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An Educational Approach for Decreasing Internet Addiction: Motivational Interviewing Psycho-Education Program **

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ABSTRACT

Purpose: The objective of the study was to examine the impact of The Motivational Interviewing Psycho-Education Program which was prepared based on the method of Motivational Interviewing by the researcher on the Internet addiction level of the Internet-addicted students who studied in university. **Research Methods:** Experimental design based on "Pre-Test - Post- Test and Follow Up Model with Control Group" was used in the study. The Motivational Interviewing Psycho-Education Program with the experimental group was carried out in 10 sessions in the form of 120-150-minute. No studies were conducted with the control group. The Personal Information Form and Internet Addiction Scale were applied to obtain the necessary data from the internet-addicted students who would form the study group in the present study. The Motivational interviewing psycho-education program was prepared by the researcher by scanning the literature and taking the opinions of experts.

Findings The present study found that motivational interviewing psycho-education program was effective in reducing/decreasing the internet addiction levels of the internet-addicted university students and that this effect continues in the follow-up test that was applied six months later.

Implications for Research and Practice: It was suggested that a placebo group could also be formed in a new study to be conducted, the psychological counseling and guidance center staff of the school could implement psycho-education programs on different levels and groups regarding internet addiction to test the effectiveness of the program. Also, the effectiveness of the program could be tested on different individuals and study groups. The findings of the study were discussed and interpreted in the light of the relevant theoretical information and field type, and suggestions for practitioners were presented.

Introduction

The use of computers and the internet has become a part of daily life today. Especially, it manages to find an important place for itself as technology develops rapidly in personal and social life and affects the lives of individuals. The use of technology, on the one hand, is seen as a means of gaining status for individuals, while on the other hand, it causes a person to lose control over its use immeasurably and indefinitely. An attempt to eliminate the need for communication easily and comfortably with rapidly developing technology and the use of the internet has led to high use of the internet and, as a result, the increase of addiction (Aksoy, 2015). It is stated that the internet, which exists in all areas of life thanks to the conveniences it provides, leads to negativity in physical, cognitive, and psychosocial areas in case it is not used consciously. According to research conducted with university students, the use of the internet; tobacco and alcohol use (Shen et al., 2020), substance use (Castro Calvo et al., 2016,), unhealthy diet, impaired nutrition (Hendekci & Avci, 2020,), increased tendency to violence (Mansuroglu & Tambag, 2019), loneliness, stress, anxiety, depression (Puri & Sharma, 2016), and suicide attempt or thought (Ozparlak & Karakaya, 2020) has been noted to be effective in the development of such risky health behaviors. It is seen that the internet affects all of an individuals' development process negatively when it is used unconsciously out of its purpose. Moreover, it is stated that the improper use of the internet creates the concept of internet addiction (Sezen & Murat, 2018).

Internet addiction resembles pathological gambling addiction. In both cases, there is a state of impulse-control disorder due to the absence of substance use (Young, 1996). Withdrawal symptoms are seen in internet addiction like the withdrawal symptoms which are seen in pathological gambling. Pathological internet use is named in different ways such as excessive use of the internet and inappropriate use of the internet; however, it has not been defined as a disease by APA yet (Gunay et al., 2018). The term internet addiction was first used by Goldberg (1996) with the adaptation of the substance addiction diagnostic criteria, which was included in the DSM-IV, to the use of the internet due to the increasing and intensive use of the internet. Young (1996) adapted the diagnostic criteria for pathological gambling of DSM-IV to internet addiction following Goldberg. Young began to identify and report cases of internet addiction and established the Center for Internet Addiction for the treatment of internet-addicted individuals (O'reilly, 1996).

Young (2004) defined internet addiction as "inability to fight the will of using internet excessively, the sense of emptiness of the time that is spent without internet, state of excessive annoyance and aggression in case of deprivation, and the deterioration of an individual's working, social, and family life". Despite the various definitions of internet addiction, there is still no exact official definition. Even though there is not an exact official definition, internet addiction is stated as the inability to limit its use, continuation to use it despite social and academic harms, intense anxiety in cases where access to the internet is limited or inhibited (Ozturk et al., 2007). While it is possible to avoid addictive substances such as cigarettes and alcohol during the

treatment process, it is different in internet addiction because the internet is used in many daily tasks, and it is impossible to avoid or write off the internet, which also hosts social media applications (Tutgun Unal, 2015). Since the first day it was defined, internet addiction has been a subject of debate, whether it is an addiction or not has been discussed, and in recent years, the studies on this have gradually increased (Griffiths et al., 2016, Van Rooij et al., 2017). The addiction develops not to the internet; but its content and opportunities (Gonul, 2002). While the use of the internet was first evaluated only by the opportunities it provided to individuals; it has started to be evaluated based on the quality of its use as a result of individuals' spending a lot of time online, using it unconsciously, and failing to solve this problem (Tari Comert, 2010).

According to a study conducted in China involving 122454 university students, the overall prevalence of internet addiction in university students was 11.3% (Li et al., 2018), again in another study with 8098 university students in China, the students ' internet addiction was 7.7% (Shen et al., 2020), in a study of 163 nursing students in Jordan, 7% of students had internet addiction (Hasan & Jaber, 2020), according to a study of 525 university students in Malaysia, 67% of students were average internet users, 9.6% were highly addicted to the internet (Wan Ismail et.al, 2020), in a study involving 266 university students in Turkey, it was stated that 42.1% of students ' internet use was at risk level and 3.4% was at dependency level, in a study of Aslan and Yazici (2016) with 910 university students, the dependency rate was 2%, the risk user rate was 20.9%.

Individuals experience a loss of control in the use of the internet over time. Therefore, individuals find themselves in distressing moods; this leads to functional impairments in their daily activities (Shapira et al., 2003). The individual is in a state of excessive anger and aggression when they are deprived of the internet. As a result, the working, social, and family life of the individual may become worse and cause a permanent disorder (Arisoy, 2009).

Internet addiction is one of the behavioral addictions as it is a special state of technology addiction (Ogel, 2012). Internet addiction is a behavioral problem that affects individuals' lifestyles. Research has also found that motivational interview techniques are effective in various lifestyle problems but have no effect on the physiological or psychological side of the problem (Baker et al., 2006). In clinical research, motivational interviewing played a positive role in solving a wide range of behavior change problems, leading to successful results. Positive results were obtained from motivational interviews in the treatment of drug addiction, internet addiction, tobacco addiction, and pathological gambling habits (Rollnick, Miller & Butler, 2008). For internet-addicted university students to overcome internet addiction, an application can be made in the treatment of addictions using the motivational interview technique, which has been determined to increase people's internal motivation and reduce their external motivation (Baker et al., 2006).

Motivational Interviewing, which is a clinical method, was first defined in 1983; it was developed as a short-term intervention method for changing the motivations of

patients with alcohol problems at the beginning. With the behavioral change, which is important for chronic diseases that constitute a general problem for the patient's motivation, motivational interviewing, since the beginning of the 1990s, began to be used to cope with other issues and health problems (Rollnick, Miller, & Butler, 2008). Motivational Interviewing is a directive and client-centered approach used to create behavioral change by helping the clients to discover and resolve ambivalence (contrasting emotions, opposite emotion states, dual emotions) (Miller & Rollnick, 2009; Dicle, 2015). Ambivalence is defined as having contradictory feelings about something or someone. It is also briefly called the change dilemma. The identification and definition of ambivalence in people are among the requirements of the interview. To ensure the motivation of benefit, the resolution of ambivalence is necessary. The Motivational Interviewing Method, which has gained significant importance today and whose effectiveness has been proved by many studies, also bases its focus on the resolution of ambivalence (Ozcan, 2009).

