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### **Educational Research and Reviews**

Full Length Research Paper

# Examination of internet use in terms of psychological well-being

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This study aimed to examine internet use in terms of psychological well-being. The descriptive and correlational research designs were used in this study. The data were collected by the online survey. The survey included "Internet Addiction" and "Warwick-Edinburgh Mental Well-being scales" and a "Socio-Demographic Form". Four hundred and twelve people participated in the study. A negative, moderate and significant relationship was found between internet addiction and psychological well-being. It has been determined that being under the age of 25, single, unemployed and having a low income are the factors that significantly increase internet addiction. In addition, with the increase in work and income levels, psychological well-being increases significantly. These findings show that individuals under the age of 25, single, unemployed, and in low-income group are in the risk group for internet addiction. As a result, it can be suggested to focus on individuals in the risk group and psychotraining program can be designed for increasing the level of psychological well-being in order to prevent internet addiction.

Key words: Internet addiction, internet usage, psychological well-being.

### INTRODUCTION

This study aims to examine internet use in terms of psychological well-being.

Turkey has been connected to the internet since April 1993 (Bolukbas, 2003), and today there have been millions of internet users in Turkey (Turkish Statistical Institute, 2020). However, while the internet makes work easier for many people, it also brings the danger of addiction for people who show excessive use. As a result, it causes some physical and psychological problems (Goldberg, 1996). For this reason, internet addiction, which is generally expressed as spending long time on the internet and not being able to control the

amount of internet usage, is seen as a significant problem today (Leung, 2004). Various physiological and psychological problems can be seen in an individual who exhibits an uncontrolled internet usage behavior, which can negatively affect the psychological well-being of the individual. Psychological well-being is a concept that is defined as to be psychologically healthy, and is directly related to whether the individuals are aware of their powers and goals during their lives and whether they have good relations with the people around them. It is stated that people who can attain a healthy harmony possess psychological well-being (Ryff and Keyes, 1995).

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Today, it is seen that people have adopted a global lifestyle in accordance with the rapidly developing technology. This lifestyle has both positive and negative effects. It is known that young people are more exposed to the negative effects of this lifestyle than the elder people are. The internet use undoubtedly plays the most important role in the formation of this lifestyle, which negatively affects young people. The Internet facilitates people's daily work, but excessive use of the Internet, which has become addictive, causes some psychological problems. The addicted person isolates himself from the social environment, and as a result, he may experience many problems such as deterioration in social relations, anxiety and regression in social skills. This situation can negatively affect the psychological well-being of the individual.

Using the internet in an unconscious and uncontrolled way can cause intense anxiety in people who do not have access to the internet, which threaten the psychological and physical health of the individual. The concept of internet addiction first appeared in international literature in 1996, with a joking e-mail sent by Dr. Ivan Goldberg (Goldberg, 1996). The concept "internet addiction" had different names, such as "internet dependency", "pathological internet use", "problematic internet use", "excessive internet use", "internet abuse" and "internet addiction disorder". Goldberg and Young initially used the concept of "internet addiction", but changed to "pathological internet use" in their later studies, with the idea that it is not a clinical concept. Other researchers switched from the term "addiction" to the concepts of "pathological" and "problematic" (Gunuc and Kayri, 2010). The common starting point of all these concepts is excessive and problematic internet use (Gunuc and Kayri, 2010).

Research scientists have also benefited from other behavioral addictions such as sex addiction and pathological gambling by using DSM (American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders) criteria to define the concept of internet addiction (Thurlow et al., 2004). Depression is thought to be an important factor in the development of pathological internet use. Depression was observed in individuals with internet addiction symptoms, with a strong relationship between depression and internet addiction (Jang et al., 2008). Depression resulting from Internet addiction can be evaluated as both a cause and a consequence. An individual may become addicted when the state of depression or depression is due to a completely different psychological or sociological reason. Adolescents with symptoms of Internet addiction stated that the time they spend on the Internet is a process that alleviates their depression, and described the Internet as an environment that relieves depression (Tsai and Lin, 2003).

Sally evaluated many studies on internet addiction and as a result of her studies; she mentioned three types of

internet addiction symptoms, firstly "The Behavioral Symptoms", secondly "The Physical and Mental Symptoms", and thirdly "The Social Symptoms".

The behavioral symptoms include: the addicted individual needs to connect to the internet in a constantly increasing amount; the addicted individual spends more and more time on the internet than the agreed time; the addicted individual spends a lot of time in organizations that serve over the internet; the addicted individual lies about the time and frequency of using the Internet; the addicted individual always has the thought of the internet in his mind; the addicted individual prefers internet to deal with problems; even if the individual is aware of the mental, physical, environmental and occupational problems caused by internet use, the addicted individual continues to use the internet.

The physical and mental symptoms include: the addicted individual worries about situations causes by internet use and develops some obsessive thoughts about internet; the addicted individual has willing to control or reduce the amount of time he uses on the Internet; the addicted individual exhibits a stressed and anxious attitude; the addicted individual experiences difficulties in remembering and focusing; head, stomach and muscle pains are common for the addicted individual and has problems with vision; there is an increase in irritability. Problems such as sleep disorders and panic attacks occur.

