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ORIGINAL ARTICLE

Examination of the Predictor Role of Impulsiveness and Avoidance in Internet Addiction with Mixed Methods

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Main Points

- Internet addiction and impulsivity are correlated.
- Internet addiction and experiential avoidance are correlated.
- Internet addiction has many negative outcomes.

Abstract

The aim of this study was to examine the predictive role of impulsivity and avoidance in the internet addiction of university students using a mixed method. The explanatory sequential design, one of the mixed research methods, was used in the study. As data collection tools, the Internet Addiction Scale, Barratt Impulsivity Scale Short-Form, Multidimensional Experiential Avoidance Questionnaire-30, and Personal Information Form were used. The difference between the internet addiction levels of female and male students was not significant. Positive correlations were found between the Internet Addiction Scale and the Barratt Impulsivity Scale Short-Form sub-dimensions of being unable to plan, motor, attention, suppression of the meaq-30 scale sub-dimensions, disliking distress, and procrastination. A negative correlation was found between the Internet Addiction Scale and the sub-dimension of bothering. The independent variables significantly predicted internet addiction. Four themes were determined about the effects of internet addiction. Regarding the effects of experiential avoidance on internet addiction, two themes were found. When the findings in both the qualitative and quantitative stages of the study were considered together, it was concluded that impulsivity and experiential avoidance had an effect on internet addiction.
Keywords: Avoidance, impulsiveness, internet addiction, mixed method, university students

Introduction

The internet is considered as an important tool in terms of broadcasting, disseminating information, connecting, and providing an interactive environment, regardless of the geographical location (Leiner et al., 2009). The internet has become increasingly involved in the vital activities of individuals. The amount of internet used determines whether usage behaviors are appropriate, problematic, or addictive (Colon-Rivera, 2020). Internet addiction can be defined as a behavioral model of internet usage that is not explained by another disorder and that accompanies significant psychosocial disorders and involves a dysfunctional craving for internet use for unregulated and excessive periods (Kuss & Pontes, 2018). Definitions of internet addiction vary greatly, but experts have generally acknowledged that internet addicts spend a lot of time online and using the internet has become one of the most important things in their lives (Nakaya, 2015). Young adult individuals starting university may be venturing outside of their family and home environment for the first time in their lives. This allows them to experience new freedoms and a variety of personally chosen lifestyle options. Individuals may turn to the internet during this period. For these reasons, one of the important factors that increase the risk of internet addiction is thought to be student life (Kuss & Griffiths, 2014). The consequences of internet addiction include a decrease in academic achievement

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and in psychological well-being and a deterioration of interaction with peers and family members (Sato, 2006). As with other types of addiction, the family, close circle, work, and school friends of internet addicts may suffer from their excessive behaviors, while the addicts themselves may not admit that they are experiencing a disorder or ignore the disturbances they experience (Eidenbenz, 2007). While people act according to their impulses, they know the consequences of their behavior, but they distort the valuation of these results internally (Ainslie, 1975). Therefore, another group at risk for internet addiction is individuals with high impulsiveness.

Impulsivity, defined as an action performed without adequate predictions, is a common aspect of normal and abnormal human behavior (Talpos et al., 2006). Individuals with high impulsiveness tend to act spontaneously, behave involuntarily, and have high sensitivity to rewards (Wang et al., 2017). It is thought that impulsive individuals are also at risk of internet addiction because they are more likely to turn to virtual reality (Obeid et al., 2019). The features of internet addiction include arousal, impulsiveness, and compulsivity (Colon-Rivera, 2020). In addition, in the recent literature findings, it was stated that the relationship between internet addiction and impulsiveness is consistently supported (Kawa & Shafi, 2015). Impulsiveness has been associated with many psychological disorders (Winstanley, 2007). Examples of these include obsession, alexymitis (Özen & Topcu, 2017), and the dark triad of Machiavellianism, narcissism, and psychopathy (Satıcı et al., 2019). In addition, individuals with high impulsiveness can be thought to be prone to avoidance behavior (Berghoff et al., 2012) and internet addiction (Li et al., 2016).

Internet addiction is thought to be associated with avoidance as a negative coping mechanism (Servidio et al., 2018). Since avoidance can affect other factors, it is one of the most important psychological factors that predispose individuals to addiction. Experiential avoidance, which is one of the basic features of addictive tendency, is avoiding situations or stimuli that lead to anxiety (Shameli & Sadeghzadeh, 2019). Experiential avoidance basically refers to the individual's desire to avoid or get rid of unwanted "subjective experiences" and everything he/she does to achieve this (Harris, 2019). Experiential avoidance is one of the important concepts in acceptance and commitment therapy (Yavuz, 2015). People experience events in which they feel pain and distress during their life (Avşaroğlu & Koç, 2019). Experiential avoidance includes not wanting to stay in touch with subjective experiences, such as painful thoughts and emotions, and it is important to evaluate it because it is generally effective in the development and maintenance of psychopathology (Chawla & Ostafin, 2007). Experiential avoidance is associated with a fear of negative evaluations, somatic cues, the meaning of thoughts and traumatic events, contextual stresses, and procrastination (Hayes-Skelton & Eustis, 2020). According to the experiential avoidance model, the fact that the individual does not have a flexible structure may lead to the misuse of the internet and technology. The individual may turn to the internet as one of the many behaviors he/she performs to avoid internal stimuli (García-Oliva & Piqueras, 2016).

Compared to other known forms of addiction, such as gambling and alcohol, public awareness of internet addiction is still in its infancy (Chebbi et al., 2020). The aim of this study was to examine the predictive role of impulsiveness and avoidance in internet addiction using the mixed method. In the quantitative part, which was the first phase of this research, the relationship between internet addiction, impulsiveness, and experiential avoidance was examined. The predictive effect of impulsiveness and experiential avoidance on internet addiction was examined. In addition, whether internet addiction differs according to various variables was also examined. In the qualitative part, which was the second phase of the study, semi-structured interviews were conducted with field experts about the effects of internet addiction on individuals and the effects of impulsiveness and experiential avoidance on internet addiction. When the national literature was examined, it was seen that the number of mixed studies on internet addiction is limited (Arpaci et al., 2018). Based on the above information, it was thought that examining the predictive role of impulsiveness and avoidance in internet addiction of university students using the mixed method will contribute to both the literature and field applications.

Methods

Mixed method research, which was used herein, is a method that integrates quantitative and qualitative research in a single project to fully understand the phenomenon of interest (Zedeck, 2014). Mixed methods are preferred because they combine the strengths of both approaches to better understand research problems (Given, 2008). In this study, descriptive sequential design, one of the mixed research methods, was used. In these designs, quantitative data are collected and analyzed first and then qualitative data were obtained. Qualitative data are used to strengthen quantitative data. Qualitative and quantitative data analyses are often linked, and integration usually takes place during the data interpretation phase and discussion. As the name suggests, these designs are useful for explaining relationships and/or examining particularly unexpected findings (Hanson et al., 2005). In this study, the predictive role of impulsiveness and avoidance in internet addiction was examined using the mixed method.

Quantitative Section

Quantitative Method

In the quantitative phase of this research, the relational research model, one of the quantitative research methods, was used. Relational research is often conducted in the social, personality, developmental, educational, abnormal, or clinical subdisciplines of psychology. In these areas, such research designs have the advantage of allowing the researcher to measure a number of different variables simultaneously (Howit & Cramer, 2011). In the quantitative phase of this study, the relationships between internet addiction, impulsiveness, and experiential avoidance were examined.

Quantitative Study Group

The quantitative study group of this research consisted of 913 university students studying in a province in the central Anatolia region of Turkey in the 2019 – 2020 academic year. There were 632 females (69.2%) and 281 (30.8%) males in the study group. Moreover, 91 (10%) students were 18 years old, 218 (23.9%) were 19 years old, 255 (27.9%) were 20 years old, 222 (24.3%) were 21 years old, and 127 (13.9%) were 22 years old. Of the students, 50 (5.5%) were studying at the Faculty of Dentistry, 48 (5.8%) at the Faculty of Letters, 427 (46.8%) at the Faculty of Education, 46 (5%) at the Faculty of Health Sciences, 238 at the Faculty of Medicine (26.1%), and 104 (11.4%) at the Faculty of Veterinary Medicine.

