Predictive Power of Leisure Boredom on Social Media Addiction in University Students

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Abstract

People have become active users of Internet and social media applications going into every aspect of life. The purpose of this study was to investigate social media addiction and perception of boredom in leisure with respect to some variables and to examine the predictive power of perception of boredom in leisure on social media addiction. There was a total of 453 (212 women and 241 men) university students selected with convenience sampling method in the study group of the research. The participants filled the "Social Media Addiction Scale-Adult Form" (SMAS-AF) and "The Leisure Boredom Scale" (LBS). According to t-test results, there was not a statistically significant difference between mean scores in "SMAS-AF" and "LBS" scales. (p>0.01). MANOVA indicated that the main effect of the physical activity participation on the subscales of the "SMAS-AF" and "LBS" was statistically significant (p< 0.05). According to the MANOVA results, significant differences were found in the "SMAS-AF" and "LBS" for daily social media usage frequency, (p< 0.01). According to the results of the correlation test, there was a statistically significant between "SMAS-AF" and "LBS". Regression analysis indicated that leisure boredom were significant predictors of social media addiction.

Keywords: *Virtual Tolerance, Virtual Communication, Leisure Boredom*

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Üniversite Öğrencilerinin Sosyal Medya Bağımlılığı ve Serbest Zaman Sıkılma Algısı Arasındaki İlişkinin İncelenmesi

Öz

İnsanlar hayatın her alanına giren internet ve sosyal medya uygulamalarının aktif kullanıcıları haline gelmiştir. Bu çalışmanın amacı, sosyal medya bağımlılığı ve serbest zamanda sıkılma algısı arasındaki ilişkin bazı değişkenler açısından incelemek ve serbest zaman sıkılma algısının sosyal medya bağımlılığını yordama gücünü incelemektir. Araştırmanın çalışma grubunda kolayda örnekleme yöntemi ile seçilen toplam 453 (212 kadın ve 241 erkek) üniversite öğrencisi bulunmaktadır. Katılımcılara "Sosyal Medya Bağımlılığı Ölçeği-Yetişkin Formu" (SMAS-AF) ve "Boş Zaman Sıkıntısı Ölçeği" (LBS) uygulanmıştır. T-testi sonuçlarına göre "SMAS-AF" ve "LBS" ölçeklerindeki ortalama puanlar arasında istatistiksel olarak anlamlı bir fark yoktur (p>0.01). MANOVA sonuçları fiziksel aktiviteye katılımın "SMAS-AF" ve "LBS" alt ölçekleri üzerindeki ana etkisinin istatistiksel olarak anlamlı olduğunu göstermiştir (p< 0.05). MANOVA sonuçlarına göre günlük sosyal medya kullanım sıklığında "SMAS-AF" ve "LBS" arasında anlamlı fark bulunmuştur (p< 0.01). Korelasyon testi sonuçlarına göre "SMAS-AF" ile "LBS" arasında istatistiksel olarak anlamlı bir ilişki bulunmaktadır. Regresyon analizi, serbest zaman sıkılma algısının sosyal medya bağımlılığını önemli ölçüde yordayıcı olduğunu göstermektedir.

Keywords: *Sanal Tolerans, Sanal İletişim, Serbest Zamanlarda Sıkılma Algısı*

Introduction

It is expected that different psychological conditions are exhibited among individuals when human behavior is examined. These psychological states leading to positive or negative behaviors depend on many internal and external factors (Virginia, Brandon, MargaritaandSteve, 2021). At this point, a result of the negative emotional states experienced by individuals can be described as addiction. (Griffiths, 2005). Addiction can be defined as a state of an incontrollable desire to repeat a certain action despite its harmful effects on individuals' mental and physical health or social life (Balcıoğlu and Abanoz, 2009). Griffith (1999) based addictive behavior on criteria such as attention, mood changes, tolerance, withdrawal, conflict and relapse. Based on the relevant literature, the concept of addiction is generally considered to be connected with the use of alcohol, drugs and tobacco (Şahin, 2017). Moreover, it can be seen that other types of addiction such as exercise addiction (Adams and Kirkby, 2002; Vardar, et al., 2012), smartphone addiction (Bianchi and Philips, 2005; Choliz, 2010), and internet addiction (Young, 2009) are also exist. Within the framework of these studies, it is thought that individuals are not addicted to the internet, but addicted to internet-based online activities. (Griffiths and Szabo, 2013). It can be seen that amongst the internet-based online applications, addiction related mostly to online games and social media use is predominant (Van Rooij, et al., 2010). To further explain a bigger picture of the researches done, it is emphasized that especially the young people use social media excessively (Usluel and Mazman, 2009; Vural and Bat, 2010). In addition, it can be said that social media creates an environment which provides an expression of individuals' and admired in communities (Hazar, 2011).