The social symptoms include: the addicted individual prefers spending time on the internet to social, business and hobby activities; after having stressful situations and competitions in professional life, the productivity of the addicted individual decreases; the addicted individual's leisure time decreases and working hours increase; the addicted individual Begins to have serious problems in real-life relationships (Sally, 2006).

The researchers state that the individuals showing these symptoms should be evaluated by taking into account some factors, such as the individual's job, place of work, age, academic status, why they use the internet and the amount of the internet use. The areas that are claimed to cause the emergence of these problems are virtual sex, dating, chat, betting, pornography, stock market, auction, video games and obsessively searching different information (Cengizhan, 2005). psychological well-being of the individuals with these symptoms may be adversely affected. Psychological wellbeing is directly related to whether the individuals are aware of their strength and goals during their lives and whether they have good relations with the people around them. Waterman defined psychological well-being as the struggle and effort of a person for self-realization. According to Jung, the state of being psychologically healthy and well-being is directly proportional to the potential of fulfilling the responsibilities of the individuals in their lives, maintaining their social relations healthy and realizing their desires. According to Adler, for the

individual's psychology to be healthy and well-being, it depends on being harmonious in the society and being successful in their professional lives and romantic relationships. In the light of all these views, it is seen that psychological well-being depends on mental health and the state of some factors in life. The harmony between factors such as self-acceptance of the person, establishing good relationships with people, autonomy, life goals and self-development, which are the basis of psychological well-being, has an important role in reducing problems and troubles. The individuals who can realize self-acceptance feels good, knows their limits and feels positive feelings about their past lives. The individuals who can establish good relationships with people can keep and maintain good relationships with people they meet and continue to get to know. The individuals who gain autonomy can achieve their individual identity in the society and even as a result of pressure in the society, they can form their ideas and actions according to their individual norms. Among these factors, it can be said that people who can achieve a healthy harmony can be in the psychological well-being (Sezer, 2013).

In this study, another variable that is a matter of curiosity about its relationship with psychological wellbeing is the internet. The fact that the Internet has become used in every aspect of people's daily lives and how it affects people as a result of their daily exposure to the internet has been a matter of curiosity for researchers. Although the fact that the internet is open to use in many areas and the fact that people can do most of their work via the internet reduces the workload and saves time and energy, it has been taken into consideration that it may affect the lives of people negatively in the studies carried out recently. It has been observed that some technologies (television, etc.) that were invented while there was no internet had a negative effect on human life (watching television for hours, visual disturbances, communication disruptions, etc.). For this reason, it was thought that the same situation could be valid for the internet and it was a question of how the internet is in terms of psychological well-being.

Therefore, it is a matter of curiosity regarding the effects of the use of Internet, which is increasing day by day, uncontrolled and exceeding its purpose, may have on people. On account of the internet being a relatively new concept, researches made on this issue in Turkey is not many. It is an important study in terms of providing information about the problems that may be caused by the misuse of the internet, as well as giving an idea to Turkey, the world, humanity and the literature. The findings of the study are important in terms of revealing the relationship between internet use at the level of addiction and psychological well-being. Thus, the main purpose of the study is to examine internet use in terms of psychological well-being. In line with this main purpose, firstly, examining the relationship between internet addiction and psychological well-being, and then

it is aimed to reveal whether there is a significant difference according to gender, age, marital status, education level, working status and income level.

#### **METHOD**

#### Research design

The research was conducted using the relational survey model, which is defined by Karasar (2016) as "the research model that aims to determine whether there is a change between two or more variables together and if there is a change together, the degree of this change".

In line with the established model, the hypotheses of the research were formed as follows:

**H1:** There is a significant relationship between internet addiction and psychological well-being.

**H2:** Internet addiction and psychological well-being differ significantly by gender.

**H3:** Internet addiction and psychological well-being differ significantly by age.

**H4:** Internet addiction and psychological well-being differ significantly by marital status.

**H5:** Internet addiction and psychological well-being differ significantly by educational status.

**H6:** Internet addiction and psychological well-being differ significantly by employment status.

**H7:** Internet addiction and psychological well-being differ significantly by income level.

### Research population and sample

The population of the research consists of the participants between the ages of 15-64, all living in Turkey. The sample of the research consists of 412 participants. The sample voluntarily participated in the study. From all participants, 289 of them were female and 123 of them were male. The distribution of the sample by gender, age, marital status, educational status, and employment status and income level was shown in Table 1.

