

[DOI: 10.21520/j.ponte.2023.03.19](https://doi.org/10.21520/j.ponte.2023.03.19)

UNIVERSITY STUDENTS' FREE TIME MANAGEMENT AND EXAMINATION OF THE RELATIONSHIP BETWEEN DIGITAL GAME ADDICTION LEVELS

Osman Kusan

0000-0001-7102-5262

osmankusan@hotmail.com

Gümüşhane University, School of Physical Education and Sports

ABSTRACT

This research aims to examine the relationship between university students' leisure time management and digital game addictions. In the study, a descriptive scanning model was used. University students, and the sample consists of 205 students selected by random sampling method from different departments at Gümüşhane University School of Physical Education and Sports. As data collection tools, demographic information form developed by the researchers, "Leisure Time Management Scale" Wang et al. (2011) developed and adapted into Turkish by Akgül and Karaküçük (2015), and "Digital Game Addiction Scale for University Students" developed by Hazar and Hazar (2019) were used. In the study, the assumption of normality was first examined with the Kolmogorov-Smirnov and Shapiro-Wilk test in the statistical evaluation of the data ($P>0.05$). In the study, the effect of gender and sporting status on the total scores of the scale was determined using Student's t-test, and the difference in age, monthly spending, playing platform and daily leisure time was determined by Tukey's multiple comparison test and One-Way Analysis of Variance. Statistical operations were performed with SPSS 22.0 statistical package program, and the results were given as mean, standard deviation, and n(%) values and were considered significant at the $p<0.05$ level. As a result, it is seen that the frequency of playing games of male participants is higher than the female participants, while the participants who do sports in their spare time are higher than those who do not do sports, 1100 TL - 2000 TL according to their monthly expenditure, compared to other income groups of those who spend (850-1000, 2100 TL). and above) higher, leisure time management and digital game addiction total scores were found to be significantly different. However, no significant relationship was found according to age groups, daily free time hours, and game-playing platform.

Keywords: Athlete, Leisure management, Video game addiction, University students

INTRODUCTION

Time is one of the most important concepts in today's societies. The only thing an individual cannot gain after losing is time. Within certain limits, we can replace one resource with another, for example, use machinery instead of manpower. However, there is no other resource that can

replace time. Therefore, it can be said that time equals life. Wasting time also means wasting life. In order for an individual to be healthy and peaceful both physically and mentally, it is necessary to use his time efficiently. The ability of an individual who has a busy work schedule or a student who has lessons and homework to be able to evaluate his time correctly is of great importance in terms of both his physical and mental health. Therefore, people who manage their time well will be able to easily pass the obstacles in achieving success and reach positive results in their own life cycle (Yaşartürk et al. 2018; Kusan and Sabah, 2022).

Leisure refers to a mood in which a person does not feel mentally relaxed and busy, a feeling that can occur in any environment or condition (Forouzan et al., 2020). Leisure provides people with the opportunity to rest from work (Tucker et al. 2008). The purpose of people's participation in physical activity in their spare time can be psychological well-being or health (Kusan and Mumcu, 2021). In contemporary societies, leisure time is one of the most important elements that increases and improves the quality of life of the individual and contributes to the individual's self-discovery, renewal and manifestation (Edginton, 2007). At this point, it is thought that recreation and physical activity will play an important role in the development of communication and social skills of the individual (Ünlü and Çeviker, 2022).

With the widespread use of the internet since the 90s, 69% of the world's population actively uses the internet today (internetworldstats, 2022). Devices such as computers, smart phones, etc., which are means of accessing the Internet, have become products owned by everyone from 7 to 70 today. The world's Internet users are represented largely by adolescents and young adults who are rapidly adopting Internet culture through various media such as Facebook, YouTube and Instagram. Today, Internet use (eg, social media, online games) on a computer or smartphone devices has become an important leisure activity among young people (Byun et al. 2021).

Video games, which started with game consoles such as Atari and Nintendo in the 1970s, have become a culture today and are among the most preferred tools for evaluating leisure time. The widespread use of computers and smartphones among young people has led to the prevalence of video games in leisure time. With this prevalence, the high intensity of video game use among young people has reached the level of addiction. Wang and Chu (2007) highlight that some players develop an obsessive passion that can lead to addiction. Internet addiction and gaming addiction share some negative aspects of substance abuse and can lead to consequences such as school failure and relationship problems (Ng & Wiemer-Hastings, 2005; Ko, 2014). Video game addiction is similar in effect and presentation to other behavioral addictions (eg gambling addiction). Symptoms may include chronic lack of responsibility for playing, playing longer than intended, inability to reduce time spent playing, or experiencing clinically significant distress due to gaming habits (Mathews et al., 2018).