While individuals use social media in order to fulfill certain needs and be psychologically satisfied; they are also faced with many dangers. Christakis and Fowler (2012) have stated that it is not only viruses that spread from human to human, but behavior and habits also spread. They also claim that many of these behaviors have great impact on an individual's health both psychologically and physiologically. It is stated that psychological problems such as addiction caused by excessive use of social media, sleep disorders and some physical pains such as hands, head and back occur (Andreassen, et al., 2012; Hazar, 2011). At this point, when a psychological problem that arises with cognitive, affective and behavioral effects such as social media addiction is considered, the negative impact of social networks on individuals is inevitable.

Another negative mood that transpire as a result of environmental and individual factors having an influence on people is the state of boredom. Boredom is defined as a psychophysical state that emerges when individuals exposed to a monotonous stimulant for a long time (O'Hanlon, 1981). As for Mikulas and Vodanovich (1993), they define boredom as a state of low/inadequate stimulation or dissatisfaction against an inadequate stimulant. It can be said that the perception/experience of

leisure time of individuals experiencing the perception of boredom is negative. However, people who participate in leisure time activities which are considered as a time frame when individuals freely express themselves (Henderson and Bialeschki, 2007), personal pleasure or satisfaction is achieved in many ways such as having fun, resting, and relaxing. Therefore, it is highlighted in many researches that de facto solutions to eliminate the negative impact of the perception of boredom in individuals are through the concept of quality/attractive leisure time (Huang and Carleton, 2003). Hence, the relationship between the concept of leisure time defined as the desired time frame which the individual freely uses by choice (Watkins, 2013) and boredom constitute utmost importance. Boredom is an unpleasant stimulit that people cannot engage with internal or external information, thus, fail to find satisfaction in any activity (Li, Feng, Xiao and Zhou, 2021). Wherefore, it is imperative for researchers to get a better appreciation of this phenomenon.

The primary objective of this study is to examine the social media addiction and perception of boredom in leisure levels of university students based on certain variables and to research the relationship between these variables. In this study, it is hypothesized that there would be statistically significant differences between social media addiction and perception of boredom in leisure regarding to gender, physical activity participation and social media use frequency. There would be a statistically significant correlation between social media addiction and perception of boredom leisure.

Method

Research Model

In the study, the relational screening model was preferred due to the social media addiction and the perception of boredom in free time in university students were examined in terms of dependent and independent variables. Relational screening model which is a research model used to determine the degree of change between two or more variables (Karasar, 2017).

Participants

The data was collected in Turkey. The research sample consists of a total of 453 (212 female and 241 male) university students selected with the convenience sampling technic. Accordingly, 217 of the participants in the studies were doing exercise and 236 were non.

Data Colletion Tools

Personal information Form, The Social Media Addiction Scale-Adult Form and The Leisure Boredom Scale were applied on as data collection tools. The personal information form included the purpose of the research and details regarding terms of participation, and the participants were told that participation was based on volunteering and confidentiality. Following are the types of measuring tools used for the research.

Personal Information Form

Covered by the scope of this study, socio-demographic features including age, gender, participation in regular physical activity were asked in the information form created by the researchers.

Social Media Addiction Scale/Adult Form (SMAS-AF)

The Social Media Addiction Scale Adult Form (SMAS-AF) developed by Şahin and Yağcı (2017) was used to estimate the social media addiction of the university students. The scale consists of 2 sub-scales and 20 items including "Virtual Tolerance" "I do not go on social media unless necessary" and "Virtual Communication" "I would prefer the friendships on social media over friendships in real life". The internal consistency for this study was found to be (0.79) in the "Virtual Communication" sub-scale, and (0.78) in the "Virtual Tolerance" sub-scale.