According to Table 1, 70.1% (n = 289) of the participants are female and 29.92% (n = 123) of them are male. 19.9% (n = 82) of the participants are between 15-24 years old, 69.4% (n = 286) are between 25-44 years old and 10.7% (n = 44) are between 45-64 years old. 53.2% (n = 219) of the participants are married and 46.8% (n = 193) are single. 0.5% (n = 2) are literate, 4.6% (n = 19) are primary school graduates and 24.8% (n = 102) are high school graduates. 55.8% (n = 230) of the participants are Pre-License or License and 14.3% (n = 59) are master or above. In addition, 55.8% of the participants (n = 230) are employed and 44.2% (n = 182) are unemployed. 11.9% of the participants (n = 49) have low-income, 77.4% (n = 319) have middle-income and 10.7% (n = 44) have high-income.

#### Data collection method and scales

The research data were collected using the Socio-Demographic Information Form (Appendix 1), the Internet Addiction Test (IAT) (Appendix 2) and the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS) (Appendix 3). An online questionnaire, which was prepared by the researchers, consists of three parts: the Socio-Demographic Information Form, the Internet Addiction Test (IAT) and the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS).

Table 1. Distribution of participants b	by gender,	age,	marital	status,	educational	status,	employment status and
income level.							

Variable		n	%
Gender	Female	289	70.1
Gender	Male	123	29.9
	15-24 age group (young)	82	19.9
Age	25-44 age group (young adult)	286	69.4
	45-64 age group (adult)	44	10.7
Marital atatus	Married	219	53.2
Marital status	Single	193	46.8
	Literate	2	0.5
	Primary Education	19	4.6
Educational status	High School	102	24.8
	Pre-License / License	230	55.8
	Master and Above	59	14.3
Francis manufacture	Employed	230	55.8
Employment status	Unemployed	182	44.2
	Low	49	11.9
Income Level	Middle	319	77.4
	High	44	10.7
Total		412	100

The Socio-Demographic Information Form consists of six demographical variables, the Internet Addiction Test (IAT) comprises of twenty questions in 6-Likert type and the Warwick-Edinburgh Mental Wellbeing Scale includes fourteen questions in 5-Likert type. The researchers put these scales consecutive to make the online questionnaire with the explanation about the questionnaire and information about the volunteers during the participation at the first page. The reliability and validity of the scales have been explained in the study. The sample was randomly collected via the internet. Sending the questionnaire and collecting the data have been conducted via Google form because of Covid-19 and SPSS 25.0 statistical program has been used for the analysis of the obtained data.

### Socio-demographic information form

In the Socio-Demographic Information Form, there are questions about the participants' gender, age, marital status, educational status, employment status and their income level. In the question about age, the participants were asked to write their age, but the answers given here were based on the source of "Policy on Standards (Date modified, May 2017) Guidelines for the development and documentation of standards" at the analysis stage. They are grouped as 15 – 24 (young), 25-44 years old (young adult) and 45-64 years old (adult).

### Internet addiction test (IAT)

The Internet Addiction Test (IAT) was developed by Young (1998) and was adapted into Turkish by Boysan et al. (2017) by carrying out validity and reliability studies. The answers of the participants in the scale, consisting of a total of 20 items in one dimension were collected with options between "0-nothing, 5-always" in 6-Likert type. There is no reverse item in the scale. The total score that can be obtained from the test varies between 0-100 and as the total

score increases, the internet addiction of the participants increases. A total score between 0-49 is interpreted as internet use can be controlled, between 50-79 being a problematic addiction from time to time, and an addiction of 80 and above as a serious problem level.

### The Warwick-Edinburgh mental wellbeing scale (wemwbs)

Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) was developed by Tennant et al. (2007) and adapted into Turkish by Keldal (2015) by making validity and reliability studies. The responses of the participants in the scale consisting of 14 items in one dimension are collected with 5-Likert type options between "1-I do not agree at all, 5-I completely agree". There is no reverse item in the scale. The total score that can be obtained from the scale varies between 14 and 70, and as the total score increases, the psychological well-being of the participants increases.

### Findings regarding the validity and reliability of the scales

The validity of the Internet Addiction Test and the Mental Well-Being Scale used in the study were evaluated with the explanatory factor analysis (EFA) and the reliability with the Cronbach Alpha Test. Kaiser-Meyer-Olkin Sampling Adequacy Coefficient was found to be 0.60 < and Bartlett's Sphericity significance value was found to be p<0.05. The total variance (validity) explained by the scales is 51.93% for IAT; It was determined as 59.65% for WEMWBS. Since KMO and Barlett values meet the minimum requirements and the validity rate is more than 50% (Buyukozturk, 2011: 168), it has been decided that the validity requirement is met.

### Analysis of data

In the analysis of the data, quantitative analysis methods were used

Table 2. Descriptive findings regarding internet addiction and psychological well-being.

Variable	n	Min.	Max.	x	Ss	<b>%</b> *
Internet addiction	412	0.00	72.00	20.86	14.40	20.9
Psychological well-being	412	14.00	70.00	52.18	10.32	68.2

<sup>\*</sup> It is proportional to the lowest and highest points that can be obtained.

