THE TURKISH JOURNAL ON ADDICTIONS
www.addicta.com.tr

ORIGINAL ARTICLE

Examining the Relationship Between the Internet Addiction Levels of Licensed Athletes and Their Mental Toughness in Sports

Ufuk Doğan[1], Salih Gülen[2], Fatih Çelik[3]

[1]Department of Psychiatric Nursing, Fırat University, Elazığ, Turkey
[2]Department of Child Development, Muş Alparslan University, Muş, Turkey
[3]Ministry of Youth and Sports (Elazığ), Sports Trainer, Elazığ, Turkey

ORCID iDs of the authors: U.D. 0000-0002-1345-5261, S.G. 0000-0001-5092-0495, F.Ç. 0000-0002-9370-4343.

Main Points

- Internet addiction significantly predicts the mental toughness of athletes.
- As the internet usage time of athletes increases, their internet addiction increases.
- Athletes in the older age group are more mentally resistant than athletes in the younger age groups, and athletes in the team category have more mental toughness than athletes in the individual category.
- Mental toughness can be used as an effective tool in reducing the level of internet addiction.

Abstract

In this study, the relationship between internet addiction levels and mental toughness levels of athletes who are actively engaged in licensed sports was examined. This descriptive study was conducted with 440 elite athletes in 2021. The Participant Descriptive Form, Internet Addiction Scale, and Sport Mental Toughness Questionnaire were used. In the analysis of data, statistical techniques such as the *t*-test, one-way analysis of variance, Pearson correlation were used with Statistical Package for Social Sciences 23.0. The mean Internet Addiction Scale score was 38.16 ± 14.7, and the mean Sport Mental Toughness Questionnaire score was 2.86 ± 0.35. A correlation was found between the duration of internet usage, the purpose of use, the tool used, and the age of the participants with their Internet Addiction Scale total scores. A low and significant negative correlation was found between Internet Addiction Scale and Sport Mental Toughness Questionnaire scores. It can be thought that if internet addiction is not intervened in athletes, mental toughness will decrease and, naturally, failure in sports may increase.
Keywords: Addiction, internet addiction, mental toughness, screen exposure, sports

Corresponding Author:
Salih Gülen
E-mail:
sgnova@windowslive.com

Received: July 12, 2022
Accepted: September 3, 2022
Publication Date:
December 19, 2022

Introduction

Today, technology is important and occupies an undeniable amount of space in our lives. Technological tools, which have made many areas of our lives easier and more useful, are directly or indirectly related to the internet. Although the positive effects of the new life order and the use of the internet have been mentioned, it has also brought about addictions, such as technology, games, social media, mobile, and internet, into our lives (Küçükvardar, 2019). The concept of internet addiction, which we will consider among these addictions, was previously mentioned in the literature with concepts such as excessive internet use and not being able to survive without internet. In an email sent by the psychiatrist Ivan Goldberg to his colleagues in 1975, this condition was first described as "internet addiction disorder" (Günüç & Kayri, 2010).

Problematic internet use causes some disruptions in the lives of individuals, loneliness of the person, psychological breakdowns, and some disruptions in communication with their social environment. Problematic internet usage includes online chatting, online digital games, social media, shopping,

Cite this article as: Doğan, U., Gülen, S., & Çelik, F. (2022). Examining the relationship between the internet addiction levels of licensed athletes and their mental toughness in sports. *Addicta: The Turkish Journal on Addictions*, 9(3), 303-310.

pornography, gambling, and crime. Problematic use of the internet, using such activities without a certain limit, and becoming dependent on the environment cause some harm to the person in terms of psychological and social communication. Concepts such as computer addiction, game addiction, virtual addiction, and social media addiction are also different expressions that define internet addiction and are sometimes used instead of internet addiction (Ögel, 2014).

Internet addiction prevents people from having social relations and taking part in physical activities due to the long hours of use (Büyükkorkmaz Öztürk, 2017). Especially in the young population where internet use is intense, sedentary life has been noticed, and it is aimed to prevent this (Hekim, 2015). This sedentary lifestyle has become a problem in many countries in the world, especially in developed countries. In programs (regular physical activity) in which an active life is encouraged, priority is given to light sports, and then they are provided with continuity in sports and leading an active life (Tavazar et al., 2014).

