BÜSAD 2024; 5(2): 332-344 BİNGÖL ÜNİVERSİTESİ SAĞLIK DERGİSİ Araştırma Makalesi
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Evaluation Of The Efficiency Of Internet Addiction Education Given To Secondary School Students

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ABSTRACT

This study aims to examine the effectiveness of internet addiction education given to secondary school students. This research was carried out in the pretest-posttest control group design and the sample of the research consists of 90 secondary school students studying in a district of Mersin. 'Descriptive Characteristics Form and Internet Addiction Scale' were used to collect data. Students were given education on internet addiction, and questionnaires were applied before and four months after the education. While the mean of daily internet use time measured with the pretest was 120.55±134.11 in the education group, the mean time of daily internet use measured by the posttest was 66.87±66.91 minutes. It was found that there was a statistically significant difference in the education group in terms of the sub-dimensions of the internet addiction scale and the overall scale score before and after the education ($p<0.05$). The questionnaire applied after the education showed that there was a statistically significant difference between the education and control groups in terms of negative social relations ($p<0.05$). The study concluded that the education given to secondary school students on internet addiction is effective.

Ortaokul Öğrencilerine Verilen İnternet Bağımlılığı Eğitiminin Etkililiği

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ÖZ

Bu çalışmanın amacı, ortaokul öğrencilerine verilen internet bağımlılığı eğitiminin etkinliğinin incelenmesidir. Bu araştırma, ön test-son test kontrol grup deseninde yapılmıştır. Araştırmanın örneklemini, Mersin iline bağlı bir ilçede öğrenim gören 90 ortaokul öğrencisi oluşturmaktadır. Verilerin toplanmasında "Tanımlayıcı Özellikler Formu ve İnternet Bağımlılığı Ölçeği" kullanılmıştır. Öğrencilere internet bağımlılığına yönelik eğitim verilmiş olup, eğitim öncesi ve eğitimden 4 ay sonra anket formları yeniden uygulanmıştır. Girişim grubunun ön test ile ölçülen günlük internet kullanımı süresi ortalaması 120,55±134,11, son test ile ölçülen günlük internet kullanımı süresi ortalaması ise 66,87±66,91 dakikadır. Girişim grubunda eğitim öncesi ve eğitim sonrası yapılan internet bağımlılığı ölçeği alt boyutları ve genel ölçek puan ortalaması açısından istatistiksel olarak anlamlı bir farklılık olduğu tespit edilmiştir ($p<0,05$). Eğitim sonrası uygulanan ankette, girişim ve kontrol grubu arasında sosyal ilişkilerde olumsuzluk açısından istatistiksel olarak anlamlı bir farklılık olduğu belirlenmiştir ($p<0,05$). Yapılan bu çalışmanın sonucunda, ortaokul öğrencilerine internet bağımlılığına yönelik verilen eğitimin etkili olduğu belirlenmiştir.

BİNGÖL ÜNİVERSİTESİ

BÜSAD 2024; 5(2): 332-344 BİNGÖL ÜNİVERSİTESİ SAĞLIK DERGİSİ Araştırma Makalesi
BUHJ 2024; 5(2): 332-344 BİNGÖL UNIVERSITY HEALTH JOURNAL Original Article
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INTRODUCTION

