenter and longitudinal studies are recommended to examine this relationship more comprehensively.

Conclusion

This study suggests a potential relationship between digital addiction and hedonic eating tendency in adolescents. The findings indicate that increases in screen time are associated with higher levels of digital addiction, and adolescents with higher digital addiction scores may tend to exhibit greater hedonic eating behaviors. Furthermore, the higher scores for both digital addiction and hedonic eating tendency among adolescents who reported that digital platforms influenced their eating habits suggest that digital media use may have an impact on adolescents' eating behaviors. Based on these findings, it may be beneficial for school-based health programs to address healthy screen use and mindful eating behaviors together. Additionally, it is important to increase the awareness of parents and educators regarding guiding and monitoring adolescents' digital media use. Health professionals, particularly school health nurses, providing education and counseling on digital media use and healthy eating behaviors in adolescents can contribute to strengthening preventive health services.

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