Sports is an important tool that contributes to the physical, spiritual, mental, and psychological progress and health of individuals and strengthens their ties with the environment by increasing their social communication. Psychological abilities such as concentration, attention, focus, goal setting, and coping with difficulties develop in individuals who do sports (Bedir et al., 2019). Negative situations caused by internet addiction in individuals can turn into positive situations as a result of sports activities (Bozkurt et al., 2016). The effect of internet addiction on the psychological process of the person is also closely related to the athletes because psychological skills such as concentration, anxiety, motivation, self-confidence, goal setting, coping with difficulties, mental preparation, and training are the determining factors in achieving athletic success (Urfa & Aşçı, 2018). Apart from athletic success, psychological skills play an important role in the mental and spiritual health of athletes (Erdoğan & Kocaekşi, 2015).

An important element among the psychological skills of athletes is mental toughness (Erdoğan & Kocaekşi, 2015). In general, in the face of difficult living conditions, being able to rid oneself of this process, adapting to current negative situations (Garmezy, 1991) or mental toughness, which is defined as the process of adapting to these situations (Hunter, 2001), is expressed as a feature that reduces the negative effects of pressure and stress and encourages positive thinking (Jacelon, 1997). In mental toughness, pressure can be defined as the ability to cope with difficult processes such as stress, anxiety, lack or excess of motivation, and inability to focus (Goldberg, 1998). Mental toughness in sports can be expressed as athletes adapting themselves to these conditions mentally and developing a mental and spiritual harmony in order to perform better than their competitors in conditions such as training and competition environments (Stamatis et al., 2020). Being mentally tough in the sports environment means not turning to negative thoughts as much as possible. On the contrary, it requires always thinking positively and staying positive in order not to lose motivation, regardless of the result. This concept can also be expressed as the transformation of a state of patience and resilience into action, which the athlete develops, believes, constructs, and supports with instant planning, in environments such as sports activities that contain negative and negative conditions and affect the athlete (Gucciardi et al., 2009). For this reason, it is important to investigate the factors affecting the mental toughness of athletes. Researchers have taken into account variables such as self-efficacy, family factors, addiction, and waiting habits that are effective in the development of mental toughness and have conducted many studies (Brace et al., 2020; Greiwe et al., 2021). The relationship between addiction, which is one of these elements, and mental toughness is thought to be an important issue. In this study, the relationship between internet addiction levels and mental toughness in sports of elite individuals aged 10 – 30 years who did active sports was investigated.

Purpose of the Research

The aim of this study was to examine the relationship between the internet addiction levels and mental toughness levels of actively licensed athletes. Within the scope of this purpose, answers to the following questions were sought:

1. Is there a significant difference between the descriptive/variable characteristics of the athletes and the scores they get from the Internet Addiction Scale (IAS) and sub-dimensions?
2. Is there a significant difference between the scores of the athletes in the Sport Mental Toughness Questionnaire (SMTQ) and sub-dimensions according to their descriptive/variable characteristics?
3. What is the relationship between the IAS and SMTQ scores?

Methods

The relational screening design, which is one of the quantitative models that aims to reveal the change and relationship between two or more variables (Karasar, 2009), was used in this research.

Research Group

The study group consisted of licensed athletes between the ages of 10 and 30 years who were active in the Gaziantep Provincial Directorate of Youth and Sports. Since 17 of the 457 athletes who participated in the study left the questionnaire incomplete, 440 licensed athletes were included in the study.

Data Collection

In order to reach the athletes within the scope of the research, after obtaining ethical approval from the Ethics Committee of Muş University (E7841) and the permission of the institution from the relevant Directorate, preliminary information was given to the athletes and the questionnaire forms were filled in. Since it was not possible to collect face-to-face surveys due to the coronavirus disease 2019 (COVID-19) pandemic, it was carried out using the web-based data collection method over the Google platform. After the information describing the content of the study was first presented to the participants, voluntary consent forms were obtained.

Data Collection Tool

The participant descriptive form, IAS and SMTQ were used in the research. Participant descriptive form was prepared by the researchers to obtain the demographic information and descriptive characteristics of the participants such as their age, gender,

daily internet usage time, internet usage area, internet usage tool, and sports branch (team – individual).