The Leisure Boredom Scale (LBS)

For the measurement of the "individual differences in perceiving boredom during leisure time" of university students, the Leisure Boredom Scale (LBS) developed by Iso-Ahola and Weissinger (1990) and its validity and reliability in Turkish conducted by Kara, Gürbüz and Öncü (2014). The scale composed of two sub-scales which are: Satisfaction "Leisure time experiences are an important part of my quality of life" and Boredom "Leisure times are boring", as well as 10 items. The internal consistency for this study was found to be (0.70) in the "Boredom" sub-scale, and (0.72) in the "Satisfaction" sub-scale.

Analysis of the Data

The statistical analyses of the data collected during the research process was realized using the SPSS 26.0 package program. The decision as to whether the data met the prerequisites of the normality tests was made by evaluating the Skewness and Kurtosis values. As a result of the analyses done, it was seen that the values were between +1.5 and -1.5 and the data were accepted to have been distributed normally among these values (Tabachnick and Fidel, 2013). Descriptive statistics, MANOVA, ANOVA and correlation tests and multiple regression tests were used for the analysis of the data.

Ethics

The study was initiated upon the approval of the Ethical Committee of Kırıkkale University (protocol no:, dated 18/01/2023, numbered 1)

Findings

The results from the descriptive statics of scales, t-test, MANOVA, correlation and multiple regression tests conducted in line with the hypotheses of the research are given below.

Table 1

Descriptive Statics of Scales

	Number of Item	N	M	Sd	Skewness	Kurtosis	Min	Max
SMAS-AF								
Virtual Tolerance	10	453	2.96	.03	.006	-.565	1.00	5.00
Virtual Communication	10	453	2.60	.03	.297	-.064	1.00	4.89
LBS								
Boredom	5	453	2.67	.04	.202	.102	1.00	5.00
Satisfaction	5	453	2.35	.03	.380	-.005	1.00	4.40

When the total scores of the participants from the "SMAS-AF" were analyzed, the lowest scores came from the "Virtual Communication" (M= 2.60) while the participants scored the highest in "Virtual Tolerance" subscales (M=2.96). Also, in the total scores obtained from the subscales of "LBS", the lowest mean scores were from the "Satisfaction" (M= 2.35) whereas the highest mean scores were obtained from the "Boredom" (M= 2.67).

Table 2

T-test Results According to Gender

	Women (212)		Men (241)		P
SMAS-AF	M	Sd.	M	Sd.	
Virtual Tolerance	2.96	.73	2.96	.69	.970
Virtual Communication	2.53	.67	2.65	.77	.088
LBS					
Boredom	2.69	.87	2.66	.83	.729
Satisfaction	2.32	.73	2.38	.70.	.331

In accordance with t-test analysis, there was no statistically significant difference between average score in "SMAS-AF" and "LBS" scales. [virtual tolerance: $t_{(451)}$=1.098; virtual communication: $t_{(451)}$= .575; boredom: $t_{(451)}$= 1.799; satisfaction: $t_{(451)}$=.510]

Table 3

T-test Results According to Participation of Physical Activity

SMAS-AF	Yes (217)		No (236)		p
	M	Sd.	M	Sd.	
Virtual Tolerance	2.83	.72	3.08	.68	.000
Virtual Communication	2.56	.73	2.62	.73	.359
LBS					
Boredom	2.46	.81	2.87	.84	.000
Satisfaction	2.27	.73	2.43	.69	.013

According to t-test results, average scores of contributor in virtual tolerance ($t_{(449)} = 601.$; $p<.05$) boredom" ($t_{(449)} = .718$; $p<.05$) and satisfaction ($t_{(449)} = .36$; $p<.05$) varied significantly according to the participation in physical activity variable. The average scores of virtual tolerance and boredom sub-dimensions of the contributor who stated that they regularly participate in the physical activities were determined to be higher than non-participate regularly. However, non-physical activity participant's scores are higher than regular physical activity participants score in the "satisfaction"

Table 4

MANOVA Results According to Social Media Use Frequency

SMAS-AF	Less than 1 hour		1-3 hour		4-8 hour		Over 8 hours	
	M	Sd.	M	Sd.	M	Sd.	M	Sd.
Virtual Tolerance	2.24	.69	2.78	.69	3.17	.61	3.45	.64
Virtual Communication	2.09	.62	2.45	.69	2.73	.66	3.10	.85
LBS								
Boredom	2.47	.87	2.57	.84	2.82	.81	2.75	.95
Satisfaction	2.25	.81	2.30	.71	2.42	.67	2.42	.80

MANOVA results indicated a significant main effect of social media use frequency variable in "SMAS-AF" (Hotellings: 0.00, $F_{(3.449)}=14.811$, $p<0.01$). Tukey's Post Hoc test revealed that, social media use frequency variable vary in sub-dimensions of "virtual tolerance" ($F_{(3.449)}=27.210$; $p<.001$) and "virtual communication" ($F_{(3.449)}=16.565$; $p<.001$) sub-dimensions in favor of "over 8 hours" users.