Wallace (2014) reports that video game addiction is common among youth on middle school, high school, and college campuses where laptops, computers, and computer labs are easily accessible. Suler (2004) identified neglecting work and personal obligations as one of the symptoms of video game addiction. More problematic for younger and newer users, work neglect is an indicator of video game addiction; it is reported that especially young people have more problems related to work neglect (Widyanto and McMurrin 2004). Video game addiction can result in the inability to fulfill or neglect basic responsibilities at work, school and home (Ko et al.2009). In this context, the aim of the research is to examine the relationship between university students' leisure time management and digital game addiction levels.

Universe and Sample

In the research, a descriptive survey model was used as it aims to determine the current situation. Survey models are research approaches that aim to describe a past or present situation as it is (Karasar, 1999).

The universe of the research consists of the students of Gümüşhane University Physical Education and Sports High School, and the sample consists of 205 students selected by random sampling method among these students.

Research Publication Ethics

Ethical permission approval was obtained from the Scientific Research and Publication Ethics Committee of Gümüşhane University with the decision dated 26/10/2022 and numbered 2022-6 in order to apply the research scales and collect data.

Data Collection Tools

As data collection tools, demographic information form developed by the researchers, "Leisure Time Management Scale" Wang et al. (2011) developed, and adapted into Turkish by Akgül and Karaküçük (2015), and "Digital Game Addiction Scale for University Students" developed by Hazar and Hazar (2019) were used.

In order to measure students' leisure time management, the "Leisure Time Management Scale" Wang et al. (2011) developed, and adapted into Turkish by Akgül and Karaküçük (2015). The scale is a 5-point Likert Type (1= Totally Agree, 5= I Disagree) with 15 items and includes four sub-dimensions called Goal Setting and Method, Leisure Attitude, Programming, and Evaluation. 1.2.3.6.7. and 8th questions are related to Goal Setting and Method sub-dimension, 10.11th and 12th questions are related to Leisure Attitude, 13.14. and 15 questions are about the programming sub-dimension, and the 4.5th and 9th questions are about the evaluation sub-dimension.

The digital game addiction scale developed by Hazar and Hazar consists of 17 items. 5-point Likert-type self-report method was used to evaluate the statements in the scale (1= Strongly Disagree, 5= Totally Agree). The lowest score that can be obtained from the scale is "21" and the highest score is "105". The scale is evaluated in 3 sub-dimensions: excessive focus and procrastination, conflict, deprivation and seeking, and emotion change and immersion.

Statistical Analysis

In the study, reliability coefficients (cronbach alpha) were calculated in order to check the internal consistency of the answers given by university students to the scale items (Table 1).

Table 1. Internal consistency coefficients of participants' responses to scale items

Scales and Sub-Dimensions	Internal Consistency Coefficient	Evaluation
Leisure Management Scale	0.794	Moderately Reliable
<i>Goal Setting and Method</i>	0.833	Highly Reliable
<i>Leisure Attitude</i>	0.733	Moderately Reliable
<i>Evaluation</i>	0.647	Moderately Reliable
<i>Programming</i>	0.682	Moderately Reliable
Digital Gaming Addiction Scale	0.964	Highly Reliable
<i>Excessive Focusing and Procrastination</i>	0.935	Highly Reliable
<i>Conflict, Deprivation and Search</i>	0.920	Highly Reliable
<i>Emotion Change and Immersion</i>	0.829	Highly Reliable

In the statistical evaluation of the data, the assumption of normality was first examined with the Kolmogorov-Smirnov and Shapiro-Wilk test ($P > 0.05$). In the study, Student's t-test was used to determine whether the total scores of the scale differ according to gender, sporting status, age, monthly spending amount, game playing platform and daily leisure time using One-Way Analysis of Variance and Tukey's multiple comparison test. SPSS 22.0 V. statistical package program was used in all statistical calculations. The research findings were given as n(%), mean and standard deviation values, and the findings were considered significant at the $p < 0.05$ level.

RESULTS

Table 2. Frequency and percentage distributions regarding the demographic characteristics of the participants

Gender	n	%	Doing Sports Status	n	%
Female	106	51.7	Yes	147	71.7
Male	99	48.3	No	58	28.3
Total	205	100.0	Total	205	100.0

Age	n	%	Monthly Spending Amount	n	%
18-20	46	22.4	850 TL -1000 TL	74	36.1
21-23	122	59.5	1100 TL - 2000 TL	64	31.2
24 and above	37	18.0	2100 TL and above	67	32.7
Total	205	100.0	Total	205	100.0

Gaming Platform	n	%	Daily Leisure	n	%
Mobile phone	132	64.4	1 - 3 hours	58	28.3
Console+pc+cell phone	11	5.4	4 - 6 hours	100	48.8
Mobile phone+pc	33	16.1	7 hours or more	47	22.9
Computer+tablet	29	14.1	Total	205	100.0
Total	205	100.0			

Of the individuals who voluntarily participated in the research, 48.3% are male, 71.7% doing sports, 18.0% are 24 years and over, 44.6% are students in the income range of 1100 TL - 2000 TL, 64.4% are students who play games on the phone and 22.9% have 7 hours or more daily free time (Table 2).