Quantitative Measurement Tools

In the quantitative phase of this study, Internet Addiction Scale, Short Form of the Barratt Impulsiveness Scale, Multidimensional Experiential Avoidance Questionnaire-30, and Personal Information Form were used for data collection.

Internet Addiction Scale: The Internet Addiction Scale was developed by Chen et al. (2003) and was adapted to Turkish culture by Kesici and Şahin (2010). The scale consists of 26 items and 5 subscales: compulsive use, withdrawal, tolerance, time management problems, and interpersonal and health problems. At the same time, the scale is evaluated on the total score. The item total correlations range from .64 to .86 for 26 items. The Goodness of Fit Index (GFI) values were found as standardized root mean square residual (SRMR) = .08, GFI = .66, adjusted GFI = .61, and root mean square error of approximation (RMSEA) = .11. The Cronbach's alpha (α) reliability coefficient of the scale was determined as .94. The internal consistency scores for each subscale calculated were found to be .86 for compulsive use, .90 for withdrawal, .91 for tolerance, .89 for time management problems, and .91 for interpersonal and health problems. As a result of the analyses, it was found that the scale is a reliable and valid measurement tool (Cutter & Sahin, 2010). In this study, the Cronbach's α reliability coefficient of the scale's total score was found to be .92.

Short Form of the Barratt Impulsiveness Scale: Barratt Impulsiveness Scale was developed by Patton et al. (1995). The Short Form of the Barratt Impulsiveness Scale was created by Spinella (2007). The adaptation of the scale to Turkish culture was done by Tamam et al. (2013). The scale consists of 15 items and 3 subscales: non-planning impulsiveness, motor impulsiveness, and attentional impulsiveness. The scale was adapted in two separate studies. In the first stage, exploratory factor analysis was carried out on 142 undergraduate students. The second stage included general participants. The study group consisted of 92 people (43 females and 49 males) between 18 and 51 years of age. In the second stage, it was determined that the correlations between the Barratt Impulsiveness Scale Short Form and Frontal Systems Behavior Scale were strong and supported the findings of the validity analysis, in line with the original study. The Cronbach's alpha reliability coefficient was found to be .82, and it was .80 for non-planning impulsiveness, .70 for motor impulsiveness, and .64 for attentional impulsiveness. Related results revealed that the scale is a valid and reliable measurement tool (Tamam et al., 2013). In this study, the Cronbach's α reliability coefficient was found to be .74 for the non-planning impulsiveness, .52 for motor impulsiveness, and .75 for attentional impulsiveness.

Multidimensional Experiential Avoidance Questionnaire-30: The Multidimensional Experiential Avoidance Questionnaire-30 (MEAQ-30) contains 62 items and was developed by Gámez et al. (2011). Multidimensional Experiential Avoidance Questionnaire-30 was created by Sahdra et al. (2016). It was adapted to Turkish culture by Ekşi et al. (2018). The scale consists of 6 subdimensions and 30 items. Confirmatory factor analysis results were found as follows: Chi-Square Fit Statistics (CMIN) = 812.519, df = 390, minimum discrepancy per degree of freedom Chi-Square Fit Statistics per Degree of Freedom (CMIN/df) = 2.08, RMSEA = .054, SRMR = .068, Comparative Fit Index (CFI) = .91, Incremental Fit Index (IFI) = .91, and Tucker – Lewis index (TLI) = .90. These values are at acceptable levels. The correlation coefficients calculated between the experiential avoidance subscales, except for the distress endurance subscale, and the Acceptance and Action Questionnaire II were found to be significant. The values range from .27 to .60. There was no significant relationship between the distress endurance subscale and the Acceptance and Action Questionnaire II. The Cronbach's α reliability coefficients were calculated as .79 for behavioral avoidance, .76 for distress aversion, .78 for procrastination, .87 for distraction/suppression, .81 for repression/denial, and .85 for distress endurance. When evaluated in general it was seen that the reliability and validity results of the adapted scale were at acceptable levels (Ekşi et al., 2018). In this study, The Cronbach's α reliability coefficients were found to be .75 for behavioral avoidance, .78 for distress aversion, .80 for procrastination, .91 for distraction/suppression, .75 for repression/denial, and .84 for distress endurance.

Personal Information Form: The Personal Information Form was created by researchers to determine the participants' thoughts on whether gender, age, class, faculty, age of starting to use the internet actively, and internet use affect their sleep patterns, diet, and sports activities.

Collection of Quantitative Data

Ethics committee approval for the study was obtained from Necmettin Erbakan University Social and Humanities Sciences Research and Publication Ethics Committee. In addition, necessary permissions were obtained from the faculties where the quantitative phase of the research was carried out. The application was made by the researcher to the volunteer students in the university classrooms during the course hours. The scales to be used in the research were transferred to Google forms. Before the application, the participants were informed about the purpose of the research and the scales were introduced. The link of the application form of the research was shared with the students. Internet connection access was provided for the students who wanted it during the application. Participants who did not have the equipment required for the application but volunteered to participate in the study were provided with a device that they could use during the application, which took approximately 45 minutes.

Statistical Analysis

The quantitative data obtained in this study were analyzed using the Statistical Package for the Social Sciences software (SPSS). Descriptive statistics, t-test for independent groups, one-way analysis of variance test and Welch test, Pearson's correlation analysis, and hierarchical regression analysis were used in the analyses. Before analyzing the data, whether the scales provided Cronbach's α reliability coefficients and normality assumption was assessed.

Qualitative Section

Qualitative Method

In the qualitative phase of this study, phenomenology approach, one of the qualitative research methods, was used. Phenomenology is carried out in order to determine the livings, perceptions, and experiences related to perceptions in order to reach the facts (Yıldırım & Şimşek, 2016). In this study, it was aimed to examine the perceptions of field experts, who have worked with addicted individuals, on internet addiction.

Qualitative Study Group

In the qualitative phase of the research, the study group consisted of experts working in the field of mental health. In order to keep the identity information of the participants confidential, the individuals forming the study group were coded as K1, K2, ⋯, K15. In the qualitative phase of this research, face-to-face interviews were conducted. Smaller study groups are selected in face-to-face interviews when compared to the survey method (Karagöz, 2017). For this reason, the study group consisted of 15 participants. The participants' ages ranged from 26 to 46 years. Ten were females (67.7%) and five were males (33.3%). The study group consisted of nine psychological counselors, four psychiatrists, one child and adolescent psychiatrist, and one social service expert. The participants' professional seniority ranged from 2 to 22 years.

Qualitative Measurement Tools

In the quantitative phase of this research, a semi-structured interview form was used.

Semi-Structured Interview Form: In phenomenology studies, one of the qualitative research methods, the data collection process usually takes place through interviews (Yıldırım & Şimşek, 2016). A semi-structured interview form was used in the research. During the creation of the form, the relevant literature and quantitative results were taken into consideration. While creating the questionnaire for the qualitative part of the research, the opinions of three faculty members were taken. In addition, a pilot study was conducted with one expert who worked as a psychological consultant before the application. As a result of the feedback, the question form was finalized.

Collecting Qualitative Data

Ethics committee approval of the study was obtained from Necmettin Erbakan University Social and Humanities Sciences Research and Publication Ethics Committee. Interviews of the qualitative part of the study were conducted in the fall semester of 2020 – 2021. Interviews were conducted with participants who volunteered to participate in the study. Participants were contacted by phone and an appointment was made. The application process was carried out in environments that would allow the participants to respond comfortably. In addition, interviews were conducted by paying attention to social distancing, masks, and hygiene rules due to the coronavirus disease 2019 pandemic. The purpose of the study was explained to the participants and an informed consent form was obtained. In the informed consent, the nature of the research, what awaits him/her in the research, and the factors related to the research were clearly explained to the participant. Participant must accept the consent form to participate in the study. In addition, stating that nobody would have access to credentials on the informed consent form increased the likelihood of the participants to respond sincerely (Shaughnessy et al., 2016). The interviews, which lasted approximately 40 – 45 minutes, were recorded with the consent of the participants.