The MANOVA tests determined that the main effect of the social media use frequency variable was not significant in "LBS" (Hotellings: 0.00, $F_{(3.449)}=14.811$, $p<0.01$). Follow-up

univariate analyses revealed that preferences for "boredom" sub-dimension were significant for "1-3 hour" and "4-8 hour" users. Results were not significant for "satisfaction" sub-dimension.

Table 5

Correlation Coefficients Between Social Media Addiction and Leisure Boredom

	Virtual Tolerance	Virtual Communication	Boredom	Satisfaction
Virtual Tolerance	1			
Virtual Communication	.609**	1		
Boredom	.332**	.277**	1	
Satisfaction	.003	-.098*		1

The results of the correlation analysis conducted to test the relationship between social media addiction and the perception of boredom in leisure (Table 4); that there is a positive correlation between virtual tolerance and boredom (r = .33; $p<0.05$) and virtual communication and boredom (r = .27; $p<0.05$). In addition, a negative correlation was found between virtual communication and satisfaction (r = -.09; $p<0.01$).

Table 6

Multiple Regression Analyses with "SMAS-AF" and "LBS"

	Boredom	Satisfaction		Boredom
Social Media Addiction	β	β	Social Media Addiction	β
Virtual Tolerance	0.37*	-0.09	Virtual Tolerance	0.37*
R=0.35; R2=0.12; Adjusted R2=0.11; F(2,450)=31.448; p<0.01			R=0.35; R2=0.12; Adjusted R2=0.11; F(2,450)=31.448; p<0.01	
Virtual Communication	0.34*	-0.20	Virtual Communication	0.34*

Prior to test result, multi collinearity was determined to be acceptable centred on tolerance (0.89) and variance inflation factor (1.17) values (Cohen, Cohen,West, and Aiken, 2003). Results of the regression analyses are shown in Table 5. Leisure boredom were predictors of virtual tolerance (R=0.35; $R^2=0.12$; Adjusted $R^2=0.11$; $F_{(2,144)}=31.448$; $p<0.01$) and virtual communication (R=0.34; $R^2=0.11$; Adjusted $R^2=0.11$; $F_{(2.144)}=29.444$ $p<0.01$).

The results of the analysis showed that the relationship between leisure boredom and virtual tolerance (β = 0.37; p<0.01) and virtual communication (β = 0.34; p<0.01) sub-dimensions was positive. The results of the analysis showed that the relationship between leisure boredom and virtual tolerance (β = 0.37; p<0.01) and virtual communication (β = 0.34; p<0.01) sub-dimensions was positive. Satisfaction sub-dimension was not included in the regression analysis model. In this context, it was determined that the satisfaction sub-dimension did not have a significant predictive power on university students' virtual tolerance (β=-0.09; p>0.01) and virtual communication (β=0.20; p>0.01).

Discussion and Result

The purpose of this study is to investigate the social media addiction and leisure boredom levels of university students based on some variables, and to determine the relationship between these variables.

According to the results obtained in the research, it can be seen that being female or male does not make a significant difference in the social media addiction and leisure boredom levels among university students for the gender variable. Therefore, an impact dependent on gender cannot be mentioned for these two variables among university students.

When the literature was examined, results that support the findings were attained in other studies, too; and it was concluded that the gender factor did not matter in the students' opinions regarding the topic of social media addiction (Balcı and Baloğlu, 2018; Baz, 2018; Kaya, 2018; Şentürk, 2017). Xam, Dendup and Tenzin (2022) reported that the mean of social media addiction for female students was higher by 0.70 compared to male students. In addition, it is possible to come across an example in the literature in the field, which apparently indicates that there is more pressure with the social. (Andreassen, et al., 2012; Stănculescu, 2022; Chen et al., 2020). On the other hand, Xuan and Amat (2021) found the average scores of social media addiction on males and females revealed significant differences, in which the average score of female respondents, m = 77.80, was significantly lower than the score for males, m = 87.28. Due to the fact that social media is a platform that nearly everybody uses and that it has become a trend especially among the young.