Motivational interviews are a special way of helping people understand their problems and take action for change. This method is especially useful for people who are reluctant to change or have ambivalence (Miller & Rollnick, 2009). The primary objective of the motivational interviewing technique developed by Miller and Rollnick is to help people discover and resolve to ensure individuals' behavioral change (Sommers-Flanagan & Sommers-Flanagan, 2015; Scott, 2010). Inside this change, it is important to convert external motivation into internal motivation as the effectiveness of the external motivations is limited (Dicle, 2017). While motivational interviewing was mostly used in addiction treatment, it was later developed as a supportive method to break the resistance to therapy. Resistances during the therapy are usually caused by indecision about the change or against the objectives (Aviram & Westra, 2011).

Computer and internet use is most common in individuals aged 16-24 (TUIK, 2020). Therefore, internet addiction especially affects high school and university students in this age group. University academic counselors state that University students are the largest risk group for internet addiction (Young, 2004).

In 2009, one of the major Dutch addiction care organizations initiated a pilot program to explore the possibility of using an existing Cognitive Behavioral Therapy and Motivational Interviewing based treatment program ('Lifestyle Training') to treat internet addiction. The current study evaluates this pilot treatment program by providing a qualitative analysis of the experiences of the therapists with the treatment of 12 self-proclaimed internet addicts. Therapists report that the program, which is ordinarily used for substance dependence and pathological gambling, fits the problem of internet addiction quite well. Interventions mainly focused on controlling and reducing internet use and involved expanding (real-life) social contacts, regaining a proper daily structure, constructive use of free time, and reframing beliefs. Therapists further indicated that the treatment achieved some measure of progress for all of the 12 treated patients, while patients reported satisfaction with the treatment and actual behavioral improvements (Van Rooij et al., 2012).

In the literature, the results of the studies show that addicted individuals suffer from more problems in their academic, social, and interpersonal relationships than those who are not addicted (Cengizhan, 2005; Niemz, Griffiths, & Banyard, 2005; Sally, 2006). It can be seen from the results of these studies that the studies conducted on internet addiction are mostly scanning studies that aim to determine the situation, but there are few solution-oriented studies. Therefore, the present study which was specifically conducted to make up for the lack of solution-oriented applied studies aimed at putting forward the effectiveness of the "Motivational Interviewing Psycho-education program" which was prepared to prevent internet addictions through group experience and in the light of the literature, for the Internet-addicted university students.

The objective of the study was to examine the impact of the Motivational Interviewing Psycho-Education Program which was prepared based on the method of Motivational Interviewing by the researcher on the internet addiction level of the internet-addicted students who studied in the university. Following this objective, the answers to the following questions were sought.

Did the Motivational Interviewing Psycho-Education Program affect the internet addiction levels of internet-addicted university students? The following hypotheses were developed based on the above-mentioned problem sentence.

1. Motivational Interviewing Psycho-Education Program affected the level of internet addiction of internet-addicted university students in favor of the experimental group at a significant level compared to the level of internet addiction of internet-addicted university students who did not participate in the psycho-education program (control group).

2. The post-test total scores of internet addiction levels of internet-addicted university students who participated in the Motivational Interviewing Psycho-Education Program were significantly lower than their pre-test total scores.

3. There was no significant difference between the post-test total scores and the scores of the internet addiction level monitoring test, which was applied six months later, of the internet-addicted university students who participated in the Motivational Interviewing Psycho-Education Program.

Method

Research Design

Experimental design based on "Pre-Test - Post-Test and Follow Up Model with Control Group" was used in the study. Pre-Test - Post- Test and Follow-Up Model with Control Group design is recognized as one of the most effective designs that are used to secure internal reliability. Additionally, it is a strong design that gives the researcher a high statistical power to test the process's impact on the dependent variable, allows the interpreting of the results obtained in the context of cause-effect, and is often used in behavioral sciences (Buyukozturk, 2001). The Pre-Test-Post-Test Control Group

Design aims to test the impact of the independent variables on the dependent variables (Heppner, Wampold, & Kivlighan, 2008). Since the research included mixed evaluations, a 2x3 mixed pattern (split-plot) was used to present independent process conditions (experiment–control group) and time-related repetitive measurements (pre-test, post-test, monitoring). Repetitive measurements which were practiced in different periods (pre-test, post-test, monitoring) were measured according to the internet addiction score averages. The design of the research is indicated in Table 1.

Table 1

The Design of the Study

GROUPS	PRE-TEST	PROCESS	POST-TEST	FOLLOW UP TEST
EXPERIMENTAL GROUP	The Personal Information Form and Internet Addiction Scale	Motivational Interviewing Psycho-Education Program	The Personal Information Form and Internet Addiction Scale	The Personal Information Form and Internet Addiction Scale
CONTROL GROUP		No Process		No Process

The Motivational Interviewing Psycho-Education Program with the experimental group was carried out in 10 sessions in the form of 120-150-minute sessions on average twice a week for five weeks between the dates of February-March 2019. No studies were conducted with the control group. At the end of the 10-session psycho-education program process, the Internet Addiction Scale (post-test) was applied to the experimental and control groups again to reveal whether the Motivational Interviewing Psycho-Education Program reduced the level of internet addiction in the experimental group. Six months later, the Internet Addiction Scale (follow-up test) was applied to control permanence.

In experimental studies, the accuracy of the effect of the psycho-education program is dependent on internal and external validity (Karasar, 2014). Measures were also taken in this research to ensure internal and external validity. Non-random assignment to groups affects the internal validity of experimental research (Karasar, 2014). In this study, subjects were randomly assigned to the experimental and control groups. The collection of data and the implementation of data collection tools also affect internal validity (Buyukozturk et al., 2014). Within the scope of the study, all participants filled Personal information form and Internet Addiction Scale; the same guidelines were applied by a single investigator in similar settings. When participating researchers are aware that they are selected for the experiment, they assume that the researcher expects a positive change in behavior from them and they act accordingly. This trend

is defined as the Hawthorne effect (Karasar, 2014). Besides, follow-up measurements were performed six months after the experimental procedure to try to determine the effect of changes in time-treatment interaction on the validity of the study. Performing the monitoring test only once, lacking the placebo group, and studying with a limited sample group can be seen as the weaknesses of the study.

Research Sample

It was announced that a 10-week Motivational Interviewing Psycho-Education Program was to be held for internet-addicted students who were studying in the university to determine the individuals who would participate in the study. After the announcement, the Internet Addiction Scale and the personal information form were applied to 211 students who were studying in university and who considered themselves internet-addicts. A total of 142 students were included in the study as the scores that were taken from the scale were considered as internet addict only when they were between 80-100. Given the students' pre-test scores on the Internet Addiction Scale, the highest was 97, the lowest was 81, the standard deviation was 4.29, and the mean score was 88.73. Volunteer students have been divided into two different groups by lot (It was drawn separately for girls and boys). Two groups were formed (experimental group and control group) with 15 university students in each of them according to their pre-test scores of Internet Addiction Scale and characteristics in the personal information form using the one-to-one correspondence method to determine whether the Motivational Interviewing Psycho-Education Program was effective in reducing students' internet addiction levels. A preliminary interview information activity was done, and the Informed Consent Form was administered to the group members.

The Mann-Whitney U test was used to determine if there was a significant difference between the pre-test scores of the Internet Addiction Scale of students. The results of the analysis are shown in Table 2.

Table 2

Mann-Whitney U Test Comparison Results of "Internet Addiction Levels" Pre-Test Scores of Experimental and Control Groups

Group	N	Mean Rank	Rank Sum	U	p
Experiment	15	15,40	231,00	111	0.950
Control	15	15,60	234,00		

p>.05

According to Table 1, there was no statistically significant difference between the internet addiction levels pre-test score means of the experimental and control groups. These results showed that the experimental and control groups could be considered equal groups according to their pre-test scores.