Internet addiction disorder (IAD-Internet Addiction Disorder) was first defined by Dr. Ivan Goldberg in 1995. According to Dr. Goldberg, internet addiction is a pathological disorder involving a wide range of behaviors and impulse control and is defined as excessive use of internet technology (1). In our country, according to the 2021 data of the Turkish Statistical Institute (TUIK), internet usage rates are 82.2% and 82.7% in adults and in the 6-15 age group, respectively (2). In addition, 53% of Turkey's population actively uses social media (3). As can be seen from the data, children and adolescents use the internet at least as much as adults. As a result of the rapid and uncontrollable penetration of the Internet into our lives, legal, sociological and psychological problems related to the use of the Internet are increasing (4). The reasons such as the fact that adolescents and young people are born in the middle of the digital world today, digital games offer a virtual competitive environment to young people, young individuals have more free time than adults, and the self-control system in adolescents is relatively less developed than adults (4). It can be effective in being a target audience for the game industry. In almost all of the studies conducted, a large proportion of addicted individuals consists of adolescents and young individuals (4). Adolescence is due to the fact that adolescents spend more time with technological tools, are prone to risk-taking and thrill-seeking behaviors due to their developmental period, are cognitively and emotionally immature, and various life difficulties encountered in this period (e.g. parents' divorce, moving, being bullied, etc.). It is accepted that this period is a critical period in terms of technological addictions (5). It is important to prevent this situation as soon as possible. Studies have found that internet-related addictions are associated with concepts such as depression, impulsivity, loneliness, sleep quality, well-being, self-esteem, musculoskeletal problems, eating disorders, academic performance, and time constraints (6,7,8). In another study, it was found that problematic internet use can frequently and increasingly harm middle school students both socially and academically (9). Considering the above-mentioned problems, there is a risk of internet addiction at a young age due to excessive use of the internet in social environments. Internet addiction trainings have an important place in creating behavioral changes in students. Studies have found that the trainings provided are effective. Different trainings such as Life Skills Training (10) and Psychoeducation Based on Cognitive-Behavioral Approach (11) were found to be effective in reducing internet addiction and increasing social skills. Therefore, it was aimed to examine the effectiveness of internet addiction education given to secondary school students with potential internet addiction.

MATERIALS AND METHODS

A this research was conducted in an semi-experimental design with pretest-posttest control group to determine the effectiveness of the education given in internet addiction. The study was carried out between March 15, 2022 and October 15, 2022, following the approval of the ethics committee. The population of the research consisted of 23569 secondary school students studying in Tarsus in the 2021-2022 academic year. The sample size of the study was calculated with the G*Power 3.1.9.2 software (ANOVA: Repeated measures, within-between interaction). In order for the mean change in internet Addiction Levels between the two groups to be significant over time, an effect size of 0.30 (low level), 0.05 type 1 error, 80% power, and 0.30 correlation between repeated measures are required. Accordingly, a minimum of 38 individuals in each group was thought to be sufficient, but a 20% loss was foreseen, and a total of 90 students, 45 in each group, were included in the study. School selection for the research was determined by drawing lots. The study was carried out in a single school, since the number of students in the school that came into the draw was sufficient for the conduct of the research. The lottery method was used to determine the classes while recruiting students to the experimental and control groups. The class that came out of the lottery was determined as the experimental and control group.

Inclusion criteria: Volunteering to participate in the study, studying at secondary school, not having a serious psychiatric disorder, being able to read and write in Turkish. Exclusion criteria

BÜSAD 2024; 5(2): 332-344 BİNGÖL ÜNİVERSİTESİ SAĞLIK DERGİSİ Araştırma Makalesi
BUHJ 2024; 5(2): 332-344 BİNGÖL UNIVERSITY HEALTH JOURNAL Original Article
DOI: 10.58605/bingolsaglik.1487197

from the study: Not wanting to participate in the study, not being educated in secondary school, having a serious psychiatric disorder, not being able to read Turkish.

Data Collection Tools

'Descriptive Characteristics Form and Internet Addiction Scale' were used to collect data.

Descriptive Characteristics Form: The form prepared by the researchers by examining similar studies; It consists of a total of 16 questions on students' age, gender, grade, duration of being connected to the internet, and internet usage purposes (12,13,14,15).

Internet Addiction Scale: It was developed by Hahn and Jerusalem, 2001 and adapted into Turkish by Şahin and Korkmaz, 2011 (16). The scale consists of 19 items and 3 factors. The first of these factors is "Loss of Control", the second is "The Desire to Stay Online More" and the third is "Negativity in Social Relationships". Item-test correlation coefficients ranged between 0.720 and 0.832 for the first factor, 0.821 and 0.901 for the second factor, and 0.729 and 0.804 for the third factor. Each item has a significant and positive relationship with the overall scale (16). The scale is 5-point Likert type. The highest total score of 95 and the lowest 19 points can be obtained from this scale. The 'Loss of Control' factor, which is one of the sub-dimensions of the scale, has the lowest 7 points and the highest 35 points; 'Excessive desire to stay online' factor with a minimum of 3 and a maximum of 15; The lowest 11 and the highest 40 points can be obtained from the 'negativity in social relations' factor. A higher score refers to a higher internet addiction level. The Cronbach Alpha internal consistency coefficient of the scale is 0.85 (16). In this study, it was found to be 0.937. Permission to use the scale was obtained from the author via e-mail.