Internet Addiction Scale

In order to determine the internet addiction level of the participants in the research, the IAS, designed by Hahn and Jerusalem (2001) and originally called "Skala zur Erfassung der Internetsucht," and the Turkish adaptation of the IAS, as a result of a validity – reliability study conducted by Şahin and Korkmaz (2011), were used. The IAS is a 5-point Likert-type scale consisting of 19 items (1 = Not at all Appropriate, 2 = Somewhat Appropriate, 3 = Appropriate, 4 = Fairly Appropriate, and 5 = Totally Appropriate). The maximum score that can be obtained from this scale is 95, and the base score is 19. High scores obtained from the scale indicate that individuals have high internet addiction levels. Internal consistency analyses were performed on the data to calculate the reliability of the scale. Accordingly, the internal consistency coefficients of the factors were 0.90 for loss of control, 0.88 for excessive desire to stay online, and 0.92 for negativity in social relations, and the internal consistency coefficient for the overall scale was determined as 0.85 (Şahin & Korkmaz, 2011). In the validity and reliability analysis conducted herein, the internal consistency coefficient for the loss of control was 0.87, for the desire to stay online was 0.87, and for the negativeness in social relations was 0.91, and for the overall scale, it was determined as 0.94. The Guttmann split-half value of the scale was 0.765, the Spearman – Brown value was 0.767, and the Cronbach alpha reliability coefficient was 0.858.

Sport Mental Toughness Questionnaire

The SMTQ, developed by Sheard et al. (2009), in order to determine the mental toughness levels of athletes, consists of 14 items. The inventory, which consists of three sub-dimensions (confidence, continuity, and control) as well as general mental toughness, is in a 4-point Likert-type scale. The Cronbach alpha values for the sub-dimensions of the inventory were 0.81 for the confidence sub-dimension, 0.74 for the continuity sub-dimension, and 0.71 for the control subscale, and the overall internal consistency coefficient was 0.81 (Sheard et al., 2009). The SMTQ was adapted into Turkish by Altıntaş (2015). The Cronbach Alpha internal consistency reliability coefficient of the SMTQ in this sample was 0.70.

Analysis of Data

IBM SPSS Statistics for Windows 23.0 (IBM Corp., Armonk, NY, USA) was used for the data analysis. In this context, statistical analyses such as the *t*-test, one-way analysis of variance, correlation were carried out, taking into account the descriptive characteristics of the participants. The results were accepted at a 95% CI and significance at $p < .05$.

Results

The findings obtained in the research were given in the order of the research problems. Accordingly, the data on the IAS and SMTQ scores and dimensions used in the research are given in Table 2.

In Table 1, information is given about the distribution of the participants according to their descriptive characteristics.

Table 1.
Introductory Information About the Research Group

Features	*N*	%
Gender		
Male	239	54.6
Female	201	45.4
Age		
10 – 13	82	18.7
14 – 16	150	34.1
17 – 20	101	23.0
21 – 25	53	12.0
26 and up	54	12.2
Daily internet usage		
Less than 1 hour	36	8.4
1 – 2	68	15.6
2 – 3	122	27.6
3 hours or more	214	49.3
Use the internet the most area		
News/information/lesson	110	25.0
Video/image sharing	167	38.0
Movie etc. watching	62	14.1
Game	92	20.9
e-Book	9	2.0
Internet usage tool		
Telephone	385	87.5
Computer	27	6.2
Tablet	28	6.3
Sports branch type		
Individual	131	29.8
Team	309	71.2

It was determined that gender was significantly associated with the loss of control sub-dimension, and women scored higher than men ($p > .05$). There was a significant relationship between the age of the participants and the scores of the sub-dimension of negativity in social relations, and the 10 – 13 age group got higher scores when compared to the other age ranges. A significant relationship was found between the daily internet usage time and the IAS total scores and all of the sub-dimensions of the scale, and the addiction scores of the athletes increased as their internet usage time increased ($p < .001$). A significant correlation was found between the tools used by the athletes to access the internet and the desire to stay online more, the sub-dimensions of negativity in social relations, and the total IAS scores. There was a significant relationship between the reasons why the athletes prefer to use the internet and the IAS total scores and all of the sub-dimensions of the scale. The video picture sharing, movie, etc., addiction levels of athletes who use the internet for watching and playing games, and the rate of those who use the internet and

Table 2.
Comparison of the Scores of the Athletes in IAS and Its Sub-dimensions According to Their Descriptive Characteristics