**Table 3.** Relationship between internet addiction and psychological well-being.

Variable		Psychological well-being
	Pearson r	-0.44
Internet addiction	р	0,00
	n	412

by making use of the SPSS 25.0 program. In this context, descriptive statistical methods such as mean and standard deviation were used to evaluate participants' responses to the socio-demographic information form and to determine descriptive findings related to internet addiction and psychological well-being. Whether the data used within the scope of the study have a normal distribution was determined by examining the skewness and kurtosis values. As a result of the analysis, the skewness values were determined as 1.037 for internet addiction and -0.829 for psychological well-being. Kurtosis values were determined as 0.894 and 0.967, respectively. The data show a normal distribution. The reason for this is that, in studies conducted in social sciences; these values within the range of ± 1.50 are considered sufficient for a normal distribution (Tabachnick and Fidell, 2013: 12). The coefficients of skewness and kurtosis are in the range of ± 1.50. Findings of the relationship between internet addiction and psychological well-being were determined by Pearson correlation analysis. The analysis of Internet addiction and psychological wellbeing according to numerous variables and determination of whether they show a significant difference was made with unrelated samples t-test, analysis of variance (ANOVA) and Tukey HSD multiple comparison (post-hoc) test. All of the analyses were carried out at 95% confidence interval and p < 0.05 significance level.

### FINDINGS AND INTERPRETATION

### Descriptive findings regarding internet addiction and psychological well-being

Descriptive findings related to internet addiction and psychological well-being obtained as a result of evaluating the answers given to the Internet Addiction test and Mental Well-being Scale are given in Table 2. According to Table 2, the internet addiction scores of the participants varied between 0-72 and the average was calculated as  $20.86 \pm 14.40$ . Psychological well-being scores varied between 14 and 70 and the average was calculated as  $52.18 \pm 10.32$ . As a result of proportioning the average scores to the lowest and highest scores that can be obtained from the scales, the internet addiction level of the participants is 20.9%; it can be said that their

psychological well-being level is 68.2%.

### Findings about the relationship between internet addiction and psychological well-being

Pearson correlation analysis was conducted to determine the relationship between Internet addiction and psychological well-being, and the findings are presented under the subtitle.

### Relationship between internet addiction and psychological well-being

Table 3 shows the findings of the relationship between internet addiction and psychological well-being. According to Table 3, it was observed that there was a

according to Table 3, it was observed that there was a moderate (0.29 < r < 0.70), negative (r = -0.44) and significant (p < 0.05) relationship between internet addiction and psychological well-being. In other words, with the increase in psychological well-being, internet addiction decreases moderately and significantly. The variance explained by the variables on each other is 19.2%. The variance explained by the variables on each other is 19.2%. This relationship is shown in Figure 1.

Based on these findings, "H1: There is a significant relationship between internet addiction and psychological well-being" has been accepted. Data is heavy to the left and rarely spread out on the right!

# Findings of investigating internet addiction and psychological well-being according to various variables

The findings obtained as a result of examining Internet addiction and psychological well-being according to various variables are presented under sub-headings.

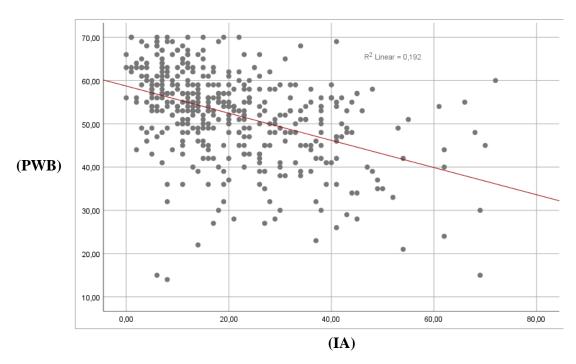


Figure 1. The Relationship between Internet Addiction and Psychological Well-Being.

**Table 4.** Analysis of internet addiction and psychological well-being by gender.

Variable	Gender	n	$\bar{\mathbf{x}}$	Ss	t	Sd	р
Internet addiction	Female	289	20.80	14.06	0.14	410	0.90
	Male	123	21.02	15.21	-0.14	410	0.89
Psychological well-being	Female	289	51.67	9.74	4.50	440	0.42
, ,	Male	123	53.37	11.51	-1.52	410	0.13

### Gender

In order to examine internet addiction and psychological well-being according to gender, unrelated samples t-test was performed and the findings obtained are given in Table 4. According to Table 4, internet addiction and psychological well-being scores of males were found to be higher than females. However, the differences are not significant. It was found that there was no significant difference between internet addiction and psychological well-being according to gender (p> 0.05).

Based on these findings, "H2:"Internet addiction and psychological well-being differ significantly by gender"has been rejected.