When literature is examined in terms of Leisure Boredom, it is seen that there is no significant difference in terms of gender, either Kara and Özdedeoğlu (2015); Kara and Gücal (2016). Thus, Korkutata (2018), findings of this research show parallelism with the literature (F(3)=0,557, p=0,643>0,05). On the other hand, according to a research done by Kara, et al. (2014) among adult individuals belonging to various professional groups, it was determined that the male participants

scored higher compared to female participants in the satisfaction sub-scale, in short, that they experienced the perception of boredom less. In this sense, it is seen that the gender factor did not differ in the perception of leisure time of university students. When it is taken into account that the most important factor for students who have similar social settings is socialization, it is considered that it results in similar activities for both genders.

According to the results obtained from the research, it has been determined that the participation in physical activities variable creates a significant impact on the social media addiction and leisure boredom levels. It has been determined that participation in physical activities has a positive impact on social media addiction and that the virtual tolerance of university students participating in physical activities is low. It is stated to be possible that as the virtual tolerance increases, the spending time on social media also increases and time management fails. Intense social media use will naturally cause less time for outdoor and recreational activities (Pantic, et al., 2012). In parallel to our findings, the study conducted by Hazar et al. on middle school students shows that sports and physical activities can be crucial tools in distracting-protecting individuals from virtual addictions such as digital game addiction. Zhang (2011) states in his study that engaging in sports plays an important role and has a good impact for avoiding addictions to internet networks for the young. The rate of doing physical activities have a great decrease with the young people of our days who are also known as the generation Z especially having grown up with technology and having made social media and similar tools the center of their lives (Turner, 2015). It can be said that it is expected that those individuals who engage in physical activities and sports use social media less.

The impact of physical activity in having low stimulation or motivation for the current leisure time activities is considered to be positive in many researches. According to literature, it can be seen that participation in physical activities has a positive impact on leisure time perceptions of individuals (Sarol and Çimen, 2017; Güngörmüş, et al., 2014; Gürbüz, et al., 2017; Wang, et al., 2012). Besides, studies where no difference was detected in terms of regular physical activity have also been determined (Kara, Gürbüz and Sarol, 2018; McCaul, 1998). Physical activity is one of the most important factors in developing the individuals' ability to use their social-communication skills and being efficient in their social relationships. Hence, the impact of physical activity is essential in the differentiation of the individuals' perception of boredom during leisure.

Though a growing number of studies have investigated the consequences of social media use (Chen, 2020; Monacis et al., 2021), only a few recent studies focused on leisure boredom and social media addiction (Marengo, Fabris, Longobard and Settanni, 2022; Gomathi and Veeramani, 2022). However, these studies ignored the proximal cognitive cause of social media addiction, which might

be the sufficient factor that directly causes sedentary lifestyle, unsociality and addiction for young adults.

The fact that social media is an active platform and that individuals can interact with peers in real life has turned social media into a "global consumer phenomenon" (Kuss and Griffiths, 2011). It can be said that social media is popular among young people in terms of its said properties. Findings have showed that there is a positive relationship between university students' perception the sub-dimensions of leisure boredom perception and social media addiction levels. Besides that, it may help university students to enter the groups in which they cannot possibly enter in real life and make them opportunity to express themselves more easily.

In line with the findings, it can be said that the participants, who do not see their free time as a part of their quality of life, are connected to the internet instead of protecting or maintaining their social relations or participating in community/group activities. It is an important point for governments and many organizations to make joint efforts to solve this problem. For example, in the Netherlands, there are few projects on the improvement and prevention of internet addiction (Van Rooij et al., 2013). At this point, the importance of similar improvement plans for Turkish youth is revealed by the findings.

In the light of the findings it is recommended that recreational and physical activity programs in universities be enhanced. Studies can be expanded depending on different demographic variables (different universities, exercise experience based on education in different classes). Leisure obstacles and leisure time facilitators also can be applied with different scales.

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Author Contributions

Idea/Concept, Design, Data Collection and/or Processing, Source Search,Writing the Article, Critical Review: Aylin Ugurlu

Conflict of Interests

The authors declare no conflict of interest.