Features	Loss of Control X ± S.S *t/F* *p*	More Requests to Stay Online X ± S.S *t/F* *p*	Negativity in Social Relationships X ± S.S *t/F* *p*	IAS Total Points X ± S.S *t/F* *p*
Gender				
Male	14.58 ± 5.60	9.32 ± 4.35	13.50 ± 6.39	37.40 ± 14.58
Female	15.68 ± 5.92	9.52 ± 4.39	13.88 ± 6.35	39.08 ± 14.85
	−1.998	−0.473	−0.624	−1.190
	.04	.636	.533	.235
Age				
10 – 13[a]	14.41 ± 6.17	9.52 ± 4.87	14.82 ± 8.04	38.76 ± 17.70
14 – 16[b]	15.07 ± 5.81	9.42 ± 4.25	14.15 ± 6.42	38.65 ± 14.99
17 – 20 [c]	15.11 ± 5.68	9.02 ± 4.29	12.95 ± 5.31	37.09 ± 13.47
21 – 25[d]	16.26 ± 5.49	9.96 ± 4.31	13.32 ± 5.68	39.55 ± 13.03
26 and up[e]	14.90 ± 5.46	9.38 ± 4.14	12.25 ± 5.51	36.15 ± 12.86
	.842	.418	1.944	1.487
	.499	.398	<.001	.046
			b,c,d,e,>a	a,b,d>e
Daily internet usage				
0 – 1 hour[a]	9.94 ± 3.34	5.72 ± 3.34	10.00 ± 3.88	25.67 ± 8.50
1 – 2 hours[b]	12.02 ± 4.66	7.35 ± 4.66	11.75 ± 5.78	31.13 ± 12.83
2 – 3 hours[c]	13.95 ± 4.56	8.75 ± 4.56	13.18 ± 5.64	35.89 ± 11.95
3 and up[d]	17.59 ± 5.80	11.07 ± 5.80	15.19 ± 6.83	43.86 ± 14.96
	39.305	30.097	11.205	31.021
	<.001	<.001	<.001	<.001
	d>a,b,c	d>a,b,c	d>a,b,c	d>a,b,c
	c>a	c>a	c>a	c>a
Internet usage tool				
Telephone[a]	15.15 ± 5.65	9.34 ± 5.65	13.45 ± 5.91	37.94 ± 13.95
Computer[b]	13.29 ± 6.43	8.18 ± 6.43	12.59 ± 6.70	34.07 ± 16.69
Tablet[c]	16.17 ± 6.57	11.60 ± 5.34	17.85 ± 10.08	45.64 ± 20.19
	1.828	4.731	6.809	4.779
	.162	.009	<.001	.009
		c>a,b	c>a,b	c>a,b
Internet area				
News/information/lesson[a]	13.31 ± 5.24	8.21 ± 4.01	11.86 ± 5.79	33.40 ± 13.25
Video/image sharing[b]	15.88 ± 5.83	9.98 ± 4.50	14.03 ± 6.12	39.90 ± 14.27
Movie etc. watching[c]	14.95 ± 6.27	8.98 ± 4.32	13.00 ± 5.75	36.93 ± 14.85
Games[d]	16.17 ± 5.57	10.14 ± 4.31	15.82 ± 7.27	42.14 ± 15.75
e-Book[e]	12.55 ± 4.00	9.00 ± 4.18	12.11 ± 6.07	33.66 ± 12.93
	4.785	3.680	5.488	5.696
	<.001	.006	<.001	<.001
	b,d>a	b,d>a	b,d>a	b,d>a
			d>c	b,d>e

IAS, Internet Addiction Scale.

Table 3.
Comparison of the Scores of the Athletes from SMTQ and Its Sub-dimensions According to Their Descriptive Characteristics

	Confidence	Control	Continuity	SMTQ Score
	X ± S.S	X ± S.S	X ± S.S	X ± S.S
	t/F	*t/F*	*t/F*	*t/F*
Features	***p***	***p***	***p***	***p***
Gender				
Male	2.80 ± 0.67	2.39 ± 0.70	2.45 ± 0.40	2.58 ± 0.44
Female	2.58 ± 0.60	2.75 ± 0.67	2.57 ± 0.39	2.61 ± 0.36
	3.548	−5.452	−1.611	0.181
	<.001	**<.001**	.108	.507
Age				
10 – 13[a]	2.95 ± 0.52	2.88 ± 0.64	2.70 ± 0.37	2.86 ± 0.34
14 – 16[b]	2.94 ± 0.52	2.87 ± 0.66	2.67 ± 0.34	2.84 ± 0.31
17 – 20[c]	2.94 ± 0.063	2.83 ± 0.63	2.62 ± 0.38	2.82 ± 0.41
21 – 25[d]	2.95 ± 0.61	2.81 ± 0.61	2.71 ± 0.47	2.84 ± 0.41
26 and up[e]	3.20 ± 0.52	2.93 ± 0.68	2.76 ± 0.29	3.00 ± 0.27
	2.424	0.342	1.451	2.507
	.048	.674	**.044**	**.042**
	e>a,b,c,d		**e>c**	**e>a,b,c,d**
Branch				
Individual	2.90 ± 0.59	2.76 ± 0.73	2.60 ± 0.35	2.77 ± 0.35
Team	3.01 ± 0.55	2.91 ± 0.60	2.72 ± 0.37	2.99 ± 0.35
	−1.932	−2.193	−3.023	−3.355
	.062	**.044**	**.003**	**<.001**
Internet usage				
0 – 1 hour[a]	3.00 ± 0.70	2.73 ± 0.74	2.72 ± 0.34	2.84 ± 0.41
1 – 2 hours[b]	3.06 ± 0.45	2.70 ± 0.71	2.66 ± 0.32	2.84 ± 0.31
2 – 3 hours[c]	3.00 ± 0.56	2.94 ± 0.59	2.69 ± 0.38	2.89 ± 0.37
3 and up[d]	2.93 ± 0.57	2.89 ± 0.63	2.68 ± 0.38	2.85 ± 0.35
	.421	.051	.832	.639