### Age

ANOVA (analysis of variance) was performed to examine internet addiction and psychological well-being according

to age, and the findings are shown in Table 5. According to Table 5, it was determined that internet addiction and psychological well-being differ significantly according to age (p <0.05). When the averages are examined, with the increase in age, it is observed that internet addiction decreases and psychological well-being increases. However, Tukey HSD multiple comparison (post-hoc) test was conducted to determine between which groups the difference was (Table 6). According to Table 6, internet addiction of the participants between the ages of 15-24 (young participants) is significantly higher than all other participants (p <0.05). In addition, participants in the 25-44 age group (young adults participants) have more addictions than the 45-64 age group (adults participants) (p <0.05). When psychological well-being was examined, it was found that the well-being levels of the participants between the ages of 15-24 (young participants) were significantly lower than all of the other participants (p <0.05). Participants in the 25-44 (young adults' participants) and 45-64 age groups (adults' participants) have similar psychological well-being.

Table 5. Analysis of internet addiction and psychological well-being by age.

Variable	Yaş	n	x	Ss	Variance	Squares Total	Sd	Squares Mean	F	р
	15-24	82	28.18	14.29	Intergroup	7556.14	2	3778.07	19.91	0.00
Internet addiction	25-44	286	20.02	14.26	In-group	77624.98	409	189.79		
	45-64	44	12.66	8.53	Total	85181.11	411			
	15-24	82	49.48	9.72	Intergroup	826.52	2	413.26	3.94	0.02
Psychological well-being	25-44	286	52.66	10.39	In-group	42908.19	409	104.91		
	45-64	44	54.09	10.19	Total	43734.71	411			

Table 6. Multiple comparison findings regarding internet addiction and psychological well-being by age.

Variable	(A) Age group	(B) Age group	Difference between means (A-B)	р
	45.04	25-44	8.16	0.00
	15-24	45-64	15.52	0.00
Internet addiction	25-44	15-24	-8.16	0.00
milemet addiction	25-44	45-64	7.37	0.00
	45-64	15-24	-15.52	0.00
	40-04	25-44	-7.37	0.00
	45.04	25-44	-3.19	0.01
	15-24	45-64	-4.62	0.02
Dayahalagigal wall being	25-44	15-24	3.19	0.01
Psychological well-being	25-44	45-64	-1.43	0.39
	4E G4	15-24	4.62	0.02
	45-64	25-44	1.43	0.39

Table 7. Examination of internet addiction and psychological well-being by marital status.

Variable	Marital status	n	x	Ss	t	Sd	р	
letere et e deliction	Married	219	19.47	14.31	2.00	440	0.04	
Internet addiction	Single	193	22.44	14.37	-2.09	410	0.04	
Developed a signal condition in a	Married	219	52.68	10.30	4.05	440	0.00	
Psychological well-being	Single	193	51.61	10.33	1.05	410	0.29	

Based on these findings, "H3: Internet addiction and psychological well-being differ significantly by age." has been accepted.

Marital status

In order to examine internet addiction and psychological well-being according to marital status, unrelated samples t-test was performed and the findings obtained are given in Table 7. According to Table 7, it was determined that there is a significant difference between internet addiction and marital status (p <0.05), but not a significant difference between psychological well-being (p> 0.05). When the averages were examined, it was seen that the internet addiction of singles was significantly higher than that of married people (p <0.05).

Based on these findings, "H4: Internet addiction and psychological well-being differ significantly by marital status." partially accepted.

### Educational status

ANOVA was performed in order to examine internet addiction and psychological well-being according to educational status and the findings obtained are shown in Table 8. According to Table 8, it was determined that internet addiction and psychological well-being did not show a significant difference according to education level (p> 0.05).

Based on these findings, "H5: Internet addiction and

Table 8. Examination of internet addiction and psychological well-being by educational status.

Variable	<b>Educational status</b>	n	$\bar{\mathbf{x}}$	Ss	Variance	Squares total	Sd	Squares Avg.	F	р
Internet addiction	Literate/Pri. education	21	19.48	15.11	Intergroup	226.02	3	75.3	0.36	0.78
	High school	102	19.78	14.44	In-group	84955	408	208.2		
internet addiction	Associate/Und. graduate	230	21.32	14.01	Total	85181.1	411			
	Master and above	59	21.42	15.73						
	Literate/Pri. education	21	56.52	8.45	Intergroup	638.5	3	212.8	2.01	0.11
Psychological	High school	102	52.83	10.55	In-group	43096.1	408	105.6		
well.being	Associate/Und. graduate	230	51.32	10.53	Total	43734.7	411			
	Master and above	59	52.86	9.31						

Table 9. Examination of internet addiction and psychological well-being by employment status.

Variable	Employment status	n	$\bar{\mathbf{x}}$	Ss	t	Sd	р
Internet	Employed	230	18.64	13.26	-3.51	359.59	0.00
addiction	Unemployed	182	23.67	15.30	-3.51	359.59	0.00
Psychological	Employed	230	54.07	9.47	4.40	204.42	0.00
well-being	Unemployed	182	49.80	10.86	4.19	361.13	0.00

Table 10. Examination of internet addiction and psychological well-being by income level.