References

Adams, J., & Kirkby, R. J. (2002). Excessive exercise as an addiction: A review. *Addiction Research and Theory*, 10, 415- 437. https://doi.org/10.1080/1606635021000032366

Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a facebook addiction scale. *Psychological Reports*, *110*(2), 501-517. https://doi.org/10.2466/02.09.18.PR0.110.2.501-517

Balcı, Ş., & Baloğlu, E. (2018). Sosyal medya bağımlılığı ile depresyon arasındaki ilişki: "Üniversite gençliği üzerine bir saha araştırması". *İleti-ş-im*, *29*(2), 209-233. https://doi.org/10.16878/gsuilet.500860

Balcıoğlu, İ., & Abanoz, Y. (2009). Madde bağımlılığı, intihar, sanık psikolojisi. *Dirim Tıp Gazetesi*, *84*(1), 15-20.

Baz, F. Ç. (2018) Sosyal medya bağımlılığı: Üniversite öğrencileri üzerine çalışma. *OPUS Uluslararası Toplum Araştırmaları Dergisi*, *9*(16), 276-295. https://doi.org/10.26466/opus.470118

Bianchi, A., & Philips, J. G. (2005). Psychological predictors of problem mobile phone use. *CyberPsychology and Behavior*, *8*, 39-51. https://doi.org/10.1089/cpb.2005.8.39

Chen, I. H., Strong, C., Lin, Y. C., Tsai, M. C., Leung, H., Lin, C. Y., Pakpour, A. H., & Grifths, M.D. (2020). Time invariance of three ultra-brief internet-related instruments: Smartphone ApplicationBased Addiction Scale (SABAS), Bergen social media addiction scale (BSMAS), and the nine-item internet gaming disorder scale-short form (IGDS-SF9) (Study part B). *Addictive Behaviors*, *101*, 1-8. https://doi.org/10.1016/j.addbeh.2019.04.018

Choliz, M. (2010). Mobile phone addiction: A point of issue. *Addiction*, *105*, 373-374. https://doi.org/10.1111/j.1360-0443.2009.02854.x

Christakis, N. A., & Fowler, J. H. (2012). *Sosyal ağların şaşırtıcı gücü ve yaşantımızı biçimlendiren etkisi* [The surprising power of our social networks and how they shape our lives]. İstanbul: Varlık Yayınları.

Griffiths, M. (2005). A 'components' model of addiction within a biopsychosocial framework. *Journal of Substance Use*, *10*(4), 191-197. https://doi.org/10.1080/14659890500114359

Griffiths, M., & Szabo, A. (2013). Is excessive online usage a function of medium or activity? an empirical pilot study. *Journal of Behavioral Addictions*, *3*(1), 74-77. https://doi.org/10.1556/jba.2.2013.016

Gomathi, A., & Veeramani, P. (2022). The study on social media addiction among adolescent. In K. Manimekalai and S. Poulpunitha (Eds.), *Prevalence of screen addiction among college students* (1st Edition ., pp.59-70), Shanlax Publications.

Güngörmüş, H. A., Yenel, F., & Gürbüz, B. (2014). Bireyleri rekreasyonel egzersize güdüleyen faktörlerin belirlenmesi: Demografik farklılıklar. *International Journal of Human Sciences*, *11*(1), 373-386. https://doi.org/10.33459/cbubesbd.378425

Gürbüz, B., Kara, F. M., & Sarol, H. (2017). Türk kadınlarının serbest zamanda sıkılma algısı, benlik saygısı ve yalnızlık düzeylerinin incelenmesi. *Atatürk Üniversitesi Beden Eğitimi ve Spor Bilimleri Dergisi*, *19*(4), 188-198. https://doi.org/10.18826/useeabd.473994

Hazar, M. (2011). Sosyal medya bağımlılığı: Bir alan çalışması. *İletişim, Kuram ve Araştırma Dergisi*, *32*, 151-175.

Huang, C. Y., & Carleton, B. (2003). The relationships among leisure participation, leisure satisfaction and life satisfaction of college students in Taiwan. *Journal of Exercise Science and Fitness*, *1*(2), 129-132.