SMTQ, Sport Mental Toughness Questionnaire. The alphabets in the tables represent groups. Bold values are significant over 0.05.

prefer e-books because of the news, information, and lessons were higher than the rate of those who prefer e-books (Table 3).

A significant difference was found between the gender of the athletes and the SMTQ confidence sub-dimension in favor of the men and the control sub-dimension in favor of the women ($p < .001$). There was a significant relationship between the age of the athletes and the confidence, continuity sub-dimensions, and SMTQ total scores, and the scores of the 26+ age group were higher than the other age groups ($p > .05$). There was a significant relationship between the type of sports performed and control, continuity sub-dimensions, and SMTQ total scores, and those who did team sports got higher scores. There was no significant relationship between the duration of internet usage and the total score and sub-dimensions of the scale ($p > .05$) (Table 4).

There was a negative, low, and significant relationship between the IAS and SMTQ scores. As the level of internet addiction increased, the level of mental toughness in sports decreased ($r = -.150$, $p = .002$) (Table 5).

Table 4.
The Relationship Between IAS and SMTQ

		IAS	SMTQ
IAS	Pearson correlation	1	−.150**
	Significance (two-tailed)		.002
	N	440	440
SMTQ	Pearson correlation	−.150**	1
	Significance (two-tailed)	.002	
	N	440	440

**Correlation is significant at the .01 level (two-tailed).
IAS, Internet Addiction Scale; SMTQ, Sport Mental Toughness Questionnaire.

Discussion

There was a difference in the sub-dimension of loss of control in the level of internet addiction of the athletes according to gender. Internet addiction levels and loss of control sub-dimension of the female athletes were higher than the male athletes ($p < .05$). Similarly, Procházka et al. (2021) found that internet addiction was higher in girls than in boys. However, in the study of Can and Tozoğlu (2019), it was concluded that male university students had higher internet addiction scores than females. The effect of internet addiction on gender should be investigated in larger populations. It can be said that there was a significant difference between the ages of the participants and the scores of the negativity in social relations sub-dimension. It was determined that the 10 – 13 age group scored higher than the other age ranges. This result can be explained, as the level of internet addiction is felt more intensely in athletes aged 10 – 13 years. Similarly, Karacic and Oreskovic (2017) and Altınova et al. (2019) found that students in the 13 – 16 age group had higher internet addiction levels than other age groups, and the most vulnerable groups for internet addiction were adolescents in this age group. In the current study, the high scores of athletes aged 10 – 13 and 14 – 16 years in the social relations sub-dimension of internet addiction can be explained by the fact that their generation is exposed to technology more than other generations since birth. A significant difference was found between the daily internet usage time and IAS total scores and all of the sub-dimensions of the scale. It was determined that as the duration of internet use of the athletes increased, their addiction scores increased ($p < .001$). Erdemir (2021), in his study of middle school and high school students, determined that as the duration of internet use during the day increased, the level of internet addiction also increased. In general, it can be said that internet addiction and the duration of daily usage make a positive significant difference.