Variable	Income level	n	$\bar{\mathbf{x}}$	Ss	Variance	<b>Squares Total</b>	Sd	Squares Avg.	F	р
Internet	Low	49	25.86	17.46	Intergroup	1418.18	2	709.09	3.46	0.03
addiction	Middle	319	20.29	13.49	In-group	83762.94	409	204.80		
	High	44	19.41	16.21	Total	85181.11	411			
<b>D</b>	Low	49	46.61	9.99	Intergroup	1843.49	2	921.74	9.00	0.00
Psychological well-being	Middle	319	52.72	9.96	In-group	41891.22	409	102.42		
well-beilig	High	44	54.48	11.38	Total	43734.71	411			

psychological well-being differ significantly by educational status." has been rejected.

### **Employment status**

In order to examine internet addiction and psychological well-being according to employment status, unrelated samples t-test was performed and the findings obtained are shown in Table 9. According to Table 9, it was found that there is a significant difference (p <0.05) between internet addiction and psychological well-being. When the averages are examined, the internet addiction of those who unemployed is more than the employed ones; it was observed that the psychological well-being of the employed participants was significantly higher than the unemployed ones (p <0.05).

Based on these findings, "H3: Internet addiction and psychological well-being differ significantly by employment status." has been accepted.

### Income level

ANOVA was performed in order to examine internet addiction and psychological well-being according to income level and the findings obtained are shown in Table 10. According to Table 10, internet addiction and psychological well-being do not show a significant difference according to income level (p <0.05). When the averages are analyzed, it is seen that internet addiction increased with the decrease in income; psychological well-being was found to decrease. However, Tukey HSD multiple comparison (post-hoc) test was conducted in order to determine between which groups the difference was (Table 11). According to Table 11, participants in the low income group have significantly higher internet addiction than other groups (p <0.05); however, psychological well-being was found to be significantly lower than the other groups (p < 0.05).

Based on these findings, "H7: Internet addiction and psychological well-being differ significantly by income

Variable	(A) Income St.	(B) Income St.	Difference between means (A-B)	р
	1	Middle	5.56	0.01
	Low	High	6.45	0.03
Internet addiction	Middle	Low	-5.56	0.01
	Middle	High	0.89	0.70
	Lliab	Low	-6.45	0.03
	High	Middle	-0.89	0.70
	1	Middle	-6.11	0.00
	Low	High	-7.87	0.00
Psychological	Middle	Low	6.11	0.00
woll boing	Middle	Lliab	4.76	0.20

High

Low

Middle

**Table 11.** Multiple comparison findings regarding internet addiction and psychological well-being examined by income level.

level." has been accepted.

well-being

### **DISCUSSION**

In this study, it was aimed to examine internet use in terms of psychological well-being. Seventy percent, of those participating in the study are females and approximately 75% are young adults (between the ages of 25-44). Approximately, 50% of the participants are married and single. A total of 412 people, 70% of whom were at least pre-license degree graduate, took part in the research. In addition, 56% of the participants are employed and 75% of them have moderate income. Accordingly, it can be said that an educated sample group consisting mainly of females aged 25 and over participated in the study. This may be due to the fact that females who have reached a certain age and who are educated may be more sensitive to participate in such studies, and the sample was randomly collected via the internet. Considering the scores obtained from the scales, it was seen that the participants generally had a low level of internet addiction and a high level of psychological well-being. The reason for this may be that the sample consists mostly of individuals above the age of 25, with a high level of education, and they are conscious internet users. This situation revealed the importance of education in reducing internet addiction and increasing psychological well-being.

High

In the study, it was seen that the relationships between internet addiction and psychological well-being were all moderate and significant (p <0.05). There is a negative and significant relationship between internet addiction and psychological well-being. In other words, internet addiction increases significantly with the decrease in psychological well-being. The variance (effect on each other) explained by internet addiction and psychological well-being on each other was found to be 19.2%. It has

been determined that being under the age of 25, being single, unemployed and having a low income are the factors that significantly increase internet addiction. According to the results of the t-test and analysis of variance, the internet addiction of those under the age of 25 was found to be significantly higher than the other age groups. It may be those individuals under the age of 25 are not yet under professional and marital responsibilities and have a lot of free time.

-1.76

7.87

1.76

0.28

0.00

0.28

Internet addiction of singles and unemployed people was found significantly higher than married couples and employed ones. This may be because single and unemployed people spend a lot of time online to spend their time and meet new people. When looking at the study of Tel and Koksalan (2009) who support this approach, it was seen that single participants "always" and "often" used the internet and this situation was attributed to the fact that single people were not under the marriage responsibility. In addition, it was found that the internet addiction of the low-income group was significantly higher than the others, and the addiction decreased with the increase in income. The reason for this may be that people with low income often prefer the internet in this direction instead of hobbies that require financial means to reduce their stress, spend time and have fun. Supporting this approach, in the research on "Internet Use of Families" conducted by the Turkey General Directorate of Family and Community Services, it was reported that internet usage decreases as the income level increases (Milliyet News, 2012). As a result, it can be said that there is an inverse proportion between income level and internet addiction.