Data Collection

Internet Addiction Education: The education has been prepared by researchers in line with the literature and in accordance with the age development of children (3,17,18,19). The content of the education was finalized after consulting the opinions of five subject matter experts. The final version of the training content was created after the suggestions made by the expert opinion. The education was given in the designated classroom in the form of a presentation on a smart board.

Research scales were administered within the scope of data collection before the education was given to the students. Later, the researchers gave internet addiction education in an empty classroom to the intervention group. The education was completed in two groups due to the small size of the classroom.

In the education content;

The definition of technology addiction, its symptoms, and suggestions about technology addiction (do's and don'ts) are included. Technology addiction training was given in two sessions. In the first session, a power point presentation on the definition and symptoms of internet addiction, question and answer; a video presentation on its negative effects and harms (Yeşilay; Technology Addiction-1) (20). Interactive participation of the students in the education was ensured. The The training took approximately 30-45 minutes.

The second session included suggestions for children to reduce technology addiction. In this session, power point and question and answer method were used as training methods. Interactive participation of the students in the education was ensured. The The training took approximately 30-45 minutes. The education was given by the researcher in the research team. The same person trained the whole group.

No education was given to the control group. Post-tests were applied four months after education because, in some studies, it is stated that the research can be applied again after four months (21). Four months after the education, the researchers went back to school and re-

administered the Internet Addiction Scale to both groups. The control group also received training after the survey.

Data Analysis

The data were analyzed with SPSS 21.0 statistical software. The descriptive characteristics of the participant students are given as number and percentage distributions. The Shapiro-Wilk normality test, paired samples t-tests were used in the analysis. The difference between the groups was analyzed using paired samples t test. The statistical significance of the data was analyzed at the $p<0.05$ level.

Ethical Approval Statement

Ethical permission was obtained from the Scientific Research and Publication Ethics Committee of a university, decision numbered 2022/20, for the research. An additional permission was also obtained from …… Provincial Directorate of National Education with the decision number E-63988265-605.01-50410514. A form containing the information about the research was prepared for the parents of the students. This form was sent to the parents through the school administration and their consent was obtained. Moreover, the purpose of the study was explained to the children participating in the study, and their consent was also obtained. The students were asked to write nicknames on the questionnaires to apply and evaluate the questionnaires to the same students before and after the education.

Limitations

One of the limitations of the research was the regional nature. The study was conducted only amongst students studying in a single secondary school in Tarsus. Internet use and whether the students had internet addiction were not taken as criteria for inclusion in the study. In addition, the fact that the study was not randomized is another limitation of the study. Therefore, the findings of the study cannot be generalized to the whole population. Reaching the sample size in the research with a single school and giving the education by a single person are its strengths.

Acknowledgement

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FINDINGS AND DISCUSSION

The mean age of the students in the education group was 12.98±0.87, and 13.31±0.63 in the control group. Comparison of the pre-posttest internet usage times of the students in the education and control groups is shown in Table 1. The mean daily internet use time of the education group measured with the pretest was 120.55±134.11 minutes, and the mean daily internet use time measured with the posttest was 66.87±66.91 minutes. The daily internet use of the control group measured by the pre-test was 108.88±104.73 and the daily internet use measured by the post-test was 92.44±70.91 minutes (Table 1).