Reliability in Qualitative Research

In qualitative research, internal reliability is the assumption that other researchers reach the same result using the same data (Karagöz, 2017). While analyzing the data in the qualitative phase of the study, another researcher, who was continuing her doctorate education in the field of Psychological Counseling and Guidance and had qualitative research experience, was asked to code the data. Both transcripts were written out and a table of created themes and categories were given. The Consensus/(Disagreement + Consensus) formula suggested by Miles and Huberman (1994) for reliability in qualitative research was used. Consensus was expected to be at least 80%. In the qualitative phase of this research, the general consensus was found to be 89%. In addition, it was found as 91% for the first question, 88% for the second question, and 86% for the third question.

Statistical Analysis of Qualitative Data

The content analysis technique was used while analyzing the data in the qualitative part of this research. Content analysis is a highly flexible research technique that is widely used in various studies. This technique is applied in qualitative, quantitative, and sometimes mixed research methods. It uses a variety of analytical techniques to generate and contextualize findings (White & Marsh, 2006). The qualitative part of the data was analyzed using the NVivo and SPSS programs.

Results

Quantitative Findings

Determining outliers is one of the prerequisites to ensure the normal distribution of the data and to detect the outlier sample (Todeschini et al., 2013) because multivariate outliers can seriously distort the estimation of population parameters. Detection of multivariate outliers can be made using the Mahalanobis Distance (Leys et al., 2018). In addition, the Cook Distance and Leverage values are also used to determine outlier data (Blatná, 2006). In this study, 126 data that were determined to be extreme values using the Mahalanobis, Cook Distance, and Leverage values coefficients were removed from the data set of the study. After removing the extreme values, whether the data provided the normal distribution assumption was determined. Classical skewness and kurtosis statistics are among the popular methods used to detect a possible deviation from normality (Liang et al., 2019). The skewness and kurtosis values being in the range of ±1 is the ideal value for normality (George & Mallery, 2019). Table 1 shows the values for the Internet Addiction Scale (skewness coefficient (SC) = – .438, skewness coefficient; kurtosis coefficient (KC) = – .418), short form of the Barratt Impulsiveness Scale sub-dimensions: non-planning (SC = .270, KC = – .499), motor (SC = .471, KC = – .191), attentional (MC = .485, KC = – .036), MEAQ-30 sub-dimensions: repression/and denial (MC = .308, KC = – .516), behavioral avoidance (SC = – .153, KC = – .399), distress aversion (SC = .090, KC = – .539), procrastination (SC = – .016, KC = – .348), distraction/suppression (SC = – .211, KC = – .487), and distress endurance (SC = – .179, KC = – .470); therefore, it can be said that the skewness and kurtosis coefficients provided normal distribution. As seen in Table 1, the Cronbach's α reliability coefficients were above .70 for the Internet Addiction Scale, non-planning and attentional subdimensions of the short form of the Barratt Impulsiveness Scale, and behavioral avoidance, distress aversion, procrastination, distraction/suppression, repression/denial, distress endurance subdimensions of the MEAQ-30. The α coefficient of the motor scale, which is the sub-dimension of the short form of the Barratt Impulsiveness Scale, was above .50. It was assumed that a Cronbach's α reliability coefficient above .70 is at an appropriate and acceptable level and that if it is above .50, although weak, it is within acceptable limits (George &

Table 1.
Mean, Median, and Mode and α Values of the Scores of the Variables

Variables	$\bar{X}$	Median	Mode	SC/SCSE	KC/KCSE	α
İnternet Addiction Scale	48.64	47.00	46.00	–.438/ .081	–.418/162	.92
SF-BIS non-planning	9.26	9.00	9.00	.270/.081	–.499/.162	.74
SF-BIS motor	10.23	10.00	10.00	.471/.081	–.191/.162	.52
SF-BIS attentional	9.53	9.00	10.00	.485/.081	–.036/.162	.75
MEAQ-30 repression/denial	15.86	15.00	11.00	.308/.081	–.516/.162	.75
MEAQ-30 behavioral avoidance	23.15	23.00	22.00	–.153/.081	–.399 /.162	.75
MEAQ-30 distress aversion	19.29	19.00	20.00	.090/.081	–.539/.162	.78
MEAQ-30 procrastination	19.52	20.00	22.00	–.016/.081	–.348/.162	.80
MEAQ-30 distraction/suppression	23.22	23.00	25.00	–.211/.081	–.487/.162	.91
MEAQ-30 distress endurance	24.57	25.00	25.00	–.179/.081	–.470/.162	.84
N = 913						

SC = skewness coefficient; KC = kurtosis coefficient; SCSE = skewness coefficient standard error; KCSE = kurtosis coefficient standard error; MEAQ-30 = Multidimensional Experiential Avoidance Questionnaire-30; SF-BIS = short form of the Barratt Impulsiveness Scale.

Mallery, 2019). The relevant Cronbach's α reliability coefficients were at acceptable level.

In Table 2, it is seen that the average score ($\bar{X}$ = 48.66) obtained by the female participants from the Internet Addiction Scale was higher than that of the male participants ($\bar{X}$ = 48.57), but the mean scores of the female and male university students from the Internet Addiction Scale did not differ significantly. It was observed that the average score ($\bar{X}$ = 50.53) of the participants who started using the internet actively before the age of 12 was significantly higher ($\bar{X}$ = 47.59) than that of the participants who started using the internet actively after the age of 12 ($p < .001$).

As can be seen in Table 3, students who thought that their internet use affected their sleep patterns received the highest average score from the Internet Addiction Scale ($\bar{X}$ = 53.88). This was followed by students who thought that it sometimes affected it ($\bar{X}$ = 46.50), and students who thought that it did not affect it ($\bar{X}$ = 38.94). The university students' mean scores from the Internet Addiction Scale according to the variable of sleep patterns differed significantly ($p < .001$). When the Levene test results were examined, it was seen that the variances were not homogeneously distributed ($p < .001$). In cases in which the variances were not homogeneously distributed, the Welch test was used for comparison (Lu & Yuan, 2010). The Welch test results were examined, and the difference was found to be significant ($F(374.471) = 109.822$, $p < .001$). Since the variances were not homogeneously distributed, the Tamhane T2 test was conducted to determine the source of the difference. It was seen that the difference was significant among the groups.

As can be seen in Table 4, students who thought that their internet use affected their diet had the highest mean score in terms of the diet variable ($\bar{X}$ = 56.01). This was followed by students who thought that it sometimes affected it ($\bar{X}$ = 51.58) and students who thought that it did not affect it ($\bar{X}$ = 45.82). The mean scores obtained by the university students from the Internet Addiction Scale according to the diet variable differed significantly ($p < .001$). Since the variances were homogeneously distributed, the Tukey test was used to determine the source of the difference. It was seen that there was significant differentiation between the groups. In addition, in terms of the physical activity variable, students who thought that their internet use affected their physical activities received the highest mean score from the Internet Addiction Scale ($\bar{X}$ = 54.18). This was followed by students who thought that it sometimes affected it ($\bar{X}$ = 50.69) and students who thought that it did not affect it ($\bar{X}$ = 44.86). According to the variable of internet use affecting physical activity, the university students' mean scores from the Internet Addiction Scale differed significantly ($p < .001$). Since the variances were homogeneously distributed, it was seen that there was a significant difference between the groups as a result of the Tukey test used to determine the source of the difference.

Table 2.
T-Test Results Regarding the Differentiation of Internet Addiction by Gender and the Age of Starting to Use the Internet Actively

Internet Addiction Scale	Groups	*N*	$\bar{X}$	SD	*t*	*p*	*d*
Gender[a]	Female	632	48.66	12.17	.107	.915	.000
	Male	281	48.57	12.06			
Age of starting to use the internet actively[b]	Under 12 years	324	50.53	12.39	3.517	.000***	.024
	12 years and older	589	47.59	11.87			

[a]95% CI (– 1.61622/1.80180), $p > .05$, [b]95% confidence interval (1.29706/4.57220), ***$p < .01$.
SD = standard deviation.