Henderson, K. A., & Bialeschki, M. D. (2007). Leisure and active lifestyles: Research reflections. *Leisure Sciences*, *27*(5), 355-365. https://doi.org/10.1080/01490400500225559

Iso-Ahola, S. E., & Weissinger, E. (1990). Perceptions of boredom in leisure: Conceptualization, reliability and validity of the leisure boredom scale. *Journal of leisure Research*, *22*(1), 1-17. https://doi.org/10.1080/00222216.1990.11969811

Kara, F. M., & Özdedeoğlu, B. (2015, Kasım 5-7). *Serbest zamanda sıkılma algısı ve boş zaman engelleri arasındaki ilişkinin incelenmesi*. 3. Rekreasyon Araştırmaları Kongresi, Eskişehir, Turkey.

Kara, F. M., Gürbüz, B., & Öncü, E. (2014). Leisure boredom scale: The factor structure and the demographic differences. *The Turkish Journal of Sport and Exercise*, *16*(2), 28-35. https://doi.org/10.15314/TJSE.201428102

Kara, F. M., Gürbüz, B., & Sarol, H. (2018). Yetişkinlerde serbest zamanda sıkılma algısı, algılanan sosyal yetkinlik ve benlik saygısı düzeyinin incelenmesi. *Uluslararası Spor, Egzersiz ve Antrenman Bilimi Dergisi*, *4*(4), 113-121. https://doi.org/10.18826/useeabd.473994

Kara, F. M. & Gücal, A. Ç. (2016). The role of the perception of being bored in free time in determining workaholicism in academics, [The role of bored in free time in determining workaholicism in academics]. *Journal of Başkent University Faculty of Health Sciences*, *1*(1), 48-63.

Karasar, N. (2017). *Bilimsel araştırma yöntemi: Kavramlar ilkeler teknikler* (32. Baskı). Ankara: Nobel Akademik Yayıncılık

Kaya, G. (2018) *Sosyal medya bağımlılığı ile internet kullanım amaçları arasındaki ilişki üzerine bir araştırma*. Yayımlanmamış Yüksek Lisans Tezi, Mersin Üniversitesi, Sosyal Bilimler Enstitüsü, İşletme Bilgi Yönetimi Ana Bilim Dalı, Mersin.

Korkutata, A. (2018). Leisure Boredom Scale: A Research on University Students. *Journal of Education and Training Studies*, *6*(12), 148-157. https://doi.org/10.11114/jets.v6i12.3648

Kuss, D. J., & Griffiths, M. D. (2011). Addiction to social networks on the internet: A literature review of empirical researches. *International Journal of Mental Healthand Addiction*, *8*(9), 3528-3552. https://doi.org/10.3390/ijerph8093528

Li, X., Feng, X., Xiao, W., & Zhou, H. (2021). Loneliness and mobile phone addiction among Chinese college students: The Mediating roles of boredom proneness and self-control. *Psychology Research and Behavior Management*,*14*, 687–694. https://doi.org/10.2147/PRBM.S315879

Marengo, D., Fabris, M. A., Longobardi, C., & Settanni, M. (2022). Smartphone and social media use contributed to individual tendencies towards social media addiction in Italian adolescents during the COVID-19 pandemic. *Addictive Behaviors, 126*, 107204. https://doi.org/10.1016/j.addbeh.2021.107204

McCaul, L. K. (1998). *Relationships among adolescent substance use, leisure boredom, and physical activity*. Master Thesis of Education. Faculty of Education, Brock University St. Catharines, Ontario.

Mikulas, W. L., & Vodanovich, S. J. (1993). The essence of boredom. *Psychological Record*, *43,* 3-12.

O'Hanlon, J. F. (1981). Boredom: Practical consequences and a theory. *Acta Psychologica*, *49*(1), 53–82.

Pantic, I., Damjanovic, A., Todorovic, J., Topalovic, D., Bojovic-Jovic, D., Ristic, S., & Pantic, S. (2012). Association between online social networking and depression in high school students: Behavioral physiology viewpoint. *Psychiatria Danubina*, *24*(1), 90-93.

Sarol, H., & Çimen, Z. (2017). Why people participate leisure time physical activity: A Turkish perspective. *Pamukkale Journal of Sport Sciences*, *8*(1), 63-72.

Stănculescu, E. (2022). The Bergen social media addiction scale validity in a romanian sample using item response theory and network analysis. *International Journal of Mental Health and Addiction*, 1-18. https://doi.org/10.1007/s11469-021-00732-7

Şahin, C. (2017). The predictive level of social media addiction for life satisfaction: a study on university students. *TOJET, 16*(4), 120-125.