BİNGÖL ÜNİVERSİTESİ

BÜSAD 2024; 5(2): 332-344 BİNGÖL ÜNİVERSİTESİ SAĞLIK DERGİSİ Araştırma Makalesi
BUHJ 2024; 5(2): 332-344 BİNGÖL UNIVERSITY HEALTH JOURNAL Original Article
DOI: 10.58605/bingolsaglik.1487197

Table 1. Comparison of the pre-post test internet usage times of the students in the education and control groups (n=54)

	Intervention group						Control Group					
	n	min	max	mean	SS	median (min-max)	n	min	max	mean	SS	median (min-max)
Pretest Internet Use Time (min)	54	10	720	120.55	134.11	60	45	0	480	108.88	104.73	60
Posttest Internet Use Time (min)	54	1	240	66.87	66.91	45	45	0	300	92.44	70.91	60

The distribution of some variables and internet usage purposes of the students in the education and control groups is shown in Table 2. 29.6% of the education group and 40% of the control group had sleep problems. While the rate of those who stated that they had a healthy diet in the education group was 74.1%, it was 73.3 in the control group. While the rate of those who thought that they could manage time well was 61.1% in the education group, it was 68.9% in the control group. 24.1% of the participants in the education group and 22.2% of the participants in the control group thought that they managed their time well. 14.8% of the education group and 26.7% of the control group stated that they experienced musculoskeletal pain. 44.4% of the education group and 48.9% of the control group stated that they felt anxious, stressed and nervous in daily life. 25.9% of those in the education group and 24.4% of those in the control group thought they were internet addicts (Table 2). While 29.6% of the education group and 33.3% of the control group reported that they used the internet mostly for chatting, students in both groups said that they mostly used the internet for homework-research (Table 2).

Table 2. The distribution of some variables and internet usage purposes of the students in the education and control groups (n=54)

		Intervention		Control	
		n	%	n	%
Sleep Problem	Yes	16	29.6	18	40
	No	38	70.4	27	60
Healthy Diet	Yes	40	74.1	33	73.3
	No	14	25.9	12	26.7
Good Time Management	Yes	33	61.1	31	68.9
	No	21	38.9	14	31.1
Social Loneliness	Yes	13	24.1	10	22.2
	No	41	75.9	35	77.8
Musculoskeletal Pain	Yes	8	14.8	12	26.7
	No	46	85.2	33	73.3
Feeling anxious, stressed, and nervous in daily life	Yes	24	44.4	22	48.9
	No	30	55.6	23	51.1
Do you think you are an internet addict?	Yes	14	25.9	11	24.4

BÜSAD 2024; 5(2): 332-344 BİNGÖL ÜNİVERSİTESİ SAĞLIK DERGİSİ Araştırma Makalesi
BUHJ 2024; 5(2): 332-344 BİNGÖL UNIVERSITY HEALTH JOURNAL Original Article
DOI: 10.58605/bingolsaglik.1487197

	No	40	74.1	34	75.6
Purpose of Internet Usage		**Intervention**		**Control**	
		n	**%**	**n**	**%**
Social Media	Never	15	27.8	12	26.7
	Rarely	13	24.1	6	13.3
	Sometimes	14	25.9	18	40.0
	Mostly	6	11.1	6	13.3
	Always	6	11.1	3	6.7
Game Playing	Never	4	7.4	6	13.3
	Rarely	15	27.8	13	28.9
	Sometimes	14	25.9	9	20.0
	Mostly	13	24.1	8	17.8
	Always	8	14.8	9	20.0
Chat	Never	8	14.8	4	8.9
	Rarely	6	11.1	8	17.8
	Sometimes	15	27.8	11	24.4
	Mostly	16	29.6	15	33.3
	Always	9	16.7	7	15.6
Homework - Research	Never	2	3.7	3	6.7
	Rarely	5	9.3	5	11.1
	Sometimes	6	11.1	4	8.9
	Mostly	21	38.9	17	37.8
	Always	20	37.0	16	35.6
Music	Never	5	9.3	5	11.1
	Rarely	6	11.1	6	13.3
	Sometimes	19	35.2	10	22.2
	Mostly	12	22.2	8	17.8
	Always	12	22.2	16	35.6
Aimless Surfing	Never	26	48.1	21	46.7
	Rarely	12	22.2	12	26.7
	Sometimes	13	24.1	5	11.1
	Mostly	1	1.9	4	8.9
	Always	2	3.7	3	6.7
Shopping	Never	17	31.5	18	40.0
	Rarely	16	29.6	7	15.6
	Sometimes	13	24.1	13	28.9
	Mostly	5	9.3	5	11.1
	Always	3	5.6	2	4.4