Table 3.
Welch Test Results Regarding the Differentiation of Internet Addiction According to the Sleep Pattern Variable

Scale	Sleep Pattern	*N*	$\bar{X}$	SD	*F*	*df1*	*df2*	*p*	Difference (Tamhane's T2)
Internet Addiction Scale	Yes	408	53.58	11.71	109.822	2	374.471	.000***	All groups
	Sometimes	381	46.50	10.85					
	No	124	38.94	9.19					
	Total	913	48.64	12.13					

***$p < .001$.
SD = standard deviation.

As seen in Table 5, a positive relationship was found between the Internet Addiction Scale and non-planning ($r = .272$, $P < .001$), motor ($r = .332$, $P < .001$), attentional ($r = .381$, $P < .001$) sub-dimensions of the short form of the Barratt Impulsiveness Scale. A positive relationship was found between the Internet Addiction Scale and repression ($r = .211$, $p < .001$), distress aversion ($r = .201$, $p < .001$), and procrastination ($r = .413$, $p < .001$) sub-dimensions of MEAQ-30, and a negative relationship was found between Internet Addiction Scale and distress endurance sub-dimension ($r = -.210$, $P < .001$). In addition, no significant relationship was found between the Internet Addiction Scale and behavioral avoidance ($r = -.030$, $p > .05$) and distraction ($r = -.008$, $p > .05$) sub-dimensions.

Regression analysis assumptions should be met before proceeding with regression analysis. First, it was checked whether there was an autocorrelation between the variables. The Durbin – Watson value should be between 1 and 3 to avoid autocorrelation between the variables. In addition, it is expected to get a value close to 2 (Mayers, 2013). In this study, the Durbin – Watson value was found to be 1.888. Another condition for regression analysis is that tolerance and Variance Inflation Factor (VIF) values should be within the desired range in order to avoid multicollinearity problems (Gaur & Gaur, 2006). The tolerance value should be greater than .20 (Cleophas & Zwinderman, 2015). In this study, the tolerance value of the relevant variables was greater than .20. It is ideal for the VIF value to be less than 5 (Denis, 2019). The VIF values of all of the variables in this study were less than 5. In this case, the necessary conditions for regression analysis were provided in this study. In hierarchical regression analysis, it is also important to decide which variables to put in the model in sequence. There are various opinions about the order in which variables are added in hierarchical regression analysis (Petrocelli, 2003). One of these views is to evaluate the state of being more theoretically important when deciding the order of addition of variables (Jeong & Jung, 2016; Lewis, 2007). While adding the independent variables to the model, the order of being theoretically important was taken into account. Considering the relevant research and its relationship with internet addiction, the sub-dimensions of the short form of the Barratt Impulsiveness Scale were first added to the model since the concept of impulsiveness was thought to be more important. Second, the sub-dimensions of the MEAQ-30 were added to the model in order to include the effect of experiential avoidance, which was researched more limitedly than impulsiveness.

As seen in Table 6, the analysis was completed in two stages. In the first phase, the non-planning, motor, and attentional sub-dimensions of the short form of the Barratt Impulsiveness Scale were added to the model. In the second phase, repression, distress aversion, procrastination, and distress avoidance sub-dimensions the MEAQ-30 were added to the model of and R^2 became .255 with an increase of .79. In the second phase, the dependent variable was predicted significantly ($R = .505$, $R^2 = .255$, $\Delta R^2 = .250$, $F_{(7\text{-}905)} = 44.364$, $p < .001$). Considering the related beta values, the strongest predictor variable was the procrastination sub-dimension ($\beta = .238$, $p < .001$). This was followed by the subdimensions of attentional ($\beta = .141$, $p < .001$), motor ($\beta = .128$, $p < .001$), distress aversion ($\beta = .116$, $p < .001$),

Table 4.
Results of the ANOVA Test Regarding the Differentiation of Internet Addiction According to Diet and Physical Activity Variables

Internet Addiction Scale		*N*	$\bar{X}$	SD	*F*	*Df*	η2	*p* Difference (Tukey)
Diet	Yes	88	56.01	12.75	42.811	2-910	.086	.000***
	Sometimes	291	51.58	11.65				All groups
	No	534	45.82	11.40				
	Total	913	48.64	12.13				
Physical activity	Yes	189	54.18	12.10	49.723	2-910	.099	.000***
	Sometimes	289	50.69	11.53				All groups
	No	435	44.86	11.28				
	Total	913	48.64	12.13				

***$p < .001$.
SD = standard deviation.

Table 5.
Correlation Results between Variables

Variables	1	2	3	4	5	6	7	8	9	10
1.Internet addiction	–	.272**	.332**	.381**	.211**	–.030	.201**	.413**	–.008	–.210**
2.Non-planning		–	.247**	.485**	.185**	–.163**	–.023	.329**	.165**	–.334**
3.Motor			–	.564**	.256**	–.012	.128**	.339**	–.042	–.085*
4.Attentional				–	.258**	–.014	.101*	.416**	.008	–.258**
5. Repression					–	.097**	.261**	.292**	.126**	–.055
6.Behavioral avoidance						–	.297**	.157**	.418**	.083*
7.Distress aversion							–	.200**	.416**	–.039
8. Procrastination								–	.084*	–.300**
9. Distraction									–	.203**
10. Distress endurance										–

**$p < .01$, *$p < .05$.

non-planning (β = .071, $p < .05$), and distress endurance (β = – .062, $p < .05$). The repression sub-dimension was not a significant predictor (β = .025, $p > .05$). In addition, approximately 25% of the total variance regarding the dependent variable was explained.

Qualitative Findings

As seen in Table 7, when the views of field experts on the effects of internet addiction are examined, four themes were determined as physiological effects, psychological symptoms, effects on social life, and effects on education life. In the theme of physiological effects, four categories were formed as physical health problems, diet, physical activity, and sleep. In the theme of psychological symptoms, three categories were formed as anxiety, depression, and stress. In the theme of effects on social life, two categories were formed as conflict and social isolation. In the theme effects on education life, two categories were formed as decline in academic success and non-attendance. When the views of field experts on the effects of impulsiveness on internet addiction were examined, three themes emerged as auto-control weakness, sensational orientation, and predisposition. The auto-control weakness theme included the categories of motor impulsiveness and non-planning. The sensational orientation theme included pleasure seeking, excitement seeking, and novelty

Table 6.
Hierarchical Regression Results Regarding the Prediction of Internet Addiction

Model	Variables	*B*	SE	β	*T*	*p*	Tolerance	VIF
1	Constant	25.304	1.810		13.978	.000		
	Non-planning	.578	.165	.121	3.500	.000***	.764	1.309
	Motor	.832	.172	.177	4.852	.000***	.681	1.468
	Attentional	.991	.180	.223	5.509	.000***	.555	1.801
Model 1: $R^2 = .176$								
2	Constant	22.554	2.876		7.842	.000		
	Non-planning	.342	.165	.071	2.074	.038*	.695	1.438
	Motor	.601	.167	.128	3.598	.000***	.651	1.535
	Attentional	.627	.176	.141	3.560	.000***	.526	1.901
	Represssion	.049	.061	.025	.805	.421	.834	1.199
	Distress aversion	.201	.052	.116	3.829	.000***	.899	1.112
	Procrastination	.470	.067	.238	7.022	.000***	.715	1.399
	Distress endurance	–.124	.063	–.062	–1.969	.049*	.834	1.200
Model 2: $R^2 = .255$; R^2 variation: .079								

SE = standard error.
Durbin – Watson: 1.888, ***$p < .001$, *$p < .05$.
Model 1: $R = .420$, $R^2 = .176$, $\Delta R^2 = .174$, $F_{(3\text{-}909)} = 64.866$, $p < .001$, R^2 variation: .176.
Model 2: $R = .505$, $R^2 = .255$, $\Delta R^2 = .250$, $F_{(7\text{-}905)} = 44.364$, $p < .001$, R^2 variation: .079.