Table 3. Leisure management and digital game addiction levels of participants by gender variable

Scales and Sub-Dimensions	Gender	n	Mean	SS	P-value
Leisure Management Scale	Female	99	49.99	9.20	0.018
	Male	106	52.87	8.15	
<i>Goal Setting and Method</i>	Female	99	20.98	5.22	0.118
	Male	106	22.05	4.49	
<i>Leisure Attitude</i>	Female	99	12.03	2.73	0.590
	Male	106	12.23	2.48	
<i>Evaluation</i>	Female	99	7.81	2.92	0.153
	Male	106	8.42	3.13	
<i>Programming</i>	Female	99	9.17	2.90	0.007
	Male	106	10.18	2.36	
Digital Gaming Addiction Scale	Female	99	38.77	17.55	0.040
	Male	106	44.25	20.16	
<i>Excessive Focusing and Procrastination</i>	Female	99	19.40	9.58	0.051
	Male	106	22.25	11.03	
<i>Conflict, Deprivation and Search</i>	Female	99	19.57	4.90	0.041
	Male	106	20.89	4.31	
<i>Emotion Change and Immersion</i>	Female	99	8.98	4.32	0.031
	Male	106	10.27	4.19	

In the study, according to the gender variable of the participants, leisure management scale total score, programming sub-dimension total score, digital game addiction scale total score, conflict, deprivation and seeking sub-dimension total score, While there was a significant difference between emotion change and immersion sub-dimension total scores, goal setting and method, leisure time attitude, There was no significant difference between evaluation, hyperfocus and procrastination sub-dimension scores. ($P < 0.05$; Table 3). The total scores of male participants were higher than female participants.

Table 4. Leisure time management and digital game addiction levels of participants by doing sports

Scales and Sub-Dimensions	Doing Sports Status	n	Mean	SS	P-value
Leisure Management Scale	Yes	147	52.50	8.13	0.007
	No	58	48.88	9.82	
<i>Goal Setting and Method</i>	Yes	147	22.10	4.59	0.008
	No	58	20.10	5.31	
<i>Leisure Attitude</i>	Yes	147	12.25	2.49	0.293
	No	58	11.83	2.84	
<i>Evaluation</i>	Yes	147	8.12	3.09	0.962
	No	58	8.14	2.93	
<i>Programming</i>	Yes	147	10.04	2.56	0.003
	No	58	8.81	2.78	
Digital Gaming Addiction Scale	Yes	147	41.05	19.01	0.511
	No	58	43.00	19.40	
<i>Excessive Focusing and Procrastination</i>	Yes	147	20.61	10.36	0.560
	No	58	21.55	10.64	
<i>Conflict, Deprivation and Search</i>	Yes	147	20.88	4.39	0.002
	No	58	18.66	4.91	
<i>Emotion Change and Immersion</i>	Yes	147	9.51	4.25	0.463
	No	58	10.00	4.41	

In the study a significant difference was determined between the total scores of the leisure management scale, programming, goal setting and method sub-dimension total score, and the conflict deprivation and seeking sub-dimension, which is the sub-dimension of digital game addiction, according to the sports status of the participants ($P < 0.05$; Table 4). The total scores of individuals who do sports in their spare time are higher than those who do not do sports in their spare time.

Table 5. Leisure management and digital game addiction levels of participants by age groups

Scales and Sub-Dimensions	Age	n	Mean	SS	P-value
Leisure Management Scale	18-20	46	51.00	7.87	0.545
	21-23	122	52.01	8.94	
	24 and above	37	50.32	9.35	
<i>Goal Setting and Method</i>	18-20	46	21.33	4.04	0.947
	21-23	122	21.61	5.00	
	24 and above	37	21.54	5.50	
<i>Leisure Attitude</i>	18-20	46	12.00	2.56	0.742
	21-23	122	12.25	2.62	
	24 and above	37	11.92	2.61	
<i>Evaluation</i>	18-20	46	8.33	3.16	0.211
	21-23	122	8.29	2.84	
	24 and above	37	7.32	3.43	
<i>Programming</i>	18-20	46	9.35	2.31	0.495
	21-23	122	9.87	2.73	
	24 and above	37	9.54	2.91	
Digital Gaming Addiction Scale	18-20	46	42.78	18.53	0.497
	21-23	122	42.16	20.41	

	24 and above	37	38.27	14.96	
<i>Excessive Focusing and Procrastination</i>	18-20	46	21.61	10.67	0.655
	21-23	122	21.00	10.81	
	24 and above	37	19.54	8.85	
<i>Conflict, Deprivation and Search</i>	18-20	46	19.70	4.34	0.489
	21-23	122	20.57	4.60	
	24 and above	37	19.89	5.14	
<i>Emotion Change and Immersion</i>	18-20	46	10.09	3,56	0.439
	21-23	122	9.71	4.77	
	24 and above	37	8.89	3.37	

In the study, no statistically significant difference was found between the total scores of the leisure management and digital game addiction scale total score sub-dimensions according to the age groups of the participants ($P>0.005$; Table 5).