BİNGÖL ÜNİVERSİTESİ
BÜSAD 2024; 5(2): 332-344 BİNGÖL ÜNİVERSİTESİ SAĞLIK DERGİSİ Araştırma Makalesi
BUHJ 2024; 5(2): 332-344 BİNGÖL UNIVERSITY HEALTH JOURNAL Original Article
DOI: 10.58605/bingolsaglik.1487197

News	Never	24	44.4	13	28.9
	Rarely	18	33.3	13	28.9
	Sometimes	9	16.7	11	24.4
	Mostly	1	1.9	4	8.9
	Always	2	3.7	4	8.9

The comparison of the pre-education Internet Addiction Scale mean scores of the students in the education and control groups is shown in Table 3. The mean of pretest loss of control was 13.29±5.96, of pretest tolerance development was 6.42±3.70, of negative consequences for social relationships was 15.87±7.72 and the mean of pretest total score was 35.59±15.99 for intervention group. There means were 13.17±6.80, 6.75±3.53, 16.60±8.74 and 36.53±17.69 for control group, respectively.

Table 3. Comparison of the pre-education Internet Addiction Scale mean scores of the students in the education and control groups (n=54)

Measurements	**Group**	**n**	**X ± SD**	**T**	**P**
Pretest Loss of Control	Intervention	54	13.29±5.96	0.092	0.927
	Control	45	13.17±6.80		
Pretest Tolerance Development	Intervention	54	6.42±3.70	-0.450	0.654
	Control	45	6.75±3.53		
Pretest Negative Consequences for Social Relationships	Intervention	54	15.87±7.72	-0.441	0.660
	Control	45	16.60±8.74		
Pretest Total	Intervention	54	35.59±15.99	-0.278	0.782
	Control	45	36.53±17.69		
Posttest Loss of Control	Intervention	54	11.07±5.53	-0.988	0.326
	Control	45	12.26±6.48		
Posttest Tolerance Development	Intervention	54	4.98±2.77	-1.287	0.202
	Control	45	5.82±3.57		
Posttest Negative Consequences for Social Relationships	Intervention	54	12.25±4.29	-2.596	**0.012***
	Control	45	15.80±8.26		
Posttest Total	Intervention	54	28.31±11.31	-1.862	0.067
	Control	45	33.88±17.21		

t: independent samples t test *:p<0,05

Comparison of the post-education Internet Addiction Scale mean scores of the students in the education group is shown in Table 4. It was found that there was a statistically significant difference between the mean of the measurements made in the education group before and after the education in terms of both the sub-dimensions of the internet addiction scale and the mean score of the general scale (p<0.05). While the mean loss of control was 13.29±5.96 in pretest, it was 11.07±5.53 in posttest. Similarly, the tolerance development (excessive desire to stay online) pretest mean was 6.42±3.70, while the posttest mean was 4.98±2.77. The pretest mean of Negative Consequences for Social Relationships was 15.87±7.72, and the posttest mean was 12.25±4.29. In

BİNGÖL ÜNİVERSİTESİ
BÜSAD 2024; 5(2): 332-344 BİNGÖL ÜNİVERSİTESİ SAĞLIK DERGİSİ Araştırma Makalesi
BUHJ 2024; 5(2): 332-344 BİNGÖL UNIVERSITY HEALTH JOURNAL Original Article
DOI: 10.58605/bingolsaglik.1487197

total, the mean pretest for internet addiction was 35.59±15.99 and the posttest mean was 28.31±11.31 (Table 4).

Comparison of the post-education Internet Addiction Scale mean scores of the students in the education and control groups is shown Table 3. After the education, it was found that there was a statistically significant difference between the education and control groups in terms of negative consequences for social relationships ($p<0.05$) (Table 3).

Comparison of the pre and post education Internet Addiction Scale mean scores of the students in the control group is shown Table 4. It was found that the differences of both the sub-dimensions of the internet addiction scale and the mean score of the general scale between pre and post-education measurements of control group were not statistically significant ($p>0.05$) (Table 4).