Table 7.
Categories and Themes Regarding the Views of Field Experts on the Effects of Internet Addiction, the Effect of Impulsiveness on Internet Addiction, and the Effect of Experiential Avoidance on Internet Addiction

Questions	Themes	Categories	*f*	%
Categories and themes related to the views of field experts on the effects of internet addiction	Physiological effects	Physical health problems	4	26.7
		Diet	8	53.3
		Physical activity	3	20
		Sleep	8	53.3
	Psychological symptoms	Anxiety	2	13.3
		Depression	5	33.3
		Stress	2	13.3
	Effects on social life	Social isolation	5	33.3
		Conflict and arguing	8	53.3
	Effects on education life	Decline in academic success	5	33.3
		Non-attendance	3	20
Categories and themes regarding the views of field experts on the effect of impulsiveness on internet addiction	Auto-control weakness	Motor impulsiveness	5	33.3
		Non-planning	3	20
	Sensational orientation	Pleasure seeking	7	46.7
		Excitement Seeking	3	20
		Novelty seeking	2	13.3
	Predisposition	Risk-taking	8	53.3
		Excessive use	2	13.3
Categories and themes related to the views of field experts on the effect of experiential avoidance on internet addiction	Escaping tendency	Repression	5	33.3
		Procrastination	5	33.3
		Pleasure irientation	5	33.3
		Inability to tolerate distress	5	33.3
	Use orientation effect	Increasing effect for internet addiction	3	20
		Decreasing effect for internet addiction	1	6.7
		Circular effect	5	33.3

seeking. The predisposition theme included risk-taking and excessive use categories. The views of experts on the effect of experiential avoidance on internet addiction were examined. When the views were examined, two themes were determined as escape tendency and use orientation effect. Escape tendency consisted of the categories of repressing emotions, procrastination, pleasure orientation, and inability to tolerate distress. The use orientation effect consisted of the categories of increasing effect for internet addiction, decreasing effect for internet addiction, and circular effect.

The following texts include sample views on the categories:

Physical health problems: "As you know, the symptoms are very prominent in internet addiction, such as neck pain, back pain, general muscle spasms, redness in the eyes and visual disturbances, hand-arm numbness." (K3)

Physical activity: "Generally, we see that addicts are up at night and sleep during the day. Apart from that, we see that they become cumbersome while doing sports. We see that they do not do sports, and obesity is increasing." (K6)

Diet pattern: "A physically important dimension of internet addiction... It may cause weight gain and diet irregularities." (K8)

Sleep pattern: "Again, I say on behalf of my students that the individual becomes lonely due to the increase of time on the screen and disconnects from his/her social relations. For example, sleep pattern is disrupted, and he/she sleeps very late at night and cannot get up in the morning." (K5)

Depression: "Internet addiction can disrupt the long-term functionality of the person as in all other addictions. It may cause long-term depressive symptoms." (K13)

Anxiety: "It is seen that internet addiction and excessive use of the internet increase the anxiety levels of people." (K15)

Stress: "Internet addiction may result in stress in the individual since it causes us to postpone our responsibilities in our daily life." (P8)

Conflict: "As far as I have observed in young people, there is a seriously noticeable tension, sudden bursts, difficulties in

expressing themselves, generally being confrontational in communication with their friends, and perhaps noticing their feelings while expressing themselves." (K5)

Social isolation: "We think of internet addiction in the event that it makes us addicted to technology by keeping us away from social life." (K12)

Academic success: "The effects of internet addiction ... To put it in more detail, there is a decrease in academic success and work performance. People spend a lot of time while they are dealing with the internet." (K10)

Non-attendance: "Or there may be some problems in school life, so what can these problems be? There may be non-attendance, or a decrease may be seen in the school compared to the previous academic status." (K8)

Motor impulsiveness: "Looking at the phone screen all the time, being unable to control that behavior actually comes to my mind as impulsiveness. Continuing a behavior despite having social, professional, and educational problems is also included in the definition of addiction. I think this is about impulsiveness." (K6)

Non-planning: "We observe that the individual who is addicted to the internet cannot make his/her own plans for life and cannot carry out his/her plans. In other words, impulsiveness may be linked to internet addiction." (K2)

Pleasure seeking: "Internet addiction can be associated with impulsiveness. Considering that it is essential to reach the points that make you happy and pleasurable in internet addiction, it is beneficial for the experts working on internet addiction to look at impulsiveness as a dynamic structure in the background." (K4)

Excitement seeking: "It can also be thought that especially young individuals satisfy their excitement seeking thanks to the exciting world of the internet." (K8)

Novelty seeking: "As the impulsiveness increases, the internet addiction increases. Because impulsive individuals are in search of innovations, such as the internet, maybe games, maybe other things brought by the internet; impulsive people may prefer short-term pleasures more easily." (K13)

Taking risks: "I know that individuals are prone to addictions like gambling, we see that they can turn to online gambling games because they can take risks more quickly." (K1)

Excessive use: "In addition, impulsive individuals may be more susceptible to addiction because they cannot control the time, they stay on the internet because they do not have time control." (K1)

Repression: "What does this mean now? It doesn't actually mean solving the problem. To a certain extent, it means repressing problems to the extent that we can afford it. Other problems appear as continuation of addiction and deficiencies in family and social relations where we cannot afford it. Experiential avoidance is therefore not an effective solution for us, but a condition that maintains our addiction." (K9)

Procrastination: "The individual can find himself on the internet, on social media instead of solving the problems or negative events he/she has experienced. Let's say that instead of solving a negative situation in his/her daily life, business life or school life, instead of sitting down and talking and discussing the problem and solving it, the individual avoids that problem, does not want to do it or does not want to face it anyway. That individual can find him/herself on the internet, on social media." (K8)

Pleasure orientation: "In other words, internet addiction will increase in order to avoid and gain pleasure in a short time in these people, those who have more avoidance behavior." (K10)

Inability to tolerate distress: "If we consider it as distress aversion, the individual cannot accept the distress caused by addiction, or if he/she talks to someone about this issue, he/she cannot cope with this problem when this issue comes to the agenda. He/she returns to his/her own world with a single click, takes refuge in the internet." (K3)

Increasing effect for the internet addiction: "... In this way, we can say that individuals with high experiential avoidance behavior are seen to have high internet addiction." (K8)

Decreasing effect for the internet addiction: "An avoidance that is thought to avoid all negativity, to get away from others' behaviors or to get away from the troubled situation does not affect the internet addiction because the person then avoids the Internet because he/she knows that the great damage will come from there. But if his/her goal is to avoid distressing environments, friends, and the negativity of his/her inner world, he also avoids the Internet." (K14)

Circular effect: "For individuals with experiential avoidance behavior, internet addiction can be both a cause and a consequence. That is, a person may have clung to the Internet to escape from a situation he/she does not like, he/she may have created a world there, or on the contrary, facing the reality in order not to give up this addiction is a problem for his/her. There may be experiential avoidance on the Internet because it gives his/her trouble." (K3)

Discussion

In the quantitative phase of this study, no significant difference was found between male and female university students' mean scores from the Internet Addiction Scale. In other research conducted on university students, it was also found that the internet addiction of female and male students did not differ significantly (Balcı & Gülnar, 2009; Chiu et al., 2013; Karimy et al., 2020; Khan et al., 2017; Yılmazsoy & Kahraman, 2017). Moreover, there are findings that are not similar to this research. In one study, it was found that male students were more likely to be internet addicts than female students (Yen 2009). In a study conducted on university students, male university students scored higher than females toward internet addiction (Akhter, 2013). Looking at current studies, it was seen that females had higher addiction potential toward social media, while males had higher addiction potential toward online gaming (Lindenberg et al., 2020). The reason why females and males did not obtain a significant difference in their scores on the Internet Addiction Scale in this study may be due to

the fact that the general level of internet addiction was addressed rather than sub-types of internet addiction, such as game addiction, which has been stated to be more preferred by males, or social media addiction, which females tend to prefer more.

In the quantitative phase of this study, the mean score obtained from the Internet Addiction Scale by the university students who started using the internet actively before the age of 12 was found to be significantly higher than that of the students who started using the Internet actively after the age of 12. In similar studies, a lower age of starting to use the internet was found to be positively associated with internet addiction (Chaudhari et al., 2015; El Salhy et al., 2019; Ghamari et al., 2011; Orsal et al., 2013). It was stated that the younger the age of starting to use the internet, the higher the tendency toward severe internet addiction (Lee et al., 2014). Individuals' use of the internet at early ages may increase the risk of future addiction (Günay et al., 2018). In this study, considering the characteristics of the Piaget development period, a 12-year-old was chosen as the limit since the age of 12 is the beginning of the formal operational period (Piaget, 2003). According to Piaget's theory, individuals after the age of 12 can think logically about abstract issues and hypothetical situations (Qayumi, 2001). Adolescent reasoning and thinking skills increase, especially after the age of 11 – 12 (Piaget, 2003). When the relevant literature was evaluated, the findings of this study were similar to the theoretical information and studies.