Table 6. Management and digital game addiction levels of participants by daily leisure time

Scales and Sub-Dimensions	Daily Leisure Hour	n	Mean	SS	P-value
Leisure Management Scale	1 - 3 hours	58	51.45	8.92	0.448
	4 - 6 hours	100	52.12	7.67	
	7 hours or more	47	50.15	10.64	
<i>Goal Setting and Method</i>	1 - 3 hours	58	21.28	5.18	0.099
	4 - 6 hours	100	22.21	4.20	
	7 hours or more	47	20.40	5.65	
<i>Leisure Attitude</i>	1 - 3 hours	58	12.62	2.39	0.150
	4 - 6 hours	100	12.08	2.54	
	7 hours or more	47	11.64	2.90	
<i>Evaluation</i>	1 - 3 hours	58	7.83	3.04	0.450
	4 - 6 hours	100	8.08	2.88	
	7 hours or more	47	8.57	3.35	
<i>Programming</i>	1 - 3 hours	58	9.72	2.94	0.895
	4 - 6 hours	100	9.75	2.41	
	7 hours or more	47	9.53	2.93	
Digital Gaming Addiction Scale	1 - 3 hours	58	40.40	16.70	0.189
	4 - 6 hours	100	40.20	19.33	
	7 hours or more	47	46.06	21.01	
<i>Excessive Focusing and Procrastination</i>	1 - 3 hours	58	20.07	9.08	0.133
	4 - 6 hours	100	20.08	10.44	
	7 hours or more	47	23.55	11.66	
<i>Conflict, Deprivation and Search</i>	1 - 3 hours	58	20.28	4.80	0.368
	4 - 6 hours	100	20.61	4.09	
	7 hours or more	47	19.45	5.48	
<i>Emotion Change and Immersion</i>	1 - 3 hours	58	9.55	3.89	0.442
	4 - 6 hours	100	9.38	4.39	
	7 hours or more	47	10.34	4.57	

In the study, no statistically significant difference was found between the total scores of the leisure management and digital game addiction scale total score sub-dimensions according to the daily spare time hours of the participants ($P>0.005$; Table 6).

Table 7. Leisure management and digital game addiction levels of participants by monthly spending amount

Scales and Sub-Dimensions	Monthly Spending Amount	n	Mean	SS	P-value
Leisure Management Scale	850 TL -1000 TL	67	50.88	8.90	0.322
	1100 TL - 2000 TL	74	52.70	7.99	
	2100 TL and above	64	50.69	9.44	
<i>Goal Setting and Method</i>	850 TL -1000 TL	67	21.22	5.11	0.315
	1100 TL - 2000 TL	74	22.22	4.04	
	2100 TL and above	64	21.06	5.47	
<i>Leisure Attitude</i>	850 TL -1000 TL	67	11.73b	2.55	0.044
	1100 TL - 2000 TL	74	12.73a	2.15	
	2100 TL and above	64	11.86b	3.00	
<i>Evaluation</i>	850 TL -1000 TL	67	8.51	2.84	0.370
	1100 TL - 2000 TL	74	7.78	3.11	
	2100 TL and above	64	8.11	3.15	
<i>Programming</i>	850 TL -1000 TL	67	9.42	2.59	0.467
	1100 TL - 2000 TL	74	9.97	2.70	
	2100 TL and above	64	9.66	2.74	
Digital Gaming Addiction Scale	850 TL -1000 TL	67	41.34	18.55	0.975
	1100 TL - 2000 TL	74	41.45	20.38	
	2100 TL and above	64	42.05	18.41	
<i>Excessive Focusing and Procrastination</i>	850 TL -1000 TL	67	20.63	10.33	0.807
	1100 TL - 2000 TL	74	20.49	10.95	
	2100 TL and above	64	21.58	10.03	
<i>Conflict, Deprivation and Search</i>	850 TL -1000 TL	67	19.81	4.65	0.366
	1100 TL - 2000 TL	74	20.85	4.32	
	2100 TL and above	64	20.02	4.98	
	850 TL -1000 TL	67	9.70	4.29	

<i>Emotion Change and Immersion</i>	1100 TL - 2000 TL	74	9.88	4.48	0.750
	2100 TL and above	64	9.33	4.13	

In the study, a significant difference was found between the total scores of the leisure management sub-dimension, which is the leisure time management sub-dimension, according to the monthly spending amounts of the participants . (P<0.005). The total scores of individuals with monthly expenditures between 1100 and 2000 TL were higher than those between 850 TL-1000 TL and 2100 TL and above (Table 7).