Psychological well-being results were also quite similar. Psychological well-being increases significantly with the increase in employment status and income levels. The reason for this may be that individuals who have a better professional life and financial situation can lead the life they want. Since individuals with high income levels will

have a higher potential to spend on their hobbies, new occupations, and various social activities, the situation of feeling well can be realized more easily. In a study supporting this approach; Tatlilioglu (2015) mentioned that the spending potential of the person is considered as a resource in terms of achieving his goals, and that it can be seen as an important factor for a person's psychological well-being.

In addition, psychological well-being of under 25 years of age was found to be significantly lower than other individuals. The reason for this may be that young people who do not have experience, who have not yet started life, who have not graduated or not have a job, are experiencing profession and future concerns.

### **CONCLUSION AND RECOMMENDATIONS**

In conclusion, when all of these findings are evaluated together with the meaningful relationships between internet addiction and psychological well-being, it is possible to say that individuals under the age of 25, single, unemployed, and low-income group are in the risk group in terms of internet addiction. In addition, looking at the characteristics of this risk group, it is seen that it mostly describes the profile of university and high school students. It is seen that university and high school students make the internet a part of their lives due to environmental change, the adaptation process to this change, new social needs and academic situations that cause them to engage with the internet. For this reason, individuals under the age of 25, including mostly university and high school students, are considered to be in a position at risk.

Based on these results, the following recommendations can be made:

- 1. Future studies to reduce or prevent internet addiction should be carried out; it can be suggested to take into consideration that there are meaningful relationships between internet addiction and psychological well-being and to take a holistic approach.
- 2. Act on the principle of this study to increase psychological well-being will significantly reduce internet addiction.
- 3. In the prevention of internet addiction, focus can be made primarily on individuals under the age of 25, single, unemployed and in the low income group.
- 4. The findings obtained by conducting similar studies on sample groups with different characteristics should be compared with the findings of this study.
- 5. New perspectives can be brought with new studies in order to understand and determine the effects of increasing internet usage on people.
- 6. People can be informed about the psychological, physical, material and spiritual disadvantages caused by unconscious internet use and how they may affect the individual.

7. Psycho-training program can be designed for increasing the level of psychological well-being in order to prevent internet addiction.

### **CONFLICT OF INTERESTS**

The authors have not declared any conflict of interest.

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**Appendix 1.** The socio-demographic information form.

## İNTERNET KULLANIMININ PSİKOLOJİK İYİ OLUŞ VE YALNIZLIK DURUMU AÇISINDAN İNCELENMESİ ANKETİ

A. Sosyo-Demografik Bilgi Formu	
1. Cinsiyetiniz?	8. Gelir Düzeyiniz?
☐ Kadın ☐ Erkek  2. Yaşınız?	☐ Düşük ☐ Orta ☐ Yüksek
Lütfen belirtiniz ( )	9. Yaşadığınız Evde İnternet Aboneliğiniz Var Mı?
3. Medeni Haliniz?	□ Var □ Yok
□ Evli □ Bekar	10. Kaç Gigabaytlık Mobil İnternet(Akıllı Telefon) Paketi Kullanıyorsunuz?
4. Eğitim Durumunuz?  Okur-yazar İlköğretim Lise Önlisans/Lisans Yüksek Lisans ve Üzeri	☐ 1 GB - 5 GB Arası ☐ 6 GB - 10 GB Arası ☐ 11 GB ve Üzeri  11. Daha Çok Ne Tür Bir Cihazdan İnternete Bağlanıyorsunuz?
5. Annenizin Eğitim Durumu?  Okur-yazar Ilköğretim Lise Onlisans/Lisans Yüksek Lisans ve Üzeri  6. Babanızın Eğitim Durumu? Okur-yazar Ilköğretim Lise Onlisans/Lisans Yüksek Lisans ve Üzeri  7. Çalışma Durumunuz?  Çalışmıyorum Çalışmıyorum	Akıllı Telefon Akıllı Televizyon Tablet Bilgisayar Masaüstü Bilgisayar Dizüstü Bilgisayar  12. İnternette En Çok Vakit Geçirdiğiniz Site Türü Nedir? Bilim, Araştırma ve Akademi Siteleri E-Ticaret Siteleri Sosyal Medya Siteleri Eş - Arkadaş Bulma Siteleri Yetişkin Siteleri 13. Hiç İnternetten Tanıştığınız Birisiyle Dışarda Görüştünüz Mü? Görüşmedim
14. İnterneti Kullanma Sıklığınızın, Sosyal Çevrenizdeki İnsanlarla Görüşmenizi Kısıtladığını Düşünüyor Musunuz?	15. Aşırı İnternet Kullanımının İnsan Psikolojisi Üzerinde Olumsuz Etkileri Olabileceğini Düşünüyor Musunuz?
☐ Düşünüyorum ☐ Düşünmüyorum	☐ Düşünüyorum ☐ Düşünmüyorum

**Appendix 2.** The internet addiction test (IAT).

### B. İnternet Bağımlılığı Ölçeği

Aşağıdaki 20 soruda ifade edilen davranışları ne sıklıkta yaptığınızı size en uygun rakamı yuvarlak içine alarak değerlendiriniz.