When the addiction levels of the athletes according to the tools they use to access the internet were examined, a significant difference was found between the sub-dimensions of the desire to stay online more and the negativity in social relations and the total scores of the IAS. Accordingly, it was observed that devices such as tablet phones and computers increase the level of internet addiction, while tablets and phones increase it at a higher level. Durak and Seferoğlu (2018) found a significant relationship between students' smartphone usage and their internet addiction levels and internet usage time in their study on secondary school students. Erdemir (2021), in his study of middle school and high school students, determined that smartphone use triggers internet addiction, and students who have a smartphone have higher internet addiction levels than students who do not have a smartphone. There was a significant difference between the purposes of using the internet and the total scores of the IAS and all of the sub-dimensions of the scale. According to this result, the addiction levels of athletes who use the internet for video picture sharing, watching movies and similar games, and playing games, and those who use the internet and prefer e-books because of the news, information, and lessons had a higher addiction rate than those who prefer e-books. Onur (2019) obtained a result in which internet addiction levels differed statistically significantly according to internet usage purposes. Can and Tozoğlu (2019) found a significant relationship between students' internet usage purpose and internet addiction. A significant relationship was found between the gender of the athletes and the SMTQ confidence and control sub-dimensions. Confidence sub-dimension scores were higher in males, and control sub-dimension scores were higher in females ($p < .001$). Similarly, Orhan (2018) found the total scores of the confidence sub-dimension to be significantly higher in males. However, Buhrow et al. (2017) found that there was no statistically significant difference between the mental toughness levels of male and female athletes in a study that examined the mental toughness of college athletes according to different variables. In a study conducted by Yarayan et al. (2018), no significant difference was found between mental toughness and gender.

There was a statistically significant difference between the ages of the athletes and the sub-dimensions of confidence, continuity, and total scores from the mental toughness sub-dimensions, and the scores of the 26+ age group were higher than the other age groups ($p > .05$). Yarayan et al. (2018), who achieved the same results with their study, concluded that the athletes in the 24 – 29 and 30 – 35 age ranges got higher scores in mental toughness levels compared to the athletes aged 18 – 23 years, and the level of mental toughness increased as the age increased. Regarding the branch of sports (team – individual), it was determined that there was a significant relationship in the mental toughness total scores in sports and those who did team sports got higher scores. Orhan (2018) found that team athletes had a higher average than the individual athletes in the mental toughness and confidence sub-dimension. This situation may have arisen as a result of interpersonal interaction. No change was observed in the mental toughness levels of the athletes related to daily internet usage time ($p > .05$) (Table 4). In a study conducted during the COVID-19 epidemic in China, Qin et al. (2020) revealed that with the increase in screen time, sports activities decreased in individuals. More studies should be done between screen exposure time and sports activities.

Pearson correlation analysis was applied to determine the relationship between the IAS and SMTQ scores. According to the results, a low and significant negative relationship was found. At the same time, it was seen that the relationship between the internet addiction levels of the athletes and their mental toughness levels was statistically significant. It was observed that as the level of internet addiction increased in the athletes, the level of mental toughness in sports decreased ($r = -.150$, $p = .002$) (Table 5). Kodaman and Eker (2019) found a statistically significant and negative relationship between psychological resilience and internet addiction. As a result, a significant relationship was found between internet addiction and mental toughness in sports.

Limitations and Directions/Suggestions for Future Research

It was determined that internet addiction affects the mental toughness level of the athletes, and their mental toughness changes inversely with the increase in the internet addiction level of the athletes. Mental toughness, which plays the most important role in the development of psychological skills, is vital for athletes to achieve success when they reach the elite-competitor level. It is thought that informing and directing the athletes about the correct use of the internet will affect the success of sports.

It is thought that research should be done on how internet addiction affects different situations of elite-level athletes, their performance in sportive competitions, and the real capacities of athletes, and it is hoped that our study will be used as an auxiliary source for research in this area.

Ethics Committee Approval: Ethics Committee permission for the research and legal permissions for the application has been obtained from the Muş Alparslan University (E7841).

Informed Consent: Written informed consent was obtained from the participants.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept - F.Ç.; Design - F.Ç., U.D.; Supervision - S.G.; Materials - F.Ç., U.D.; Data Collection and/or Processing - F.Ç., U.D.; Analysis and/or Interpretation - U.D., S.G.; Literature Review - F.Ç., U.D.; Writing - F.Ç., U.D., S.G.; Critical Review - S.G.

Declaration of Interests: The authors have no conflicts of interest to declare.

Funding: The authors declared that this study has received no financial support.