Demographics of the Study Group: Both groups consisted of 6 females and 9 males and a total of 15 members each. Out of the members, 6 of them were 18, 5 of

them were 19, 10 of them were 20, 7 of them were 21, and 2 of them were 22 years old. The departments of the members were as follows: 10 from departments of math and sciences, 12 from departments of Turkish and social skills, and 8 from equally-weighted departments. The academic general grade point averages of the members were between 2.13 and 3.07. Out of the members, 16 of them felt lonely, 14 of them did not feel lonely. The perceived family income of the members was stated as low by 8, as middle by 16, and as high by 6. The attitudes of the members' parents were stated as inconsistent by 4, over-protective by 6, authoritative by 12, and tolerant by 8. Out of the students, 18 stated that they used cigarettes every day, 12 of them stated that they did not use cigarettes at all. Out of the members, 14 of them stated that they consumed alcohol regularly, 16 of them stated that they did not consume alcohol.

Research Instruments and Procedure

The Personal Information Form and Internet Addiction Scale were applied to obtain the necessary data from the internet-addicted students who would form the study group in the present study.

Personal information form. This form was prepared by the researcher to balance the research groups of the individuals involved in the study by determining gender, age, department, academic GPA, feeling of loneliness, family income level, parent attitudes, smoking and alcohol use, time spent on the internet, the device with which they were most connected to the internet, and the purposes of internet use.

Internet addiction scale. It is a Likert-type scale that consists of 20 questions formed by Dr. Kimberly Young (1996) adapted from the DSM-IV's "Pathological Gambling" scales. This is a self-assessment test. In the Internet Addiction Scale, the participant is asked to mark one of the options of "always", "very often", "mostly", "occasionally", "rarely", and "never". These options' points are 5,4,3,2,1,0, respectively. The minimum point is 0 and the maximum point is 100. The participants with scores between 80-100 are defined as internet addicts. The participants with scores between 50-79 are defined as the ones with limited symptoms and those with scores between 49-0 are defined as the ones with no symptoms (Bayraktar, 2001). The Internet Addiction Scale was translated into Turkish in Bayrakt's (2001) study. The reliability of the scale translated into Turkish was found to be 0.91 in terms of the standardized Alpha value and 0.87 in terms of the Spearman-Brown value. These results suggest that the scale is reliable (Bayraktar, 2001). Cronbach's alpha coefficient for the reliability of the scale was found to be .90 in the present study.

Motivational interviewing psycho-education program. The Motivational interviewing Psycho-Education Program was prepared by the researcher by scanning the literature and taking the opinions of experts. Motivational interview psycho-educational draft program, "Motivational Interviewing", written by William R. Miller and Stephen Rollnick (2009), "a Toolkit of Motivational Skills", written by Catherine Fuller and Philip Taylor (2005), "Building Motivational Interviewing Skills" written by David B. Rosengren (2009), "Curriculum-Based Motivation Group" (2004a) written by Ann Fields, "Enrolling Our Adult Learners Back into School" (2004b), "Motivational

Enhancement Therapy For Problem & Pathological Gamblers" (2004c), "Resolving Patient Ambivalence" (2004d) and "Paradigm Shifts & Corporate Change - All On Board "(2006)," Technology Addiction", written by Ibrahim Akkas (2019), written by Kultegin Ogel (2017)," addiction treatment and basic book", as well as other sources have been reviewed. Draft program from one of the fields of Psychology, Professor, Doctor of psychological counseling and guidance from the field, one a professor, the other an associate professor of psychological counseling and guidance from the field, and their feedback was evaluated by three experts in line with the final shape of the program is given. "Motivational interview psycho-educational program" was created and applied during the "motivational interview principles and techniques, characteristics, elements, tools, principles of application". It is a 10-session program. Motivational interviewing Psycho-Education Program, "T.C. Ministry of Family, Labour and Social Services Sinop Provincial Directorate" was implemented in the training hall. Psycho-Education Programs that were performed are as follows:

Session 1. Introduction and Sharing. Getting to know the group, informing members about the process, sharing expectations, determining personal goals related to the process, determining the rules for the group, being aware that the internet is a tool, enabling group members to speak about their computer usage status, evaluation and session summary.

Session 2. Addiction. Recognizing the concept of addiction, explaining the concept of internet addiction, explaining the concepts of deprivation and control difficulties, noticing the concepts of dysfunction and social isolation in functionality, examining the physical and psychological consequences of internet addiction, evaluation, and session summary.

Session 3. Self-acquaintance. Examining the effect of emotions, thoughts, and behaviors in the addiction process, the ability to notice the correlation between habit and addiction, examining the process of habits turning into an addiction, evaluation, and session summary.

Session 4. Awareness. Making oneself a slave of the computer, putting forward the correlation between the excessive use of the internet and academic success, conscious use of the internet, teaching strategies for using time effectively and productively, implementing the mentioned strategies, determining the functional objectives, evaluation, and session summary.

Session 5. Motivation. Attention, motives, efforts, beliefs, concentrating, developing skills to increase motivation, avoiding false motivation, evaluation, and session summary.

Session 6. Self-control. Understanding the concept of healthy daily use of the internet, teaching the students how to be their therapist, recognizing their strengths, have group sharing about "self-control" skills, evaluation, and session summary.

Session 7. Strategies. Setting an objective, planning, developing problem-solving and effective listening skills, understanding the methods of repeating and remembering, evaluation, and session summary.

Session 8. Life. Recognizing the basic inter-personal skills in social interaction, sharing the place and impact of the internet on the participants' social lives, discussion of ideas about the activities that could be done instead of the internet, developing new life skills, evaluation, and session summary.

Session 9. Limitations. Developing the ability to set limitations, conversations about the past experiences of limitations, discussion of the peer influence in playing on the computer, evaluation, and session summary.

Session10. Conclusion. Summary of the sessions, review of the experiences throughout the process, evaluation of the members' personal developments and group development, ensuring positive emotion at the end of the process, the last activity, and appropriate ending for the group.

Data Analysis

The pre-, post-, and follow-up test scores of the Internet Addiction Scale were organized to test the hypotheses of the study in the experimental and control groups. The data obtained from the study were analyzed for normality. As the data did not show normal distribution, they were evaluated with nonparametric statistics Mann Whitney U Test and Wilcoxon Signed-Rank Tests.

Microsoft Excel 2016, SPSS 22.0 package programs were used in cleaning the data and statistical analysis respectively.

The statistical significance level considered was 0.05.

Required Permissions

A preliminary interview information activity was done, and the Informed Consent Form was administered to the group members.

Permission was obtained for the Internet Addiction Scale which was used as the evaluation tool.

For this research, the ethical committee approval was given by "Human Research Ethics Committee of Sinop University" on January 15, 2018 with decision numbered 2018/13.

The study was funded by the Sinop University Coordinatorship of Scientific Research Projects with the EGTF-1901-18-06 project number dated 18.09.2018, and it was completed and accepted on 27.09.2019.

Results

Hypothesis 1. Motivational Interviewing Psycho-Education Program affected the level of internet addiction of internet-addicted university students in favor of the experimental group at a significant level compared to the level of internet addiction of internet-addicted university students who did not participate in this psycho-education program (control group).

The arithmetic mean of the internet addiction scores of the students who were in the experimental and control groups is indicated in Table 3.