Table 8. Leisure management and digital game addiction levels of participants by gaming platform

Scales and Sub-Dimensions	Gaming Platform	n	Mean	SS	P-value
<i>Leisure Management Scale</i>	Mobile phone	132	51.09	9.20	0.106
	Console+pc+cell phone	11	49.55	9.87	
	Mobile phone+pc	33	54.79	7.14	
	Computer+tablet	29	50.21	7.39	
<i>Goal Setting and Method</i>	Mobile phone	132	21.35	5.05	0.159
	Console+pc+cell phone	11	19.45	5.22	
	Mobile phone+pc	33	23.00	3.82	
	Computer+tablet	29	21.48	4.80	
<i>Leisure Attitude</i>	Mobile phone	132	12.16	2.67	0.629
	Console+pc+cell phone	11	12.09	2.63	
	Mobile phone+pc	33	12.48	2.22	
	Computer+tablet	29	11.62	2.70	
<i>Evaluation</i>	Mobile phone	132	8.05	3.11	0.184
	Console+pc+cell phone	11	9.09	2.47	
	Mobile phone+pc	33	8.79	3.24	
	Computer+tablet	29	7.31	2.51	
<i>Programming</i>	Mobile phone	132	8.12	3.04	0.205
	Console+pc+cell phone	11	9.53	2.74	
	Mobile phone+pc	33	8.91	2.77	
	Computer+tablet	29	10.52	2.51	
<i>Digital Gaming Addiction Scale</i>	Mobile phone	132	9.79	2.41	0.357
	Console+pc+cell phone	11	39.95	19.17	
	Mobile phone+pc	33	48.18	25.34	
	Computer+tablet	29	43.73	18.72	
<i>Excessive Focusing and Procrastination</i>	Mobile phone	132	44.21	16.32	0.328
	Console+pc+cell phone	11	41.60	19.10	
	Mobile phone+pc	33	20.01	10.53	
	Computer+tablet	29	25.18	13.53	

<i>Conflict, Deprivation and Search</i>	Mobile phone	132	22.06	10.02	0.160
	Console+pc+cell phone	11	21.83	8.93	
	Mobile phone+pc	33	20.00	4.73	
	Computer+tablet	29	19.18	4.24	
<i>Emotion Change and Immersion</i>	Mobile phone	132	21.88	4.45	0.051
	Console+pc+cell phone	11	19.93	4.41	
	Mobile phone+pc	33	9.05	4.18	
	Computer+tablet	29	9.91	4.83	

In the study, no statistically significant difference was found between the participants' total scores of leisure time management and digital game addiction scale total score sub-dimensions according to the game playing platform ($P > 0.005$; Table 8).

Table 9. Correlation table of leisure management and digital game addiction scale

		Aim	Attitude	Program	Evaluation	GATS	Focus	Conflict	EC
Leisure Time	r	0.848	0.549	0.336	0.817	0.152 *	0.096	0.901	0.229
	p	0,000	0,000	0,000	0,000	0.030	0.169	0,000	0.001
Aim	r		0.302	- 0.082	0.759	- 0.028	- 0.090	0.834	0.081
	p		0,000	0.241	0,000	0.693	0.200	0,000	0.249
Attitude	r			0.048	0.226	- 0.073	- 0.077	0.452	0.027
	p			0.492	0.001	0.296	0.272	0,000	0.705
Program	r				0.067	0.475	0.472	0.066	0.350
	p				0.337	0,000	0,000	0.345	0,000
Evaluation	r					0.081	0.018	0.919	0.181
	p					0.250	0.793	0,000	0.009
GATS	r						0.969	0.049	0.837
	p						0,000	0.481	0,000
Focus	r							- 0.014	0.723
	p							0.838	0,000
Conflict	r								0.179
	p								0.010

(GATS: Game Addiction Total Score; EC: Emotion Change)

There was a significant weak level between the participants' total score of leisure management scale and total score of game addiction ($r=0.152$) and emotion change sub-dimension total score ($r=0.229$); A significant positive high level correlation was found between the conflict sub-dimension ($r= 0.901$) (Table 9).

DISCUSSION AND CONCLUSION

In this study, it was aimed to examine the relationship between university students' digital game addiction and leisure management.