In the quantitative phase of this study, it was found that the mean scores of the Internet Addiction Scale significantly differed according to the variable of sleep pattern. In the qualitative phase of the study, the sleep category was found under the theme of physiological effects of internet addiction. The qualitative findings of the study supported the quantitative findings. In a similar study, a significant positive relationship was found between internet addiction and poor sleep quality of university students (Jahan et al., 2019). In another qualitative study conducted on university students, about half of the participants reported that their sleep patterns typically deteriorated due to using the internet until late at night (Chou, 2001). In a study conducted on adolescents, the mean scores of the participants, who thought that internet use affected their sleep patterns, on the Internet Addiction Scale was significantly higher than the participants who thought that it did and those who thought that it sometimes did (Kağnıcı, 2020). Some individuals with internet addiction reduce the number of hours that they sleep so that they can spend time on the internet (Widyanto et al., 2011). Internet addiction can cause sleep problems, including poor sleep quality and decreased sleep duration. Current evidence shows that the relationship between internet addiction and sleep disorders exists in different countries, cultures, and ethnicities (Alimoradi et al., 2019). In summary, it was seen that individuals who are strongly addicted to the internet suffer from sleep-related problems and disorders (Kootesh et al., 2016). It was seen that the findings of this study were compatible with the literature.

In the quantitative phase of this study, it was found that the mean scores obtained from the Internet Addiction Scale differed significantly according to the diet variable. In the qualitative phase of the study, the category indicating that internet addiction affects diet was put forward. It seemed that the qualitative findings of the study supported the quantitative findings. Considering both findings, it is believed that internet addiction negatively affects the diet of individuals. In a similar study, a significant positive relationship was found between the scores that university students obtained from the Internet Addiction Scale and the scores they obtained from the dietary habits sub-dimension of the Risky Behaviors Scale (Karaca, 2019). In another study, the scores obtained from the Internet Addiction Scale of the individuals who stated that internet use disrupted their eating habits were significantly higher than those who stated that it did not (Doğan, 2013). In another study, internet addicts consumed more fast food than non-addicts (Bener et al., 2019). In a study conducted on university students, it was found that as the severity of internet addiction increased, the individuals skipped breakfast, increased the number of meals, and ate more snacks while using the internet (Kamran et al., 2018). It was stated that many clients applying with internet addiction had poor eating habits as a common physical problem. In addition, it was stated that self-care is prioritized in the counseling process regarding internet addiction and the individual may lack physical health awareness about diet (Kuss & Griffiths, 2014). Relevant studies seem to support the findings of this research.

In the quantitative phase of this study, it was found that the mean score of the Internet Addiction Scale significantly differed according to the variable of internet use affecting physical activity. In the qualitative phase of the study, the category stating that internet addiction affecting physical activity was put forward. It was seen that the findings revealed in the qualitative stage of the research supported the findings determined in the quantitative stage. The literature seems to support the findings of this study. In a similar study conducted on university students, students who did not do physical activity had significantly higher internet addiction scores than students who did regular physical activity (Khan et al., 2017). Similarly, in a study conducted on university students, the mean scores obtained from the Internet Addiction Scale of students who did sports were significantly lower than the average scores of students who did not do sports (Can & Tozoğlu, 2019). In another study, individuals who were not internet addicts exhibited higher physical activity than internet addicts (Bener et al., 2019). In another study, it was found that individuals with moderate and severe internet addiction were less engaged in a planned physical activity, and they did less frequent and shorter activity than normal users (Kamran et al., 2018). In some studies, no significant relationship was found between internet addiction and participating in physical activity (Avşar, 2020; Karimy et al., 2020).

In the qualitative phase of this research, the category that internet addiction causing physical health problems has been reached. Similarly, in a study conducted on first-year female university students, it was concluded that internet addiction was associated with the risk of musculoskeletal pain (Yang et al., 2019). Among the negative effects of internet use, problems about myopia and vision problems such as painful, dry, or irritated eyes have been cited. In addition, it was stated that the result of being on the internet until late at night caused pain and fatigue in the shoulders, back, hands, and fingers (Chou, 2001). In another study, physical complaints were found to be a significant predictor of internet addiction (Atoum & Al-Hattab, 2015). When evaluated

in general, internet addiction appears to have an effect on physical health problems, such as decreased activity of the immune system, poor self-care, headache, vision problems, back pain, and carpal tunnel syndrome (Marazziti et al., 2014). The results of similar studies supported the findings of this study.

In the qualitative phase of this study, depression, stress, and anxiety categories were included in the theme of psychological symptoms in the effects of internet addiction on individuals. In a similar qualitative study, it was found that the participants stated that they experienced sadness and depression after using the internet (Li et al., 2015). In another study, it was stated that individuals who played online games enter a depressive mood when they lose control or become aware of the conflicts required by the game and that playing games is associated with feelings of anxiety and stress (Beranuy et al., 2013). In another qualitative study conducted on university students, stress and anxiety emerged related to the effects of smartphone addiction (Afshari et al., 2020). In a study conducted on university students, it was found that students with internet addiction potential had significantly higher depression, stress, and anxiety scores than normal internet users (Saikia et al., 2019). Paradoxically, the constant use of the internet is a source of stress, and individuals use the internet to overcome stress (Kuss & Griffiths, 2014). In addition, depression has generally been associated with the overuse of the internet. Evidence as to whether depression causes addiction or whether being addicted causes depression is unclear, but studies have shown that the two syndromes are highly correlated, reinforcing each other (Young et al., 2011). When evaluated in general, studies show that frequent internet use causes many conditions, such as anxiety, depression, and stress (Azher et al., 2014). It was seen that the findings of this study coincided with the findings of similar studies.

In the qualitative phase of this study, conflict/arguing and social isolation categories emerged in the theme of the effects of internet addiction on social life. In a similar qualitative study on the internet users, some basic concepts were obtained consisting of reduced social activity, psychological side effects, decreased family relations, and isolation experiences. One participant in the same study stated that internet addiction reduced family relations (Pashaei et al., 2009). In another study, it was found that technology addiction had negative social effects and kept students away from the outside world (Karadağ & Kılıç, 2019). In a similar study, it was reported that many students stated that they could not participate in face-to-face social activities due to excessive time spent on the internet (Li et al., 2015). In a qualitative study conducted on individuals between the ages of 16 – 26 who were addicted to online games, it was concluded that online gaming may involve serious negative effects, such as not performing real-life activities and having conflicts with interpersonal relationships or with themselves (Beranuy et al., 2013). Internet addiction can cause individuals to neglect their real relationships, and the same bad relationships can increase internet addiction. In this case, internet addiction and interpersonal relationships are thought to affect each other mutually (Hao et al., 2020). Similar studies seemed to support the findings of this study.

In the qualitative phase of this study, the theme of the effects of internet addiction on academic life was created. Under this theme, two categories emerged as decreased academic success and non-attendance. The related research and literature also supported the findings of this study. Similar studies also found a negative relationship between internet addiction and academic success (Demir & Kutlu, 2017; Houston, 2019). In a case study, it was reported that a university student's internet use had an effect on non-attendance and a decrease in academic success (Anderson, 2001). In another qualitative study conducted on university students, it was seen that social media addiction caused problems in the academic status of students (Afshari et al., 2020). In a qualitative study conducted on Taiwanese university students, it was stated that late night use of the internet caused students to be late for classes (Chou, 2001). It was reported that university students had significant academic problems while browsing websites, chatting with friends on the internet, or playing online games. Moreover, students often could control their internet use. Because of this, they may get low grades, not attend classes, or even stay in classes due to non-attendance problems (Ayub et al., 2014; Tella, 2007). There were also studies that did not coincide with the findings of this study. For example, Mellouli et al. (2018) found that academic success did not differ significantly according to internet addiction levels in their study on university students.