Table 3

The Arithmetic Means and Standard Deviations of the Experimental and Control Groups' Internet Addiction Level Scores

	N	Pre-test		Post-test		Follow-Up Test	
		$\overline{X}$	S	$\overline{X}$	S	$\overline{X}$	S
Experiment	15	88.53	1.12	57.26	1.87	57.13	1.61
Control	15	88.60	1.09	88.47	1.08	88.80	1.06

Given the results indicated in Table 3, it is seen that the arithmetic means of pre-test scores of the internet addiction attitudes were 88.53 for the experimental group and 88.60 for the control group. The arithmetic mean of post-test scores was 57.26 for the experimental group and 88.47 for the control group. The arithmetic means of follow-up test scores were 57.13 for the experimental group and 88.80 for the control group.

Mann-Whitney U Test Analysis was applied to the students' Internet Addiction Post-Test Scores; results are indicated in Table 4.

Table 4

Mann-Whitney U Test Results Regarding the Internet Addiction Post-Test Scores between the Experimental and Control Groups

	N	Mean Rank	Rank Sum	U	p
Experiment	15	8.00	120,00	0.000	0.000
Control	15	23.00	345,00		

$p < 0.001$

Statistical data indicated in Table 4 shows that the difference between the distributions of internet addiction post-test total scores of the individuals in the experimental and control groups was significant at the level of 0.001 in favor of the experimental group. In other words, it was concluded that the internet addiction levels of the students who participated in the motivational interviewing psycho-education program were more positive when compared to the students who did not participate in the motivational interviewing psycho-education program.

This result confirms the first hypothesis of the study.

Hypothesis 2. The post-test total scores of internet addiction levels of internet-addicted university students who participated in the Motivational Interviewing Psycho-Education Program were significantly lower than their pre-test total scores.

The Wilcoxon Signed-Rank test was used to determine whether there was a significant difference between pre-test attitude scores of internet addiction levels of the university students who participated in the motivational interviewing psycho-education program and the post-test attitude scores. The results are indicated in Table 5.

Table 5

Wilcoxon Signed-Rank Tests Results of the Internet Addiction Level Scores of the University Students Who Participated in the Motivational Interviewing Psycho-Education Program

Post-test Pre-test	N	Mean Rank	Rank Sum	z	p
Negative Rank	15	8.00	120,00	-3.412	0.001
Positive Rank	0	0.00	0.00		
Equal	0				

p<.001

As can be seen, indicated in Table 5, internet addiction last-test attitude scores of the university students who participated in the motivational interviewing psycho-education program were significantly different from their pre-test attitude scores ($z=-3.412$, $p<0.001$). In other words, the pre-test and post-test attitude scores of the university students who participated in the motivational interviewing psycho-education program were significantly different. It was seen that the internet addiction attitude levels of all the university students who participated in the motivational interviewing Psycho-Education Program decreased positively when compared to the internet addiction attitude levels before the psycho-education program.

The Wilcoxon Signed-Rank test was used to test whether there was a significant difference between the pre-test and the post-test attitude scores of internet addiction levels of the university students who did not participate in the motivational interviewing psycho-education program. The results are indicated in Table 6.

Table 6

Wilcoxon Signed-Rank Test Results of the Internet Addiction Level Scores of the University Students Who Did Not Participate in the Motivational Interviewing Psycho-Education Program

Post-test Pre-test	N	Mean Rank	Rank Sum	z	p
Negative Rank	7	6.36	44.50	-0.462	0.644
Positive Rank	5	6.70	33.50		
Equal	3				

p>.05

As can be seen, indicated in Table 6, internet addiction last-test attitude scores of the university students who did not participate in the motivational interviewing psycho-education program were not significantly different from their pre-test attitude scores ($z= -.462$, $p>.05$). In other words, the pre-test and post-test attitude scores of the university students who did not participate in the motivational interviewing psycho-

education program were not significantly different. Considering the internet addiction attitude levels of the university students who did not participate in the motivational interviewing psycho-education program, it was seen that the internet addiction levels of seven students decreased, of five students increased, and of three students remained the same compared to their internet addiction levels before the psycho-education program.

The results which were obtained support the 2nd hypothesis of the study.

Hypothesis 3. There was no significant difference between the post-test total scores and the scores of the internet addiction level monitoring test, which was applied six months later, of the internet-addicted university students who participated in the Motivational Interviewing Psycho-Education Program.

The Wilcoxon Signed-Rank test was used to test Whether there was a significant difference between follow-up test attitude scores, which was made six months later, and post-test attitude scores of internet addiction levels of the university students who participated in the motivational interviewing psycho-education program. The analysis results are indicated in Table 7.

Table 7

Wilcoxon Signed-Rank Tests Results Regarding the Scores of Internet Addiction Post-Test and Follow-Up Test of the University Students Who Participated in the Motivational Interviewing Psycho-Education Program

Post-test Follow-up Test	N	Mean Rank	Rank Sum	z	p
Negative Rank	7	7.07	49.50	-0.282	0.778
Positive Rank	6	6.92	41.50		
Equal	2				

p>0.05

As can be seen indicated in Table 7, internet addiction follow-up test attitude scores of the university students who participated in the motivational interviewing psycho-education program were not significantly different from their post-test attitude scores (z= -282, p>0.05). In other words, the follow-up test and post-test attitude scores of the university students who participated in the motivational interviewing psycho-education program were not significantly different.

The Wilcoxon Signed-Rank test was used to test whether there was a significant difference between the follow-up test and the post-test attitude scores of internet addiction levels of the students who were studying in university and who did not participate in the motivational interviewing psycho-education program. The results are indicated in Table 8.

Table 8

Wilcoxon Signed-Rank Tests Results Regarding the Scores of Internet Addiction Post-Test and Follow-Up Test of the University Students Who Did Not Participate in the Motivational Interviewing Psycho-Education Program

Post-test Follow-up Test	N	Mean Rank	Rank Sum	z	p
Negative Rank	7	6.64	49.50	-0.382	0.703
Positive Rank	7	8.36	58.50		
Equal	1				

p>0.05

As can be seen, indicated in Table 8, internet addiction last-test attitude scores of the university students who did not participate in the motivational interviewing psycho-education program were not significantly different from their pre-test attitude scores (z= -0.382, p>0.05). In other words, the post-test and follow-up test attitude scores of the university students who did not participate in the motivational interviewing psycho-education program were not significantly different.

The results which were obtained support the 3rd hypothesis of the study.

Discussion, Conclusion, and Recommendations

The present study found the following results: The difference between the post-test mean attitude scores which were adjusted according to the internet addiction pre-test was significant. The experimental psycho-education program that was applied caused a difference in the internet addiction levels of university students. The internet addiction of the students who participated in the psycho-education program for preventing internet addiction was more positive when compared to the students who did not participate in the psycho-education program for preventing internet addiction. Along with this, it was found that pre-test scores of internet addiction level were not a significant predictor of the post-test scores, and there was a significant difference between the pre-test and post-test attitude scores of the university students who participated in the psycho-education program for preventing internet addiction. Internet addiction of the students who participated in the psycho-education program for preventing internet addiction was decreased positively when compared to their internet addiction before the psycho-education program. There was no significant difference between the internet addiction post-test total scores and follow-up test scores which were applied six months later in the students in the experimental group who participated in the psycho-education program for preventing internet addiction. While these results support the hypothesis of the study, it can be interpreted that motivational interviewing Psycho-Education Program is effective in reducing the leaning towards internet addiction.