In the study, according to the gender variable of the participants, leisure management total score, programming sub-dimension, digital game addiction scale total score, conflict, deprivation and seeking sub-dimension, While there were significant differences between the total scores of emotion change and immersion sub-dimensions, there was no significant difference between the total scores of goal setting and method, leisure time attitude, evaluation, excessive focus and procrastination. The total scores of male participants were higher than female participants. Horzum (2011), Akçay and Özcebe (2012), Gökçearsan and Durakoğlu (2014), Ergin et al. (2013), in their various studies, found that boys' level of playing computer games is higher than girls'. In a different study, Ekinçi et al. (2017), in their study on 931 high school students in the villages and districts of Kütahya, they found that there is a significant relationship between gender, participation in sports and game addiction, and that female students are more addicted than male students. This result may be due to the different lifestyles between secondary education and university students. It can be thought that this may be due to the fact that the village and district environment has a more conservative social structure compared to the university environment and that mostly men work and women spend more time at home, and that men have many physical activity opportunities compared to women.

In the study, a significant difference was determined between the total scores of the leisure management scale, programming, goal setting and method sub-dimension total score and the conflict deprivation and seeking sub-dimension, which is the sub-dimension of digital game addiction, according to the sports status of the participants. The total scores of individuals who do sports in their spare time are higher than those who do not do sports in their spare time. Ergin et al. (2013) stated in their study that the frequency of playing games is higher in people who do sports regularly than those who do not. Hazar and Hazar (2018) reported that games involving physical activity reduce the level of daily digital game play and this decrease is effective in reducing the level of digital game addiction. Festl et al. (2016) found a significant and high correlation between daily game playing time and video game addiction level in a similar study. Hazar (2014), according to the results on the relationship between high school students' sports participation levels and internet and computer game addictions, it was concluded that students with an athlete license had a higher level of digital game addiction than those without an athlete license, and the daily sports variable did not affect the addiction level. When the results of the literature are examined, it is seen that the data obtained in the studies show differences. This difference may be due to the fact that the researched groups are related to different socio-cultural structures and different demographic variables.

In the study, no statistically significant difference was found between the total scores of the leisure time management and digital game addiction scale total score sub-dimension according to the age groups of the participants. Donati et al. (2015) found no relationship between age-related digital game diversity and digital game addiction in their study on 701 male teenagers aged 13-18 years. In their study, Akçay and Özcebe (2012) found that the frequency of playing games of the older students of preschool education is higher than the younger ones. Festl et al. (2016), in their study of problematic computer games in adolescents and adults; By including 580 adolescents in the 14-18 age range, 1866 young adults in the 19-39 age range, and 1936

adults over the age of 40, they stated that there is an inversely proportional relationship between the level of video game addiction and age, and that young people play digital games for longer periods of time. When the literature is examined, it has been determined that the results of the data obtained in the studies are different from each other. It can be said that this difference is due to the widespread availability of access to technological development in the years in which the study was conducted, and the increase in the amount of time societies spend in front of the screen accordingly.

In the study, no statistically significant difference was found between the total scores of the leisure management and digital game addiction scale total score sub-dimensions according to the daily spare time hours of the participants. Griffiths (2000) stated in his study that online gaming addiction should be associated with the extent to which excessive gaming negatively affects other areas of the players' lives, rather than the time spent playing games, and that it also leads to little or no negative consequences in the lives of players despite playing 14 hours a day. argues that an activity cannot be defined as an addiction. Weinstein (2010) stated in his study that despite the negative consequences of computer and video games, his addiction was not clinically defined and no formal diagnosis was made. Yen et al. (2007) noted that online addictive behaviors support several potential emotion regulation functions by strengthening feelings of control, securing online social acceptance, and compensating for real-life disadvantages, and are preferable because they are less harmful than other types of addiction.

In the study, a significant difference was found between the total scores of the leisure management sub-dimension, which is the leisure time management sub-dimension, according to the monthly spending amounts of the participants. The total scores of individuals with monthly expenditures between 1100 and 2000 TL were higher than those between 850 TL-1000 TL and 2100 TL and above. Carson and Janssen (2012) stated that individuals with low income level as a social class have a high rate of television, computer and video game use, and this is due to the fact that they stay at home longer and participate less in social environments.

In the study, no statistically significant difference was found between the total scores of the leisure management and digital game addiction scale total score sub-dimensions according to the game playing platform of the participants. In Pala and Erdem's (2011) research titled digital game preference and the relationship between game preference and gender, grade level and learning style, it was found that gender differences differ according to game preferences, while women prefer real-time games, while men's real and full-time games are the same. reported that they preferred Yeşilyurt (2014), in his study titled "Investigation of adolescents' experiences in online games and their attitudes towards online games, found that boys prefer sports, car racing, action and strategy role-playing games, while girls prefer desktop games. Savci & Aysan, (2017), in their study, found that the strongest effect comes from internet addiction, followed by social media addiction, digital game addiction and smartphone addiction, respectively. Irls and Gomis (2015), in their study investigating impulsivity and video game addiction, found a significant positive relationship between the time and frequency of spending time in front of the computer and the level of video addiction. In the study conducted by Aydoğdu Karaaslan (2015), it was stated that 88% of the participants spent 2-5 hours of their free time on the Internet and on the computer.