References

Altınova, A., Daşbaş, S., & Kesen, N. (2019). 11 – 17 Yaş Arası Ergenlerde Internet Bağımlılığı ve Video Kanallarının Takip Edilmesinin Incelenmesi. *Pediatric Practice and Research*. Retrieved from https ://dergipark.org.tr/en/pub/pprjournal/issue/51342/668749

Altıntaş, A. (2015). *Sporcuların Zihinsel Dayanıklılıklarının Belirlenmesinde Optimal Performans Duygu Durumu, Güdülenme Düzeyi ve Hedef Yöneliminin Rolü* [Doktora Tezi]. Ankara Üniversitesi.

Bedir, D., Erhan, S. E., & Akkuş, Y. (2019). Bilgisayar Oyun Bağımlılığı Sporcuların Psikolojik Becerilerini Etkiler Mi? *Atatürk Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, *21*, 1(A), 40 – 49.

Bozkurt, H., Şahin, S., & Zoroğlu, S. (2016). Internet Bağımlılığı: Güncel Bir Gözden Geçirme. *Çağdaş Tıp Dergisi*, *6*(3), 235 – 247.

Brace, A. W., George, K., & Lovell, G. P. (2020). Mental toughness and self-efficacy of elite ultra-marathon runners. *PLoS One*, *15*(11), e0241284. [CrossRef]

Buhrow, C., Digmann, J., & Waldron, J. J. (2017). The Relationship between sports specialization and mental toughness. *International Journal of Exercise Science*, *10*(1), 44 – 42.

Büyükkorkmaz Öztürk, S. (2017). *Mobil Medya Aygıtları ve Internetin Çocukların Günlük Yaşamları ve Sağlıkları Üzerindeki Yeri ve Etkileri* [Uzmanlık Tezi]. Abant İzzet Baysal Üniversitesi Tıp Fakültesi.

Can, H. C., & Tozoğlu, E. (2019). Üniversite Öğrencilerinin Internet Bağımlılık Düzeylerinin Spor ve Farklı Değişkenler Açısından Incelenmesi. *Spor Eğitim Dergisi*, *3*(3), 102 – 118. Retrieved from https://dergipark.org.tr/en/pub/seder/issue/48470/631101

Durak, H., & Seferoğlu, S. S. (2018). Ortaokul Öğrencilerinin Akıllı Telefon Kullanımları ve Bağımlılık Düzeyleriyle Ilgili bir Inceleme, Eğitim Teknolojisi Kuram ve Uygulama. *Educatıonal Technology Theory and Practıce*, *8* (Winter), 1.

Erdemir, N. (2021). Ortaokul ve Lise Öğrencilerinin Internet Bağımlılığı ve Problemli Internet Kullanımının Incelenmesi [Doktora Tezi]. İnönü üniversitesi eğitim Bilimleri Enstitüsü eğitim Bilimleri Anabilim Dalı.

Erdoğan, N., & Kocaekşi, S. (2015). Elit Sporcuların Sahip Olması Gereken Psikolojik Özellikler. *Türkiye Klinikleri Spor Bilimleri Dergisi*, *7*(2), 57 – 64.

Garmezy, N. (1991). Resilience and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist*, *34*(4), 416 – 430. [CrossRef]

Goldberg, A. S. (1998). *Sports slump busting: 10 Steps mental toughness and peak performance*. Human Kinetics Publishers.

Greiwe, J., Gruenke, J., & Zeiger, J. S. (2021). The impact of mental toughness and postural abnormalities on dysfunctional breathing in athletes. *Journal of Asthma*, 1 – 15.

Gucciardi, D. F., Gordon, S., & Dimmock, J. A. (2009). Advancing mental toughness research and theory using personal construct psychology. *International Review of Sport and Exercise Psychology*, *2*(1), 54 – 72. [CrossRef]

Günüç, S., & Kayri, M. (2010). Türkiye'de Internet Bağımlılık Profili ve Internet Bağımlılık Ölçeğinin Geliştirilmesi: Geçerlik-Güvenirlik Çalışması. Hacettepe Üniversitesi. *Eğitim Fakültesi Dergisi*, *39*, 220 – 232

Hahn, A., & Matthias, J. (2001). Internetsucht—Reliabilität und Validität in der Online-Forschung. *Online-Marktforschung*. Gabler Verlag. 213 – 233.

HekİM, M. (2015). Çocukluk Çağı Obezitesinin Önlenmesinde Fiziksel Aktivite ve Sporun Önemi. *Journal of International Social Research*, *8*(37), 1102 – 1102. [CrossRef]

Hunter, A. J. (2001). A cross-cultural comparison of resilience in adolescents. *Journal of Pediatric Nursing*, *16*(3), 172 – 179. [CrossRef]

Jacelon, C. S. (1997). The trait and process of resilience. *Journal of Advanced Nursing*, *25*(1), 123 – 129. [CrossRef]

Karacic, S., & Oreskovic, S. (2017). Internet addiction through the phase of adolescence: A Questionnaire Study. *JMIR Mental Health*, *4*(2), e11. [CrossRef]

Karasar, N. (2009). *Bilimsel Araştırma Yöntemi* (*19* Baskı). Nobel Yayıncılık.