A total of four studies "aimed at reducing internet addiction of university students" were found in the domestic and international literature survey. The first is also a study that examines the impact of motivational interviewing on college students' internet

addiction. According to research, a pilot program was initiated to explore the possibility of using an existing Cognitive Behavioral Therapy and Motivational Interviewing based treatment program ('Lifestyle Training') to treat internet addiction. The current study evaluates this pilot treatment program by providing a qualitative analysis of the experiences of the therapists with the treatment of 12 self-proclaimed internet addicts. Therapists report that the program, which is ordinarily used for substance dependence and pathological gambling, fits the problem of internet addiction quite well. Interventions mainly focused on controlling and reducing internet use and involved expanding (real-life) social contacts, regaining a proper daily structure, constructive use of free time, and reframing beliefs. Therapists further indicated that the treatment achieved some measure of progress for all of the 12 treated patients, while patients reported satisfaction with the treatment and actual behavioral improvements (Van Rooij et al., 2012). The result of the study, similar to the result of our study, shows that the "motivational interview-based internet addiction training program" has an effective result in reducing internet addiction. This finding supports our conclusion.

Dicle (2018) stated that Psycho-Education Program for Preventing Internet Addiction was effective in reducing/decreasing the internet addiction levels of internet-addicted students. The results are similar to the results of the present study. Maheri & Sadeghi, (2017), according to the high prevalence of internet addiction among university students, this study aimed to determine the effect of an educational intervention on preventive behaviors of internet addiction among Tehran University of Medical Sciences students. This study was a quasi-experimental study conducted among female college students who live in the dormitories of Tehran University of Medical Sciences. Two-stage cluster sampling was used for the selection of eighty participants in each study group. Data were collected using "Young's Internet Addiction" and an unstructured questionnaire. Similar to the results of our research, after the intervention, the mean scores of internet addiction, perceived barriers construct, and the prevalence of internet addiction significantly decreased in the intervention group than that in the control group and the mean scores of knowledge and Health Belief Model (HBM) constructs (susceptibility, severity, benefits, self-efficacy) significantly increased (Maheri & Sadeghi, 2017). This result is similar to the findings of our study. Jong-Un (2008), using a computer and internet addiction group guidance study based on reality therapy, which he conducted with university students, concluded that internet addiction levels of the students decreased. This result supports the findings of our study.

Since "no other studies aimed at reducing internet addiction of college students" were found in the literature review, studies aimed at reducing internet addiction of adolescence and high school students were also included.

Arar (2018) found that in the study "the impact of the psycho-education program for coping with internet addiction on the use of internet in 10th-grade students in high schools" that internet addiction decreased significantly in favor of the experimental group. Berdibayeva et al. (2016) applied a psycho-education program for preventing internet addiction in high school students aged between 15-17 and found that there

was a decrease in the number of students with a tendency to internet addiction in the experimental group as a result of the application. Berber Celik (2016) conducted a psycho-education program for reducing the internet addiction tendency with the high school students aged between 15-18; at the end of the application, there was a significant difference between the experimental group's pre-, post-, and follow-up tests which were obtained from the problematic use of internet-scale, when compared to the control group. Additionally, the researcher wanted to see the permanence by using the follow-up test and found that post-test and follow-up test scores were significantly low when compared to the pre-test scores. Andrisano Ruggieri et al. (2016) conducted an internet addiction peer education program, which lasted for 3 hours every week for a year. According to the results which were obtained at the end of the study, a significant decrease was seen in the post-test scores of the experimental group when compared to their pre-test scores. Tas (2015) found in his study of ''the impact of the psycho-education program for reducing the psychological symptoms on internet addiction in adolescents'' that the psycho-education program for reducing the psychological symptoms was effective in reducing the internet addiction and psychological symptoms. Iskender (2013) found in his study "the impact of the human values-oriented psycho-education program on problematic use of the internet and cyber-bullying" that human values-oriented psycho-education program was effective in reducing the level of problematic use of the internet. Gyeong Ran & Hee Sook (2010) carried out a study in which they provided psychological counseling to a group of high school students which was formed to prevent internet addiction. The group went through 10 counseling sessions each of which lasted 50 minutes. There was a meaningful difference between the internet addiction scores of the control group and the experimental group in favor of the experimental group. When the research results are examined, the results of psycho-educational studies conducted with adolescents and high school students aimed at reducing internet addiction show similar findings to our study. This explains that the results of our study are supported by the literature.

Internet addiction psycho-education program, developed based on motivational interview technique, has enabled internet-addicted university students to accept that responsibility and ability for change are within themselves. It has helped them discover and resolve their ambivalence. It eliminated the ambivalence they experienced. By increasing their internal motivation, they decreased their external motivation. It allowed them to reveal behavioral changes. A central component of motivational interviewing is providing individualized feedback to internet addicts about their internet use and associated risk. The effectiveness of the created psycho-education program in combating internet addiction has been demonstrated. It also shows that the internet addiction psycho-education program based on motivational interviewing promotes a reduction in internet addiction even six months after the intervention is administered.

The present study found that motivational interviewing psycho-education program was effective in reducing/decreasing the internet addiction levels of the internet-addicted university students and that this effect continued till the follow-up

test that was applied six months later. The information in the literature also supports this result.

This research has some limitations like other researches. Findings of students participating in the survey are limited to qualities measured by the measuring instruments used. The results of this experimental study can only be generalized to university students with similar characteristics. Also, a follow-up test was conducted once to test the permanence of the study. Longer-term follow-up testing can be done. A placebo group was not created. A placebo group can be formed and compared with the experimental and control groups. Psychological counseling centers at universities can develop psycho-education programs and apply them to internet addiction and other addictions. The effectiveness of the technique and program which are used in different age groups or at different levels of education can be tested. In the case of its implementation in other experimental studies, it may contribute to the validity of the results of this research. Finally, it is suggested that researchers who will work on motivational interviewing should know "motivational interview principles and techniques, characteristics, elements, tools, and principles of application".

References

Akkas, I. (2019). *Teknoloji bagimliligi*. Salon Yayinlari.

Aksoy, V. (2015). Internet bagimliligi ve sosyal ag kullanim duzeylerinin fen lisesi ogrencilerinin demografik ozelliklerine gore degisimi ve akademik basarilarina etkisi. *Akademik Sosyal Arastirmalar Dergisi, 3*(19), 365-383.

Andrisano Ruggieri, R., et al. (2016). Internet addiction: A prevention action-research intervention. *Epidemio-logy Biostatistics and Public Health,* 13(3), 1–5.

Arar, M. (2018). *Internet bagimliligi ile basa cikma psiko-egitim programinin lise 10. siniflarinda internet kullanimina etkisi*. Yayimlanmamis yuksek lisans tezi. Lefke Avrupa Universitesi. Lefke.

Arisoy, O. (2009). Internet bagimliligi ve tedavisi. *Psikiyatride Guncel Yaklasimlar,* 1(1): 55-67.

Aslan, E., & Yazici, A. (2016). Universite ogrencileri arasinda internet bagimliligi ve ilgili sosyodemografik faktorler. *Turk Klinik Psikiyatri Dergisi*, *19*(3), 109-117.

Aviram, A. & Westra, H.A. (2011). The impact of motivational interviewing on resistance in cognitive behavioural therapy for generalized anxiety disorder. *Psychother Res., 21*, 698-708.

Baker, A., et al. (2006). Cognitive-behavioural therapy for substance use disorders in people with psychotic disorders: randomised controlled trial. *The British Journal of Psychiatry*, *188*(5), 439-448.

Bayraktar, F. (2001). *Internet kullaniminin ergen gelisimindeki rolu*. Yayinlanmamis yuksek lisans tezi. Ege Universitesi Sosyal Bilimler Enstitusu. Izmir.

Berber Celik, C. (2016). Educational intervention for reducing internet addiction tendencies. *Addicta: The Turkish Journal on Addictions, 3*, 375–386.