As a result, it is reported in the literature that digital game addiction is mostly preferred by men and young people with high socio-economic status. It is stated that young people with low educational success spend more time on video games. Young people with low income levels may increase their screen-based activities as they prefer to stay at home and avoid insecurity concerns caused by high social and physical environmental impairment. Therefore, low income level, which appears to be associated with video game addiction, is considered to be one of the environmental factors to be addressed in the future, and it can be said to be one of the important public health interventions aimed at reducing screen use by young people. There are many studies reporting that individuals in a high level of gaming addiction class are less likely to meet physical activity levels and are more likely to be obese. It is known that video games reduce physical activity time and cause unhealthy eating behaviors. Many studies contain inconsistent findings about the relationship between physical activity and video games. It is stated that screen time (TV watching, computer use, video games) is consistently associated with physical inactivity and overweight. The findings show the impact of screen time behaviors on individuals' health and show that problematic video games are associated with physical health risks. Therefore, it is recommended to limit screen time to two hours or less. Excessive use of technology may cause some individuals to deteriorate in functioning and distance themselves from the real social environment. Social media, smartphone and digital gaming addiction can cause isolation, especially among young people. This may lead to the isolation of individuals who are technologically dependent and to a decrease in their social connectedness. Internet, social media, digital gaming and smartphone addiction can negatively affect interpersonal relationships and lead to deceptive behaviors. Social connectedness is measured by the individual's feeling of being a meaningful part of their relationships, but technological addictions can reduce this feeling and create conflict and conflict in interpersonal relationships. Because relevant case studies will be more detailed than surveys, they can provide stronger evidence of the reality of internet addiction. Case studies can more clearly reveal the causes of addiction and what exactly gaming addiction means. It may be more important that gaming addiction should be defined by its negative effects on other areas of life rather than the duration of gaming. The student group we are working with is limited considering our general student population. Much more comprehensive studies are needed to determine whether the results are due to the characteristics and demographic structure of the school.

REFERENCES

- Akçay, D. and Özcebe, H. (2012). Evaluation of computer game playing habits of preschool children and their families. *Journal of Child*, 12(2), 66-71.
- Aydoğdu Karaaslan, İ. (2015). Digital games and digital violence awareness: a comparative analysis of parents and children. *Journal of International Social Research*, 8(36).
- Byun, D., Kim, R., and Oh, H. (2021). Leisure-Time and study-time internet use and dietary risk factors in korean adolescents. *The American Journal Of Clinical Nutrition*, 114(5), 1791-1801.
- Carson, V., & Janssen, I. (2012). Neighborhood disorder and screen time among 10-16 year old Canadian youth: a cross-sectional study. *International journal of behavioral nutrition and physical activity*, 9(1), 1-11.

- Donati, A. M., Chiesi, F., Ammannato, G., & Primi, C. (2015). Versatility and addiction in gaming: the number of video-game genres played is associated with pathological gaming in male adolescents. *Cyberpsychology, Behavior, and Social Networking*, 18(2), 275-289.
- Edginton, C. R. (2007). The World Leisure Organization: promoting social, cultural and economic transformation. *LICERE-Revista Do Programa De Pós-Graduação Interdisciplinar Em Estudos Do Lazer*, 10(2).
- Ekinci, N. E., Yalçın, İ., & Soyer, F. (2017). Digital game addiction level of high school students in Turkey. *Acta Kinesiologica*, 11(2), 98-103.
- Ergin, A., Uzun, S., U. and Bozkurt, A. İ. (2013). Frequency of internet addiction in medical school students and affecting factors. *Pamukkale Medical Journal*, 6(3), 134-142
- Festl, R., Scharkow, M., & Quandt, T. (2016). Problematic computer game use among adolescents, younger and older adults. *Addiction*, 108(3), 592-599.
- Forouzan, F., Teimouri, H., & Safari, A. (2020). Leisure time management in the workplace: providing a model. *Human Systems Management*, 39(3), 399-412.
- Gökçearslan, Ş. and Durakoğlu, A. (2014). Examination of secondary school students' computer game addiction levels according to various variables. *Journal of Dicle University Ziya Gökalp Faculty of Education*, 23(14), 419-435
- Griffiths, M. (2000). Does Internet and computer" addiction" exist? Some case study evidence. *CyberPsychology and Behavior*, 3(2), 211-218.
- Hazar, K. (2014). *Investigation of the relationship between internet and computer game addiction in high school students with the level of participation in sports and some variables*. (Master's thesis, Niğde University/Institute of Social Sciences).
- Hazar, Z. and Hazar, M. (2018). The effect of games containing physical activity on digital game addiction of 11-14 age group secondary school students. *Journal of Research in Education and Teaching* 6 (11), 243-253.
- Horzum, M. B. (2011). Examining the computer game addiction levels of primary school students according to various variables. *Education And Science*, 36(159).
- Hu, M. (2009). Will online chat help alleviate mood loneliness? *Cyberpsychol Behav*, 12:219-223.
- Irls, D. L., and Gomis, R. M. (2015). Impulsiveness and video game addiction. *Health and Addictions*, 16(1), 33-40.
- Internetworldstats, (2022). <https://www.internetworldstats.com>. Date of access:15.11.2022
- Karasar, N. (1999). Bilimsel araştırma yöntemi kavramlar, teknikler, ilkeler. Ankara: Nobel Yayıncılık.
- Ko, C.-H., Yen, J.-Y., Chen, S.-H., Yang, M.-J., Lin, H.-C., and Yen, C.-F. (2009). Proposed diagnostic criteria and the screening and diagnosing tool of internet addiction in college students. *Comprehensive Psychiatry*, 50(4), 378-384.
- Kusan, M. and Sabah, S. (2022). Examination of the status of the students of the faculty of sports sciences regarding the characteristics of being healthy. Özer, Ö and Soslu, R. (Ed.). *INSAC Contemporary Trends in Sport Sciences*. (S. 124). Duvar Kitapevi.