Considering the quantitative findings of this study, a significant positive relationship was found between the Internet Addiction Scale and attention, motor, and non-planning sub-dimensions of the short form of the Barratt Impulsiveness Scale. At the same time, attentional impulsiveness, motor impulsiveness, and non-planning subdimensions positively and significantly predicted the Internet Addiction Scale. Considering the qualitative findings of the study, the auto-control weakness theme of impulsiveness was determined. In this theme, the categories of non-planning and motor impulsiveness emerged. Motor impulsiveness included physical movement because of the need for movement; attentional impulsiveness included difficulties in focusing and maintaining attention. Non-planning included difficulties with impulsiveness, foresight, planning, and reflection. Impulsiveness can be expressed in any combination in any of these domains (Ebneter et al., 2012). Impulsiveness is related to behaviors of acting without considering risks or future consequences and includes structures such as novelty seeking, excitement seeking, behavioral diminished control, and disinhibition (Meerkerk et al., 2007). In this respect, it can be said that the findings in the qualitative stage supported the findings in the quantitative stage. In similar studies conducted on university students, a significant positive relationship was found between internet addiction and motor impulsiveness, attentional impulsiveness, and non-planning impulsiveness (Bisen & Deshpande, 2020; Dalbudak et al., 2013; Ünsalver & Aktepe, 2017). In addition, there are studies showing that motor impulsiveness, attentional impulsiveness, and non-planning impulsiveness are significant predictors of internet addiction (Bisen & Deshpande, 2020). Similar studies conducted on university students also found a positive relationship between internet addiction and impulsiveness (Amiri & Naseri Tamrin, 2015; Shaikh, 2019; Tang, 2018). In addition, studies conducted on university students concluded that impulsiveness was a significant predictor of internet addiction (Amiri & Naseri Tamrin, 2015; Tang, 2018; Yen et al., 2009). In general, impulsiveness is related to problems with inhibition of response, hypersensitivity

to reward expectancy, or poor planning. Impulsiveness can also refer to risky, early expressed, and poorly designed actions (Grant & Kim, 2014). Abuse and addiction-related disorders are also characterized by a high level of impulsiveness (Romháriková, 2016). There is substantial evidence that addiction is associated with a loss of frontal lobe function and increased impulsiveness (Crews & Boettiger, 2009). High level of impulsiveness can catalyze the addictive process, encourage other behaviors that instantly give pleasure, and reinforce rewards even though the person is aware of later negative consequences (Rosenberg & Feder, 2014). It was observed that individuals with high impulsiveness were more likely to develop compulsive internet use; that is, even if they were aware of the negative consequences, they were less able to resist the urge to keep clicking the next button (Meerkerk et al., 2007). The results of the relevant literature given above also supported the findings of this study.

In the qualitative findings of this research, the theme of sensational orientation, which can be considered as a feature of impulsivity, and the categories of this theme: novelty, excitement and pleasure seeking, emerged. Impulsiveness includes new activities and seeking excitement and pleasure (Hollander & Evers, 2001; Whiteside et al., 2005). In this respect, it can be thought that impulsiveness increases the internet addiction of individuals with the tendency toward seeking new activities, excitement, and pleasure. The relevant research supported the findings of this research. In a similar qualitative study, internet addicted individuals assessed that their internet addiction increased as they faced a new, attractive, and extraordinary world and found a great difference between this world and the real world. It was reported that users also declared that they were able to obtain their desires through the wonderful, pleasant, and free world of the internet (Pashaei et al., 2009). In the study conducted by Karaca (2019), it was found that there was a significant positive relationship between novelty seeking and internet addiction, and novelty seeking was a significant predictor of internet addiction. In another study, it was found that people with high impulsiveness reacted spontaneously to thoughts and stimuli, such as focusing on pleasant activities, which may cause them to spend more time on Facebook, which brings with it a higher risk of being addicted (Cudo et al., 2020). It was seen that the findings of this research were consistent with related studies.

In this study, risk predisposition category emerged, which can be considered as a feature of impulsiveness. Impulsiveness, as an explanatory construct, means "acting according to impulse" and is generally defined as acting on emotion without anticipating risks and consequences or acting carelessly. Definitions of impulsiveness can be quite broad-based and include both early, out-of-control responsiveness, and excessive risky behavior (Dalley & Robbins, 2017). Risk-taking behavior, which is considered to be a secondary reinforcer for addictive behaviors, causes the addictive behavior to continue. Positive expectations about addictive behavior and risk taking can also increase addiction (DiClemente, 2018). In addition, former studies also support the findings of this research. In a qualitative study conducted on smartphone addicts, participants also reported that they liked to take risks (Lapointe et al., 2013). A positive significant relationship was found between university students' levels of risk-taking and internet addiction (Moradi et al., 2017). In another study conducted on young adults, it was found that internet-addicted individuals made significantly more risky decisions than non-addicted individuals (Ko et al., 2010).

In the qualitative phase of this study, the category of excessive use tendency, which can be considered as a feature of impulsiveness, emerged in the findings about the effect of impulsiveness on internet addiction. Impulsiveness is defined as a failure or extreme difficulty in controlling impulses despite negative consequences. In addition, impulsiveness includes excessive behaviors (Littman-Sharp et al., 2013). In a study conducted by Li et al. (2015), university students reported that intensive internet usage caused internet addiction. It was seen that individuals with a high level of impulsiveness spent more time on the internet and had a higher level of internet addiction (Wang et al., 2017). In addition, in a study conducted on university students, it was found that individuals with a present tense perspective had low self-control, which leads to internet addiction (Kim et al., 2017). It was shown that compulsive internet users were characterized by the inability to resist the urge to continue using the internet (Meerkerk et al., 2007). In another study conducted on adults, it was found that the time spent on the internet positively predicted internet addiction (Przepiorka & Blachnio, 2016). In another study conducted on university students, a significant relationship was found between smartphone addiction and the time spent on the internet (Traş & Öztemel, 2019). Similar studies also revealed the relationship between internet addiction and the tendency toward excessive use, as in the findings of this study.

In the quantitative phase of this study, a positive relationship was found between the Internet Addiction Scale and the sub-dimensions of the MEAQ-30. In addition, distress aversion was a significant predictor of internet addiction. In the qualitative phase of the study, the category of intolerance to distress emerged. In a similar study conducted on university students, a significant relationship was found between internet addiction and distress aversion. In addition, it was determined that distress aversion was a significant predictor of internet addiction (Aslan, 2020). In a similar study conducted on adolescents, a significant relationship was found between internet/smartphone addiction and distress aversion. In addition, it was determined that distress aversion was a significant predictor of internet/smartphone addiction (Lee, 2017). In another study conducted on university students, there was a positive relationship between distress aversion and social media addiction. In addition, it was seen that distress aversion had a direct and indirect effect on internet addiction (Ekşi, 2019). Distress aversion includes negative evaluations or attitudes toward distress (Gámez et al., 2011). Experiential avoidance can increase by anxiety and reflection and by acting with the belief that certain internal experiences should be controlled and eliminated (Oliver & Morris, 2013). In this case, when the relevant literature and the findings of this study were evaluated together, individuals experiencing experiential avoidance may increase their internet addiction if they turn to the virtual world because they do not like distress. The relevant literature and studies supported the findings of this study.

In the quantitative phase of this study, a positive significant relationship was found between the Internet Addiction Scale and repression-denial sub-dimension of the MEAQ-30. In the

qualitative stage, it is seen that individuals use repression as an escape orientation. Relevant literature supports the findings of this study. Similarly, in the study conducted by Aslan (2020) on university students, a positive relationship was found between internet addiction and repression – denial, which is one of the sub-dimensions of the Experiential Avoidance Questionnaire. In the study of Ekşi (2019), a positive relationship was found between social media addiction and repression – denial, which is one of the sub-dimensions of the Experiential Avoidance Questionnaire. Experiential avoidance is the opposite of being open to experience. Individuals often avoid experiences because dealing with them triggers disturbing thoughts and painful feelings. They are not willing to accept their pain and suffering and take appropriate measured (Blonna, 2011). Repression/denial refers to avoiding distress and lack of distress awareness (Gámez et al., 2011). In this case, it can be thought that individuals' use of the internet as a means of ignoring the problems by repressing and denial can affect the development of internet addiction. In a qualitative study, the effect of smartphone addiction on university students was examined and the category of avoiding problems emerged. Individuals who used smartphones in a way that can cause addiction stated that they turned to the internet to avoid problems, but the mood they experienced while using the internet was not permanent and did not last for a long time (Jameel et al., 2019). When emotions arise in avoidance behavior, individuals push them down reflexively. They can drink excessively, take drugs, have sexual intercourse, eat too much, clean compulsively, or become workaholics (Young et al., 2003). In this respect, it can be thought that experiential avoidance behavior increases individuals' internet addiction.