Berdibaeva, S., et al. (2016). Psychological prevention of older adolescents' interpersonal relationships, who are prone to internet addiction. *Procedia-Social and Behavioral Sciences, 217*, 984–989. http://dx.doi. org/10.1016/j.sbspro.2016.02.081.

Buyukozturk, S. (2001). *Deneysel desenler ontest – sontest kontrol grubu desen ve veri analizi*. Ankara: Pegem A Yayincilik.

Buyukozturk, S., et al. (2014). *Bilimsel arastirma yontemleri*. (18th ed.). Ankara: Pegem Akademi.

Castro Calvo, J., et al. (2016). Common etiological pathways between toxic substance use, internet and cybersex addiction: The role of expectancies and antisocial deviance proneness. *Computers in Human Behavior*, 63, 383–391.

Cengizhan, C. (2005). Ogrencilerin bilgisayar ve internet kullaniminda yeni bir boyut: "Internet bagimliligi". *Marmara Universitesi Ataturk Egitim Fakultesi Egitim Bilimleri Dergisi*, 22(22), 83-98.

Dicle, A.N. (2015). *Motivasyonel gorusme uygulamalari*. Turkiye Alim Kitaplari. Saarbrucken, Deutschland / Almanya.

Dicle, A.N. (2017). Motivasyonel gorusme: Ogeler, ilke ve yontemler. *Journal of Social And Humanities Sciences Research (JSHSR),* 4(15), 2043 - 2053. Doi: http://dx.doi.org/10.26450/jshsr.299.

Dicle, A.N. (2018). Internet bagimliligini onleme psiko-egitim programinin universite ogrencilerine etkisi. *The Journal of Academic Social Science*, 6 (85), 271-284.

Dinc, A., & Askin, A. (2018) Internet addiction among vocational students in Canakkale; example of Biga Vocational School/ Canakkale'de meslek yuksekokulu ogrencileri arasinda internet bagimliligi; Biga Meslek Yuksekokulu ornegi. *Journal of Human Sci*ences, 15(1), 112-122.

Fields, A. (2004a). *Curriculum-based motivation group*, Washington: Hollifield Associates.

Fields, A. (2004b). *Enrolling our adult learners back into school*. Washington: Hollifield Associates.

Fields, A. (2004c). *Motivational enhancement therapy for problem & pathological gamblers*. Washington: Hollifield Associates.

Fields, A. (2004d). *Resolving patient ambivalence*. Washington: Hollifield Associates.

Fields, A. (2006). *Paridigm shifts & corporate change - all on board*. Washington: Hollifield Associates.

Fuller, C., & Taylor, P. (2005). *A toolkit of motivational skills*. 2nd Edition, England: John Wiley & Sons Ltd.

Goldberg, I. (1996). *Internet addiction disorder*, http://users.rider.edu/~suler/psycyber/supportgp.html, 23.05.2019.

Gonul, A.S. (2002). Patolojik internet kullanimi. *Yeni Symposium, 40:*105-110.

Griffiths, M.D., et al. (2016). The evolution of internet addiction: A global perspective. *Addiction Behaviroal, 53*:193-195.

Gunay, O., et al. (2018). Internet addiction and depression levels in Erciyes University Students, *Dusunen Adam The Journal of Psychiatry and Neurological Sciences, 31*: 79-88. https://doi.org/10.5350/DAJPN2018310108.

Gyeong Ran, P., & Hee Sook, K. (2011). Effects of a group counseling integration program on self-determination and internet addiction in high school students with tendency to inter-net addiction. *Journal of Korean Academy of Nursing, 41*(5), 694–703.

Hasan, A.A.H., & Jaber, A.A. (2020). The relationship between internet addiction, psychological distress, and coping strategies in a sample of Saudi undergraduate students. Perspectives in psychiatric care, 56(3), 495-501.

Hendekci, A. & Avci, I.A. (2020). The relationship between internet addiction and nutrition exercise behaviors in adolescents. *Ankara Medical Journal*, 20(2): 315-326.

Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (2008). *Research design in counseling*. (3rd ed.). USA: Thomson, Belmont. C.A.

Iskender, M. (2013). *Insani degerler yonelimli psiko-egitim programinin problemli internet kullanimi ve siber zorbalik uzerindeki etkisi*. (Yayimlanmamis doktora tezi). Sakarya Universitesi, Sakarya.

Jong-Un, K. (2008). The effect of art group counseling program on the internet addiction level and self esteem of internet addiction university students. *International Journal of Reality Therapy, 27*(2), 4-12.

Karasar, N. (2014). *Bilimsel arastirma yontemi.* (27th ed.). Ankara: Nobel Yayin Dagitim.

Li, L., et al. (2018). Prevalence of internet addiction disorder in Chinese university students: A comprehensive meta-analysis of observational studies. *Journal Of Behavioral Addictions*, 7(3), 610-623.

Maheri, A., Tol, A., & Sadeghi, R. (2017). Assessing the effect of an educational intervention program based on Health Belief Model on preventive behaviors of internet addiction. *Journal of Education and Health Promotion*, 6.

Mansuroglu, S. & Tambag, H. (2019). The determination of internet addiction and violence tendency level among aolescents. *Internatioal Social Sciences Studies Journal*, 5(51): 6916-6925.

Miller, W.R. & Rollnick, S. (2009). *Motivasyonel Gorusme*, Figen Karadag, Kultegin Ogel, Ahmet Ertan Ozcan (Ceviri Ed.), Ankara: HYB Basim Yayin.

Niemz, K., Griffiths, M., & Banyard, P. (2005). Prevalence of pathological internet use among university students and correlations with self-esteem, the General Health Questionnaire (GHQ), and disinhibition. *Cyberpsychology & Behavior*, 8(6), 562-570.

O'Reilly, M. (1996). Internet addiction: A new disorder enters the medical lexicon. *CMAJ, 154*(12):1882-1883.

Ogel, K. ((2012). *Internet bagimliligi: Internetin psikolojisini anlamak ve bagimlilikla basa cikmak*. Turkiye Is Bankasi Kultur Yayinlari. Istanbul.

Ogel, K. (2017). *Bagimlilik tedavisi ve temel kitabi*. IQ Kultur Sanat Yayincilik.

Ozcan, S. (2009). *Denetimli serbestlik uygulamasinda motivasyonel gorusmelerin etkinligi*. Yayimlanmamis yuksek lisans tezi. Izmir: Ege Universitesi.

Ozparlak, A. & Karakaya, D. (2020). Internet addiction in adolescents: A systematic review of nursing studies. *Journal of Psychosocial Nursing and Mental Health Services*, 58(3), 47-55.

Ozturk, O., et al. (2007). Internet bagimliligi: Klinigi ve tedavisi. *Bagimlilik Dergisi*, 8:36-41.

Puri, A. & Sharma, R. (2016). Internet usage, depression, social isolation and loneliness amongst adolescents. *Indian Journal of Health and Wellbeing*, 7(10), 996-1003.

Rollnick, S., Miller, W.R. & Butler, C.C. (2008). *Motivational interviewing in health care: Helping patients change behavior*. New York: The Guilford Press.

Rosengren, D. B. (2009). *Building motivational interviewing, skilss: A pradictioner workbook*. New York: The Guilford Press.

Sally, L. P. M. (2006). *Prediction of internet addiction for undergraduates in Hong Kong*. Baptist University, Hong Kong, UMI Dissertation Information Service.

Scott, R. (2010). *Motivational interviewing: An emerging trend in medical management*. An Action Guide to Eliciting Powerful Behavior Change Professional Patient Advocate Institute, Dorland Health. www.patientadvocatetraining.com. (Erisim tarihi: 13.12.2017).