0	1	2	3	4	5
Hiç	Nadiren	Bazen	Sıkça	Çoğu zaman	Her zaman

1.Ne sıklıkta planladığınızdan daha uzun süre internette kalırsınız?						5
2.Ne sıklıkta internette çok fazla zaman geçirdiğiniz için evdeki sorumluluklarınızı ihmal edersiniz?	0	1	2	3	4	5
3. Ne sıklıkta internetten aldığınız keyfi, sevdiğiniz insan veya yakın arkadaşınızla zaman geçirmeye tercih edersiniz?	0	1	2	3	4	5
4. Ne sıklıkta sizin gibi internet kullanıcılarıyla yeni arkadaşlıklar kurarsınız?	0	1	2	3	4	5
5.Ne sıklıkta yaşamınızdaki diğer insanlar sizin internette geçirdiğiniz zamandan şikayet eder?	0	1	2	3	4	5
6.Ne sıklıkta internette geçirdiğiniz zamandan ders notlarınız veya okul çalışmalarınız olumsuz etkilenir?	0	1	2	3	4	5
7. Ne sıklıkta yapmanız gereken başka bir şeylerden önce e-postanızı kontrol edersiniz?	0	1	2	3	4	5
8. Ne sıklıkta iş performansınız veya üretkenliğiniz internetten olumsuz etkilenir?	0	1	2	3	4	5
9.Ne sıklıkta birileri size internette ne yaptığınızı sorduğunda savunmacı veya gizleyici olursunuz?	0	1	2	3	4	5
10.Ne sıklıkta yaşamınıza dair rahatsız olduğunuz konulardaki düşüncelerinizi, internette rahatlatıcı fikirler bularak savuşturursunuz?	0	1	2	3	4	5
11.Ne sıklıkta kendinizi tekrar internete girmek için beklerken bulursunuz?	0	1	2	3	4	5
12.Ne sıklıkta internetsiz bir yaşamın sıkıcı, boş ve zevksiz bir şey olacağından korkarsınız?	0	1	2	3	4	5
13.Ne sıklıkta siz internetteyken birileri sizi rahatsız ederse ona sert çıkar, bağırır veya soğuk davranırsınız?	0	1	2	3	4	5
14.Ne sıklıkta gece internete girdiğiniz için uykusuz kalırsınız?	0	1	2	3	4	5
15.Ne sıklıkta internette değilken kafanızın internetle meşgul olduğunu hissedersiniz veya internette olmakla ilgili hayaller kurarsınız?	0	1	2	3	4	5
16.Ne sıklıkta internetteyken kendi kendinize "Sadece birkaç dakika daha" dediğinizi fark edersiniz?	0	1	2	3	4	5
17.Ne sıklıkta internette geçirdiğiniz zamanı azaltmaya çalışır ve başarısız olursunuz?	0	1	2	3	4	5
18.Ne sıklıkta internette ne kadar zaman geçirdiğinizi saklamaya çalışırsınız?	0	1	2	3	4	5
19.Ne sıklıkta başkalarıyla birlikte dışarıya çıkmaktansa internette zaman geçirmeyi daha fazla tercih edersiniz?	0	1	2	3	4	5
20.Ne sıklıkta internete girmediğinizde depresif, huysuz veya gergin hissedersiniz; öyle ki bu duygular internete girdiğinizde kaybolup gider?	0	1	2	3	4	5

Appendix 3. The warwick-edinburgh mental wellbeing scale (WEMWBS).

### Warwick-Edinburgh Mental İyi Oluş Ölçeği

		Hiç katılmıyorum	Katılmıyorum	Biraz katılıyorum	Katılıyorum	Tamamen
1.	Gelecekle ilgili iyimserim.	1	2	3	4	5
2.	Kendimi işe yarar ( faydalı) hissediyorum.	1	2	3	4	5
3.	Kendimi rahatlamış hissediyorum.	1	2	3	4	5
4.	Diğer insanlara karşı ilgiliyim.	1	2	3	4	5
5.	Farklı işlere zaman ayırabilecek enerjim var.	1	2	3	4	5
6.	Sorunlarla iyi bir şekilde başa çıkabilirim.	1	2	3	4	5
7.	Açık ve net bir biçimde düşünebiliyorum.	1	2	3	4	5
8.	Kendimden memnunum.	1	2	3	4	5
9.	Kendimi diğer insanlara yakın hissediyorum.	1	2	3	4	5
10.	Kendime güveniyorum.	1	2	3	4	5
11.	Kendi kararlarımı kendim verebiliyorum.	1	2	3	4	5
12.	Sevildiğimi hissediyorum.	1	2	3	4	5
13.	Yeni şeylere karşı ilgiliyim.	1	2	3	4	5
14.	Neşeli hissediyorum.	1	2	3	4	5