Şahin, C., & Yağcı, M. (2017). Sosyal medya bağımlılığı ölçeği-yetişkin formu: Geçerlilik ve güvenirlik çalışması. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi*, *18*(1), 523-538.

Şentürk, E. (2017). *Sosyal medya bağımlılığının, depresyon, anksiyete bozukluğu, karışık anksiyete ve depresif bozukluk hastalıkları ile kontrol grubu arasında karşılaştırılması ve kullanıcıların kişilik özellikleriyle ilişkisinin araştırılması*. Yayımlanmamış Yüksek Lisans tezi, Gazi Üniversitesi, Sağlık Bilimleri Enstitüsi, Ankara.

Tabachnick, B. G., & Fidel, L. S. (2013). *Using multivariate statistics* (4thed.). Boston: Allyn and Bacon.

Turner, A. (2015). Generation Z: Technology and social interest. *The Journal of Individual Psychology*,*71*(2), 103-113. https://doi.org/10.1353/jip.2015.0021

Usluel, Y. K., & Mazman, S. G. (2009). Sosyal ağların benimsenmesi ölçeği. *Eğitim Bilimleri ve Uygulama*, *8*(15), 139-160.

Van Rooij, A. J., Schoenmakers, T. M., Van den Eijnden, R. J. J. M., & Van de Mheen, D. (2010). Compulsive Internet use: the role of online gaming and other Internet applications. *The Journal of Adolescent Health*, *47*(1), 51-57. https://doi.org/10.1016/j.jadohealth.2009.12.021

Van Rooij, A. V., & Schoenmakers, T. M. (2013). Monitor internet en jongeren 2010- 2012. Het (mobiele) gebruik van sociale media en games door jongeren [Monitor internet and youth 2010-2012: The (mobile) use of social media and games by adolescents]. https://doi.org/10.13140/RG.2.1.3396.8486

Vardar, E., Vardar, S. A., Toksöz, İ., & Süt, N. (2012). Egzersiz bağımlılığı ve psikopatolojik özelliklerin değerlendirilmesi. *Düşünen Adam Psikiyatri ve Nöroloik Bilimler Dergisi*, *25*(1), 51-57. https://doi.org/10.5350/DAJPN2012250106

Vural, Z. B., & Bat, M. (2010). Yeni bir iletişim ortamı olarak sosyal medya: Ege üniversitesi iletişim fakültesine yönelik bir araştırma. *Journal of Yaşar University*, *20*(5), 3348-3382.

Wang, W. C., Wu, C. C., Wu, C. Y., & Huan, T. C. (2012). Exploring the relationships between freetime management and boredom in leisure. *Psychology Report*, *110*(2), 416–426. https://doi.org/10.2466/13.17.PR0.110.2.416-426

Watkins, M. (2013). Using intentional attributions to explain change in leisure meanings. *Leisure Sciences*, *35*(2), 89-106. https://doi.org/10.1080/01490400.2013.761900

Xam, S., Dendup, T., & Tenzin, K. (2022). Social media addiction and self-esteem in relation to gender of students. *Bhutan Journal of Research and Development*, *11*(1), 92-107. https://doi.org/10.17102/bjrd.rub.11.1.028

Xuan, J.Y. (2021). The gender differences in the relationships between self-esteem and life satisfaction with social media addiction in university students. *Asian Social Science, 17*(11), 48-56. https://doi.org/10.5539/ass.v17n11p48

Xuan, Y. J., & Amat, M. A. C. (2021). The gender differences in the relationships between self-esteem and life satisfaction with Social Media Addiction among university students. *Asian Social Science*, *17*, 48.

Young, K. S. (2009). Internet addiction: Diagnosis and treatment consideration. *Journal of Contemporary Psychotherapy*, 39, 241-246. https://doi.org/10.1007/s10879-009-9120-x

Zhang, Y. L., Li, S., & Yu, G. L. (2019). The relationship between boredom proneness and cognitive failures:The mediating role of mobile phone addiction tendency and its difference between only and nononly child family. *Psychological Development and Education*, *35*(3), 344–351. https://doi.org/10.16187/j.cnki.issn1001-4918.2019.03.12

Zhang, B. (2011). Research on relations between sports and adolescents network addiction. *Second International Conference on Education and Sports Education*, 2, 245-248.