Sezen, M. F. & Murat, M. (2018). Ergenlerde akran zorbaligi, internet bagimliligi ve duygusal zekâ duzeyleri arasindaki iliskinin incelenmesi. *OPUS–Uluslararasi Toplum Arastirmalari Dergisi*, 9(16), 160-182. DOI: 10.26466/opus.476629.

Shapira, N.A., et al. (2003). Problematic internet use: Proposed classification and diagnostic criteria. *Depression and Anxiety, 17*(4): 207-216.

Shen, Y., et al. (2020). Internet addiction among college students in a Chinese population: Prevalence, correlates, and its relationship with suicide attempts. *Depression and Anxiety,* 1–10.

Sommers-Flanagan, J., Sommers-Flanagan, R. (2015). *Klinik gorusme*. Cevirenler: Akbas, G., Korkmaz, L. Istanbul: Deniz Ofset Matbaacilik.

Tari Comert, I. (2010). Diger bagimliliklar: Bilgisayar ve internet bagimliligi. Ed: Ogel K. *Sigara, alkol ve madde kullanim bozukluklari: Tani, tedavi ve onleme.* Istanbul: Yeniden Yayinlari. 15-27.

Tas, I. (2015). *Psikolojik belirtileri azaltmaya yonelik psikoegitim programinin ergenlerde internet bagimliligina etkisi.* Yayimlanmamis doktora tezi. Sakarya Universitesi, Sakarya.

Turkiye Istatistik Kurumu (TUIK), (2020). https://data.tuik.gov.tr/Bulten/Index?p=Hanehalki-Bilisim-Teknolojileri-(BT)-Kullanim-Arastirmasi-2020-33679. (Erisim Tarihi:18.10.2020)

Tutgun Unal, A. (2015). *Sosyal medya bagimliligi: Universite ogrencileri uzerine bir arastirma.* Yayimlanmamis doktora tezi. Marmara Universitesi Sosyal Bilimler Enstitusu, Istanbul.

Van Rooij, A. J., et al. (2012). Treating internet addiction with cognitive-behavioral therapy: A thematic analysis of the experiences of therapists. *International Journal of Mental Health and Addiction*, 10(1), 69-82.

Van Rooij, A.J., et al. (2017). Time to abandon internet addiction? Predicting problematic internet, game and social media use from psychosocial well-being and application use. *Clinical Neuropsychiatry, 14*:113-121.

Wan Ismail, W. S., et al. (2020). The relations of internet and smartphone addictions to depression, anxiety, stress, and suicidality among public university students in Klang Valley, Malaysia. *Perspectives in Psychiatric Care*, 56(4), 949-955.

Young, K. S. (1996). Internet addiction: The emergence of a new clinical disorder. *Cyber Psychology and Behavior, 1*(3): 237-244.

Young, K.S. (2004). Internet addiction: A new clinical phenomenon and its consequences. *American Behavioral Scientist (ABS); 48,* 402-415.

İnternet Bağımlılığını Azaltmada Eğitsel Bir Yaklaşım: Motivasyonel Görüşme Psiko-Eğitim Programı

Atıf:

Özet

Problem Durumu: İletişim ihtiyacının hızla gelişen teknoloji ve internet kullanımı ile daha kolay ve konforlu bir şekilde giderilmeye çalışılması, internetin çok fazla kullanılmasına ve bunun sonucunda bağımlılığın gelişebilmesine sebep olmuştur. Son yıllarda özellikle çocuklarda ve ergenlerde internet kullanımının yaygınlaşması dikkat

çekmektedir. Bu iletişim ağı, verimli ve uygun seviyede kullanılmadığı takdirde oldukça önemli problemlere yol açmakla birlikte, dolaylı olarak toplumsal yapıda da olumsuzluklara yol açacaktır. Doğru olmayan internet kullanımının, internet bağımlılığı kavramını ortaya çıkardığı da belirtilmiştir. İnternet bağımlılığı bir madde kullanımı söz konusu olmaması sebebiyle dürtü-kontrol bozukluğu durumu olduğu için patolojik kumar bağımlılığına benzemektedir. Patolojik kumar oynamada görülen yoksunluk belirtileri gibi internet bağımlılığında da yoksunluk belirtilerine rastlanmaktadır. Patolojik internet kullanımı; aşırı internet kullanımı, uygun olmayan İnternet kullanımı gibi farklı biçimlerde isimlendirilmektedir fakat internet bağımlılığı APA tarafından henüz bir hastalık olarak tanımlanmamaktadır. İnternet bağımlılığı terimi ilk olarak Goldberg tarafından DSM-IV'te yer alan madde bağımlılığı tanı kriterlerinin internet kullanımı için uyarlanmasıyla kullanılmıştır. İnternet bağımlılığı, Young tarafından "İnternetin aşırı kullanılması isteğinin önüne geçilememesi, internete bağlı olmadan geçirilen zamanın önemini yitirmesi, yoksun kalındığında aşırı sinirlilik hali ve saldırganlık olması ve kişinin iş, sosyal ve ailevi hayatının giderek bozulması" olarak tanımlanmıştır. Bağımlılık internete değil, içeriğine ve sunduğu olanaklara karşı gelişmektedir. İnternet kullanımı başlarda yalnızca bireylere sağladığı imkânlar doğrultusunda değerlendirilmekteyken, daha sonraları bireylerin internette çok fazla zaman harcamaları, bilinçsizce kullanımları ve bir türlü bu durumdan kurtulamamaları gibi sorunlar neticesinde internet kullanımının niteliği üzerine odaklanılmaya başlanmıştır Klinik bir yöntem olan Motivasyonel Görüşme ilk kez 1983 yılında tanımlanmış, başlangıçta alkol problemi olan hastaların motivasyonunu değiştirmek için kısa süreli bir müdahale yöntemi olarak geliştirilmiştir. 1990'ların başlarından itibaren motivasyonel görüşme, diğer sağlık sorunları ile birlikte, kronik hastalıklarda önemli olan davranış değişikliğinin hastanın motivasyonunda genel bir sorun teşkil etmesiyle birlikte, diğer problemlerle baş etmek için de kullanılmaya başlanılmıştır. Motivasyonel Görüşme, danışanların ambivalansı keşfedip çözümlemelerine yardımcı olarak davranış değişikliğini ortaya çıkartmak için kullanılan, direktif ve danışan merkezli bir yaklaşımdır. Motivasyonel Görüşme Tekniği de odağını ambivalansın çözümüne dayandırır. Motivasyonel Görüşme, kişilerin sorunlarını anlamalarını ve değişim amacıyla eyleme geçmelerini sağlamak için yapılan yardımın özel bir yoludur. Bu yöntem, özellikle değişim için isteksiz olan veya ambivalans olan kişilerde kullanışlı bir yöntemdir. Motivasyonel Görüşme tekniğinin temel hedefi, kişilerin davranış değişimini sağlamak amacıyla onların keşfetmelerine ve çözmelerine yardım etmektir. Bu değişim içinde, dışsal motivasyonların etkinliği sınırlı olduğundan, dışsal motivasyonu içsel motivasyona dönüştürmek önemlidir. Alan yazın tarandığında araştırma sonuçları internet bağımlılarının, bağımlı olmayanlara nazaran akademik, sosyal ve kişilerarası ilişkilerinde daha fazla problem yaşamakta olduklarını da ortaya koymuştur. Bu çalışma sonuçlarından yola çıkarak internet bağımlılığı ile ilgili yapılan çalışmaların daha çok durum tespitine yönelik tarama çalışmaları olduğu ancak çözüme yönelik çalışmaların az olduğu göze çarpmaktadır. Bu nedenle özellikle çözüme yönelik uygulamalı çalışmaların eksikliğini kapatmaya yönelik olan bu araştırma internet bağımlısı üniversite öğrencilerine grup yaşantısı yoluyla ve literatür ışığında, internet bağımlılıklarını önleyebilmek düşüncesiyle hazırlanan bir "Motivasyonel Görüşme Psiko-Eğitim Programı" nın etkililiğini ortaya koymaya yönelik olarak yapılmıştır.