Table 4. Comparison of the pre and post education Internet Addiction Scale mean scores of the students in the education group (n=54) and control group (n=45)

Group / Intervention	Measurement	Descriptive Statistics			Differences between measurements					
		n	Mean	Standard Deviation	Mean	Standard Deviation	Standard Error	T	SD	P
Pretest Loss of Control		54	13.29	5.96	2.22	6.56	.89	2.486	53	**0.016***
Posttest Loss of Control		54	11.07	5.53						
Pretest Tolerance Development		54	6.42	3.70	1.44	3.93	.53	2.696	53	**0.009****
Posttest Tolerance Development		54	4.98	2.77						
Pretest Negative Consequences for Social Relationships		54	15.87	7.72	3.61	8.41	1.14	3.154	53	**0.003****
Posttest Negative Consequences for Social Relationships		54	12.25	4.29						
Pretest Internet Addiction Total		54	35.59	15.99	7.27	17.35	2.36	3.082	53	**0.003****
Posttest Internet Addiction Total		54	28.31	11.31						
Control										
Pretest Loss of Control		45	13.17	6.80	0.91	9.23	1.36	0.662	44	0.511
Posttest Loss of Control		45	12.26	6.48						
		45	6.75	3.53	0.93	4.95	0.73	1.263	44	0.213

Pretest Tolerance Development	45	5.82	3.57						
Posttest Tolerance Development	45	16.60	8.74	0.80	12.82	1.91	0.418	44	0.678
Pretest Negative Consequences for Social Relationships	45	15.80	8.26						
Posttest Negative Consequences for Social Relationships	45	36.53	17.69	2.64	25.51	3.80	0.695	44	0.491
Pretest Internet Addiction Total	45	33.88	17.21						
Posttest Internet Addiction Total									

t: paired samples t test

This study aimed to examine the effectiveness of internet addiction education given to secondary school students. It determined that students use the internet for the following purposes: browsing social media, playing games, chatting, doing homework-research, listening to music, surfing aimlessly, shopping, and getting news. In addition to the aspect of the internet that makes life easier, it is known that when it is not used in a controlled manner, excessive use has negative aspects in terms of social, psychological, and physical aspects. One of the negative aspects is internet addiction (22).

Internet addiction can lead to undesirable consequences such as sleep, anxiety, and eating problems that negatively affect daily life (23,24,25). It was found that as the severity of internet addiction increased, the duration and quality of sleep decrease and sleep problems become more common (26). Another study reported that students with high internet addiction choose later hours to sleep, have more difficulty in falling asleep, and wake up more frequently at night than students with low internet addiction (27). A study examining sleep problems and internet addiction in children and adolescents revealed a positive correlation between the two variables (28). Excessive and uncontrolled internet use of adolescents causes shortening of sleep time, feeling tired the next day and deteriorating sleep quality (29). According to a study conducted in Turkey in 2021, it was determined that students' digital game playing status did not change their sleeping habits and the time they played games did not change their sleeping and waking hours (30). In this study, it is found that excessive and uncontrolled internet use causes sleep problems in individuals. Excessive and uncontrolled internet use causes sleep problems in individuals. In the study, 29.6% of the intervention group and 40% of the control group had sleep problems. Excessive and uncontrolled internet use causes individuals to have sleep problems.

Eating disorder problems occur in adolescents with internet addiction (31). Studies similar to our study results found a negative relationship between internet addiction and healthy eating habits (32,33). In the study, 74.1% of those in the intervention group stated that they had a healthy diet, and 73.3% in the control group.

Problematic internet users cannot organize and manage their time, cannot balance their time with family, school and colleagues, and deceive themselves by constantly staying online and use the internet to change their morale. In a study conducted with university students, no significant relationship was found between internet addiction and time management (34). In a study, it was observed that individuals who use digital tools too much do not manage their spare time well (35). In the study, those who think that they cannot manage time well are 38.9% in the intervention

group and 31.1% in the control group. In the study, it was determined that the pre-test mean of the excessive desire to stay online in the intervention group was 6.42±3.70 and the post-test mean was 4.98±2.77; in the control group, the mean of the excessive desire to stay online in the pre-test was 6.75±3.53. The education given to prevent addiction reduced the students' excessive desire to stay online. has reduced.