Kodaman, U., & Eker, E. (2019). 14 – 18 Yaş Arası Ergenlerin Psikolojik Dayanıklılıkları Ile Internet Bağımlılığı Arasındaki İlişkinin İncelenmesi, İstanbul Aydın Üniversitesi, Psikoloji Anabilim Dalı. *Akademik Sosyal Araştırmalar Dergisi*, *98*, 342 – 354

Küçükvardar, M. (2019). *Bilişim Çağında Teknoloji Bağımlılığı ve Dijital İstila Üzerine bir Araştırma* [Doctoral Dissertation]. Marmara Üniversitesi.

Ögel, K. (2014). *İnternet bağımlılığı*. Türkiye İş Bankası Kültür Yayınları, Sağlık Bakanlığı. Retrieved from https://sbu.saglik.gov.tr/Ekutuphane/kitaplar/maddebagimliligi.pdf.

Onur, M. A. (2019). *Spor Bilimleri Fakültesi Öğrencilerinin Internet Bağımlılığı ve Yaşam Doyum Düzeylerinin İncelenmesi* [Yüksek Lisans Tezi]. Beden Eğitimi ve Spor Eğitimi Anabilim Dalı.

Orhan, S. (2018). *Bireysel Sporcular ve Takım Sporcularında Duygusal Zeka ve Zihinsel Dayanıklılık Ilişkisi* [Yüksek Lisans Tezi]. Marmara Üniversitesi Sağlık Bilimleri Enstitüsü, Beden Eğitimi ve spor Anabilim Dalı.

Procházka, R., Suchá, J., Dostál, D., Dominik, T., Dolejš, M., Šmahaj, J., Kolařík, M., Glaser, O., Viktorová, L., & Friedlová, M. (2021). Internet addiction among Czech adolescents. *PsyCh Journal*, *10*(5), 679 – 687. [CrossRef]

Qin, F., Song, Y., Nassis, G. P., Zhao, L., Dong, Y., Zhao, C., Feng, Y., & Zhao, J. (2020). Physical activity, screen time, and emotional well-being during the 2019 novel coronavirus outbreak in China. *International Journal of Environmental Research and Public Health*, *17*(14), 5170. [CrossRef]

Şahin, C., & Korkmaz, Ö. (2011). Internet Bağımlılığı Ölçeğinin Türkçe'ye Uyarlanması. *Selçuk Üniversitesi Ahmet Keleşoğlu Eğitim Fakültesi Dergisi*, *32*, 101 – 115.

Sheard, M., Golby, J., & Van Wersch, A. (2009). Progress towards construct validation of the Sports Mental Toughness Questionnaire (SMTQ). *European Journal of Psychological Assessment*, *25*(3), 186 – 193. [CrossRef]

Stamatis, A., Grandjean, P., Morgan, G., Padgett, R. N., Cowden, R., & Koutakis, P. (2020). Developing and training mental toughness in sport: A systematic review and metaanalysis of observational studies and pre-test and posttest experiments. *BMJ Open Sport and Exercise Medicine*, *6*, 1 – 9.

Tavazar, H., Erkaya, E., Yavaş, Ö., Zerengök, D., Güzel, P., & Özbey, S. (2014). The research of the differences between physical activity and life quality in senior high school students (Manisa City example). *International Journal of Science Culture and Sport*, *5*, 496 – 510.

Urfa, O., & Aşçı, F. H. (2018). 10 Haftalık Psikolojik Beceri Antrenman Programının Genç Futbolcuların Kaygı, Özgüven, Güdülenme, Dikkat ve Şut Isabet Oranı Üzerine Etkisi. *Spor Bilimleri Dergisi*, *29*(3), 131 – 146.

Yarayan, Y. E., Yıldız, A. B., & Gülşen, D. B. A. (2018). Elit Düzeyde Bireysel ve Takım Sporu Yapan Sporcuların Zihinsel Dayanıklılık Düzeylerinin Çeşitli Değişkenlere Göre Incelenmesi. *Uluslararası Sosyal Araştırmalar Dergisi*, *11*(57), 992 – 999.