Araştırmanın Amacı: Araştırmacı tarafından Motivasyonel Görüşme tekniğine dayalı olarak hazırlanmış Motivasyonel Görüşme Psiko-Eğitim Programının üniversite öğrenimi görmekte olan internet bağımlısı üniversite öğrencilerinin internet bağımlılık düzeylerine olan etkisinin incelenmesidir. Bu amaç doğrultusunda aşağıda ifade edilen soruya yanıt aranmaktadır.

Motivasyonel Görüşme Psiko-Eğitim Programı üniversite öğrenimi görmekte olan internet bağımlısı üniversite öğrencilerinin internet bağımlılık düzeylerini etkilemekte midir?

Yukarıdaki problem cümlesinden yola çıkarak şu denenceler oluşturulmuştur.

1. Motivasyonel Görüşme Psiko-Eğitim Programı, Motivasyonel Görüşme Psiko-Eğitim Programına üniversite öğrenimi görmekte olan internet bağımlısı üniversite öğrencilerinin internet bağımlılık düzeylerini, bu uygulamalara katılmayan (kontrol grubu) üniversite öğrenimi görmekte olan internet bağımlısı üniversite öğrencilerinin internet bağımlılık düzeylerine göre anlamlı düzeyde deney grubu lehine etkiler.

2. Motivasyonel Görüşme Psiko-Eğitim Programına katılan üniversite öğrenimi görmekte olan internet bağımlısı üniversite öğrencilerinin internet bağımlılık düzeyleri son-test toplam puanları, ön-test toplam puanlarına göre anlamlı düzeyde düşüktür.

3. Motivasyonel Görüşme Psiko-Eğitim Programına katılan üniversite öğrenimi görmekte olan internet bağımlısı üniversite öğrencilerinin internet bağımlılık düzeyleri son-test toplam puanları ile altı ay sonra uygulanan internet bağımlılık düzeyleri izleme testi puanları arasında anlamlı bir farklılık bulunmamaktadır.

Araştırmanın Yöntemi: Araştırmada "Kontrol Gruplu Ön-test - Son-test ve İzleme Testi Modele" dayalı deneysel desen kullanılmıştır. Üniversite öğrenimi görmekte olan internet bağımlısı 15'i deney 15'i kontrol toplam 30 genç çalışma grubunu oluşturmaktadır. Her iki grup 6 kadın 9 erkek toplam 15 er üyeden oluşmuştur. Üyelerden 6 tanesi 18, 5 tanesi 19, 10 tanesi 20, 7 tanesi 21 ve 2 tanesi 22 yaşındadır. Üyelerden 10 tanesi sayısal, 12 tanesi sözel, 8 tanesi eşit ağırlıklı bölümlerde eğitim almaktadır. Üyelerin akademik genel not ortalamaları 2.13 ile 3.07 arasında dağılmaktadır. Üyelerden 16 tanesi kendisini yalnız hissetmekte 14 tanesi ise yalnız hissetmemektedir. Üyelerin 8 tanesi algıladıkları aile gelir düzeyini düşük, 16 tanesi algıladıkları aile gelir orta ve 6 tanesi algıladıkları aile gelir düzeyini yüksek olarak belirtmişlerdir. Üyelerin anne babalarının 4 tanesi tutarsız, 6 tanesi aşırı koruyucu, 12 tanesi otoriter, 8 tanesi hoşgörülü anne-baba tutumları sergilediklerini ifade etmişlerdir. Üyelerden 18 tanesi günlük sigara kullanma alışkanlıklarının olduğunu, 12 tanesi ise sigara kullanmadıklarını belirtmiştir. Üyelerden 14 tanesi düzenli alkol kullandıklarını 16 tanesi ise alkol kullanmadıklarını ifade etmişlerdir. Deney grubu ile Motivasyonel Görüşme Psiko-Eğitim Programı 5 hafta haftada iki kez ortalama 120-150 dakikalık oturumlar şeklinde 10 oturum olarak gerçekleştirilmiştir. Kontrol grubu ile hiçbir çalışma yapılmamıştır.

Araştırmanın Bulguları: Motivasyonel görüşme uygulamasına katılan üniversite öğrencilerinin motivasyonel görüşme uygulamasına katılmayan üniversite öğrencilerine göre internet bağımlılık düzeyleri daha düşük olduğu sonucuna varılmıştır. Motivasyonel görüşme Psiko-Eğitim Programına katılan üniversitede öğrenimine devam eden üniversite öğrencilerinin tamamının uygulama sonrası internet bağımlılık düzeyleri uygulama öncesi internet bağımlılık düzeylerine göre olumlu yönde düştüğü görülmüştür. Motivasyonel görüşme Psiko-Eğitim Programına katılmayan üniversitede öğrenimine devam eden üniversite öğrencilerinin yedisinin uygulama sonrası internet bağımlılık düzeyleri uygulama öncesi internet bağımlılık düzeylerine göre düştüğü, beşinin arttığı, üçünün ise değişmediği görülmüştür. Motivasyonel görüşme uygulamalarına katılan üniversitede öğrenimine devam eden üniversite öğrencilerinin internet bağımlılık izleme testi tutum puanları ile son-test tutum puanları anlamlı bir şekilde farklılaşmamaktadır. Motivasyonel görüşme Psiko-Eğitim Programına katılmayan üniversitede öğrenimine devam eden üniversite öğrencilerinin internet bağımlılık son-test tutum puanları ile izleme tutum puanları anlamlı bir şekilde farklılaşmamaktadır.

Araştırmanın Sonuçları ve Önerileri: Araştırmamız bulgularına göre, internet bağımlısı üniversite öğrencilerinin internet bağımlılığı düzeylerinin azalmasında/düşmesinde motivasyonel görüşme psiko-eğitim programının etkili olduğu ve bu etkinin altı ay sonra alınan izleme ölçümünde de devam ettiği sonucuna varılmıştır. Bu araştırmanın diğer araştırmalar gibi bazı sınırlılıkları vardır. Envanter uygulanan öğrencilerin bulguları, kullanılan ölçme araçlarının ölçtüğü niteliklerle sınırlıdır. Bu deneysel çalışmanın sonuçları sadece benzer özelliklere sahip üniversite öğrencileri için genelleştirilebilir. Çalışmanın kalıcılığını test etmek için bir kez izleme testi yapılmıştır. Daha uzun süreli izleme testleri yapılabilir. Bir plasebo grubu oluşturulmamıştır. Bir plasebo grubu oluşturulabilir ve deney ve kontrol grupları ile karşılaştırılabilir. Üniversite Psikolojik Danışma ve Rehberlik Merkezleri psiko-eğitim programları geliştirebilir ve bunları internet bağımlılığı ve diğer bağımlılıklara uygulayabilir. Farklı yaş gruplarında veya farklı eğitim düzeylerinde kullanılan teknik ve programın etkililiği test edilebilir. Bu karşılaştırma, bu araştırmanın sonuçlarının geçerliliğine katkıda bulunabilir. Son olarak, motivasyonel görüşme üzerinde çalışacak araştırmacıların, motivasyonel görüşme ilkeleri ve teknikleri, özellikleri, unsurları, araçları, uygulama ilkeleri"ni bilmeleri önerilmektedir.

Anahtar Kelimeler: bağımlılık, üniversite öğrencisi, eğitim, deneysel yöntem.

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