Internet addiction distances the individual from real life relationships (36). As individuals who are addicted to the Internet decrease their time sharing with the real world and real people, their social relationships deteriorate or come to the point of breaking off completely (37). According to a study examining students' internet addiction in terms of deprivation, difficulty in control, impairment in functionality and social isolation; It was stated that the majority of students were in the risk and threshold group, and it was found that there was a significant difference between the duration of internet use and deprivation, difficulty in control, functional impairment, social isolation and total internet addiction scores (38). In a study, a low and positive significant relationship was found between internet addiction scores and loneliness scores (39). In our study; While the average loss of control in the intervention group was 13.29±5.96 in the pre-test, it was found to be 11.07±5.53 in the post-test. Loss of control caused by internet addiction can be reduced with training.

In addition to symptoms such as postural disorders, pain, carpal tunnel syndrome, and eye strain due to spending too much time in front of the computer, individuals with excessive internet use may also experience vital health problems such as deep vein thrombosis due to inactivity (40). It is thought that not paying attention to ergonomics along with excessive internet use increases health problems (41). Digital games have been defined as a determinant of muscle and joint pain, especially among individuals in the developmental period (42). A study has found that playing digital games can cause musculoskeletal problems (43). Another study emphasized that uncontrolled internet use can cause neck and back pain (44). In this study, it was found that uncontrolled internet use causes musculoskeletal pain. Uncontrolled internet use causes musculoskeletal pain.

In the study conducted by Shutzman and Gershy (2023), it was determined that the level of internet use increased as the level of anxiety increased (45). In another study conducted with university students, it was found that excessive internet use was associated with depression, anxiety and stress levels, and it was stated that problematic internet use behavior increased as depression, anxiety and stress levels increased (46). In the study, it was found that excessive internet use caused students to be anxious, stressed and angry.

Negative behaviors including loss of time, neglect of basic needs such as nutrition and sleep, deprivation, anger, fatigue and social isolation may occur as a result of excessive use of the Internet. Excessive use of the Internet or poor use control measures cause distressing situations such as behavioral disorders that cause problems (47). In the study, there was no statistically significant difference in terms of loss of control, excessive desire to stay online and general scale scores ($p>0.05$). Internet addiction; It is a problem that includes not only excessive internet use, but also the wrong and unconscious use of the internet (48). In the study conducted by Erol (2019) with high school students, Cognitive Behavioral Therapy Based "Problematic Internet Use Reduction Program" lasting 10 sessions was applied to the experimental group (49). According to the results of the pre-test, post-test and follow-up test applied during the program process, while the level of problematic internet use of the experimental group decreased, no significant difference was observed in the control group. Similarly, the results of Hamu et al. (2020) with high school students in Indonesia, Agbaria (2021) with Arab adolescents in Israel, and Aşantuğrul (2020) on reducing internet addiction of adolescents based on Cognitive-Behavioral approach showed that

the level of internet use decreased (50,51,52). Based on the findings of this study; Informing about the use of technology can be used as a step to prevent internet addiction.

CONCLUSIONS AND RECOMMENDATIONS

In this study, it was found that there was a significant difference in the internet addiction levels of the students who were given education compared to the pre-educational level. It was determined that the mean scores of students' loss of control decreased significantly with the education. It was found that the average of the students' excessive desire to stay online decreased significantly as a result of the training given.

The study has made many contributions to the literature. It has been determined that the education given to secondary school students has a positive effect on the prevention of internet addiction. It was determined that the students' self-control skills increased with the training given about internet addiction. It has been determined that the effect of the education given on the situations of experiencing negativity in social relations due to internet use has a positive effect. Students' excessive desire to stay online decreased after the training.

It is recommended to provide systematic internet addiction training in primary school curricula to increase awareness of the correct use of the internet and to ensure healthy internet use. It is thought that the awareness of healthy internet use will be gained from an early age, will play an important role in solving the problem of internet addiction that threatens individuals and society.

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