In the quantitative part of this study, a significant positive relationship was found between the Internet Addiction Scale and procrastination, which is a sub-dimension of the MEAQ-30. In addition, procrastination is a significant predictor of experiential avoidance. In the qualitative part, field experts stated that the procrastination behavior used as an escape tendency may affect internet addiction. Similarly, in a study conducted with university students, a positive relationship was found between internet addiction and procrastination, which is one of the sub-dimensions of the Experiential Avoidance Questionnaire. In addition, procrastination is a significant predictor of internet addiction (Aslan, 2020). In a study conducted on secondary school students, a significant positive relationship was found between internet addiction and procrastination, which is a sub-dimension of the Experiential Avoidance Questionnaire (Lee, 2017). In another study, a significant positive relationship was found between social media addiction and procrastination, which is a sub-dimension of Experiential Avoidance Questionnaire (Ekşi, 2019). In a study conducted by Tras and Gökçen (2020), a significant positive relationship was found between adolescents' internet addiction and academic procrastination. In a qualitatively conducted study, participants stated that they used social networking sites to procrastinate, and this harmed their offline relationships, but they still continued. Participants reported that social networks were a good starting point for procrastination (Powell et al., 2013). Procrastination refers to postponing the expected distress (Gámez et al., 2011). In this case, it can be thought that for individuals experiencing experiential avoidance, delaying the problems instead of solving them and turning to the internet may increase internet addiction.

In this study, no significant relationship was found between the Internet Addiction Scale and behavioral avoidance and distractio n/suppression subdimensions of the MEAQ-30. In a similar study conducted on university students, no significant relationship was found between internet addiction and behavioral avoidance and distraction/suppression, which are sub-dimensions of the Experiential Avoidance Questionnaire (Aslan, 2020). In a study conducted on undergraduate students, no significant relationship was found between social media addiction and behavioral avoidance and distraction/suppression sub-dimensions of experiential avoidance (Ekşi, 2019). In another study, no significant relationship was found between internet addiction of secondary school students and behavioral avoidance and distr action/suppression, which are sub-dimensions of the Experiential Avoidance Questionnaire (Lee, 2017). It was seen that this finding of this research was compatible with the literature. The reason for this finding may have been due to the qualifications of the research group or the structure of the measurement tools.

In this study, a negative relationship was found between the Internet Addiction Scale and distress endurance subdimension of the MEAQ-30. In addition, distress endurance was a significant predictor of internet addiction. In other words, internet addiction decreases as the distress endurance, which is the sub-dimension of experiential avoidance, increases. In the qualitative part of this study, it was concluded that experiential avoidance behavior also had a reducing effect on internet addiction. In this case, it was seen that the qualitative findings supported the quantitative findings. Distress endurance indicates a willingness to act effectively in the face of distress (Gámez et al., 2011). People with excessive self-control do not allow emotions such as joy, anger, and excitement to affect them. They prefer to endure distress rather than to relieve themselves, and they try to keep themselves completely under control (Horney, 1995). In this case, the reason for the negative relationship between distress endurance sub-dimension and internet addiction may be due to individuals' excessive self-control. In addition, previous studies seemed to support the findings of this research. In a similar study conducted on university students, a negative relationship was found between distress endurance and internet addiction. In addition, enduring distress predicted internet addiction significantly (Aslan, 2020). In a study conducted on university students, a significant negative relationship was found between internet addiction and distress endurance (Reyhanlıoğlu, 2015). In a study by Ekşi (2019), a negative relationship was found between social media addiction and the distress endurance subdimension of the MEAQ-30.

In the qualitative phase of this research, the category that the experiential avoidance has an increasing effect on the internet addiction emerged. In a similar study, a significant relationship was found between internet addiction and experiential avoidance (Hsieh et al., 2019). In another study conducted on university students, a significant relationship was found between experiential avoidance and smartphone addiction (Ko & Kwak, 2018). Similarly, in another study conducted on university students, it was found that experiential avoidance had direct and indirect relationships with social media addiction (Seong &

Hyun, 2016). In another study conducted on university students, a positive relationship was found between experiential avoidance and online game addiction (Zandipayam & Mehrabizadeh, 2016). There are also studies that found a significant positive relationship between experiential avoidance and addiction potential (Shameli & Sadeghzadeh, 2019). When the literature was reviewed, it was seen that experiential avoidance increased both internet addiction and subtypes of internet addiction. Experiential avoidance is defined as an attempt to reduce the frequency or form of negative subjective experiences, such as thoughts, emotions, and memories. Individuals can avoid these kinds of experiences by repression, distraction, positive thinking, alcohol abuse, overworking, etc. (Ciarrochi & Bailey, 2008). The category stating that individuals with experiential avoidance behaviors have an increasing effect on internet addiction was consistent with both the studies conducted and the current literature.

In addition, another category was found regarding the circular effect between internet addiction and experiential avoidance. It was stated that individuals turn to the internet to avoid unwanted situations, such as problems in interpersonal relationships or negative effects of body image, and then internet usage increases these problems more and causes a vicious circle (Hou et al., 2019; Rodgers et al., 2013). In another study, it was stated that the basis of internet addiction is experiential avoidance and as the individual's addiction increases, he/she will enter a vicious circle (Quan, 2016). Avoidance behaviors can occasionally provide temporary relief or delay schema pain, but they cause more pain, suffering, and relationship damage in the long run (Lev & McKay, 2017). In this respect, it is argued that while experiential avoidance increases internet addiction, internet addiction may also increase experiential avoidance.

In the qualitative findings of this study, it was concluded that the pleasure orientation effect of experiential avoidance increases internet addiction. This finding is in line with the basic philosophy of Acceptance and Commitment Therapy (ACT). When viewed through the ACT lens, coping behaviors are learned experiential avoidance behaviors as a way of avoiding painful internal experiences and schema activation (Lev & McKay, 2017). In addition, experiential avoidance in individuals and limiting the cognitive resources they use in daily life may prevent them from enjoying daily life (Machell et al., 2015). When all of these were evaluated, it is believed that individuals who experience experiential avoidance tend to use the internet in order to obtain pleasure, and it may affect the increase of internet addiction.

Limitations, Directions/Suggestions for Future Research

Nowadays, students use the internet more than the general population because they are introduced to technology earlier and they need it more for their education. For this reason, studies on students' use of the internet basically about the general population may be misleading (Rumpf et al., 2016). The fact that the study group of the quantitative phase of the research was composed of university students may have created a limitation.

In this study, it was seen that impulsiveness significantly predicted internet addiction. Impulsiveness in internet addiction can be considered as a risk factor (Rømer Thomsen et al., 2018). It is believed that identifying students with high impulsiveness at different educational levels will contribute to prevention interventions for internet addiction. In this study, a significant relationship was found between experiential avoidance and internet addiction. In individual and group counseling about internet addiction, counseling services based on the acceptance and commitment therapy can be provided to reduce the experiential avoidance of individuals. The study group of this research consisted of university students in young adulthood. In future studies, the relationship between internet addiction, impulsiveness, and experiential avoidance can be examined on study groups consisting of different developmental stages, such as children, adolescents, or older participants. In this study, it was determined that experiential avoidance, which is a dimension of psychological inflexibility, affected internet addiction. In future studies, the relationships between internet addiction and other elements of the hexagon that constitute psychological inflexibility can be examined. The relational research method was used in the quantitative phase of this study and the phenomenology approach in the qualitative phase. In future studies, empirical studies can be conducted on reducing internet addiction through experiential avoidance.

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