- Kusan, M., & Mumcu, H. E. (2021) Examining the job performances of physical education and sports teachers regarding the physical activity levels and individual variables. *International Journal of Eurasian Education And Culture*, 6(14), 1806-1831.
- Mathews, C. L., Morrell, H. E., & Molle, J. E. (2019). Video game addiction, ADHD symptomatology, and video game reinforcement. *The American Journal of Drug And Alcohol Abuse*, 45(1), 67-76.
- Ng, B. D., and Wiemer-Hastings, P. (2005). Addiction to the internet and online gaming. *Cyberpsychology & Behavior*, 8(2), 110-113.
- Pala, F. K., and Erdem, M. (2011). A study on the relationship between digital game preference and game preference and gender, grade level and learning style. *Ahi Evran University Kırşehir Journal of the Faculty of Education*, 12(2), 53-71
- Savci, M., and Aysan, F. (2017). Technological addictions and social connectedness: predictor effect of internet addiction, social media addiction, digital game addiction and smartphone addiction on social connectedness. *Dusunen Adam: Journal of Psychiatry & Neurological Sciences*, 30(3), 202-216.
- Suler, J. (2004). Computer and cyberspace “addiction”. *International Journal Of Applied Psychoanalytic Studies*, 1(4), 359–362.
- Tucker, P., Dahlgren, A., Akerstedt, T., & Waterhouse, J. (2008). The impact of free time activities on sleep, recovery and well-being. *Applied Ergonomics*, 39(5), 653-662.
- Ünlü, Ç., & Çeviker, A. (2022). Examination of the social skills levels of students participating in recreative activities. *International Journal on Social & Education Sciences (IJonSES)*, 4(4).
- Wallace, P. (2014). Internet addiction disorder and youth. *Embo Reports*, 15(1), 12–16.
- Wang, C. C., and Chu, Y. S. (2007). Harmonious passion and obsessive passion in playing online games. social behavior and personality: *An International Journal*, 35(7), 997-1006.
- Wang, W. C., Kao C. H., Huan, T. C. & Wu, C. C (2011). Free Time management contributes to better quality of life: a study of undergraduate students in Taiwan. *Journal of Happiness Studies*, 12(4), 561-573.
- Weinstein, AM (2010). A comparison between computer and video game addiction game users and non-game users. *American Journal of Drug and Alcohol Abuse*, 36 (5), 268-276.
- Widyanto, L., & Mcmurrin, M. (2004). The psychometric properties of the internet addiction test. *Cyberpsychology & Behavior*, 7(4), 443–450.
- Yaşartürk, F., Akyüz, H., and Karataş, İ. (2018). The investigation of the relationship between recreation department students’ organizational factors affecting their academic achievement and leisure management. *Journal of Sport Sciences Researches*, 3(2), 233-243.
- Yen, J. Y., Ko, C. H., Yen, C. F., Wu, H. Y., & Yang, M. J. (2007). The comorbid psychiatric symptoms of internet addiction: attention deficit and hyperactivity disorder (ADHD), depression, social phobia, and hostility. *Journal of adolescent health*, 41(1), 93-98.

Yeşilyurt, F. (2014). *A research on the experiences and the attitudes of adolescents towards online games*, Doctoral Thesis Istanbul University Institute of Education Sciences, İstanbul