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Original Article

Investigation of The Relationship Between Physical Activity and Social Media Addiction in Adults

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Abstract

The study was designed as a descriptive-relational study. The study was carried out in Konya city center, Selçuklu district. The population of the study consisted of adults between the ages of 18-65 living in Selçuklu district of Konya province. The sample size of the study consists of 163 adults. The social media addiction scale mean score of the participants was 69.11 ± 15.92. When the social media addiction scale mean score was compared according to the physical activity level of the participants, the social media addiction score mean of those who were the physically inactive was found to be higher than the social media addiction scale score mean of those who were low physical activity level, and the difference was found to be statistically significant. In terms of physical inactivity, it was found that women, those who are married, and those who perceived their health to be moderate were more inactive.

1. Introduction

The developments and applications in technology have left an indelible mark in all areas of life. As a result of these developments, it can be stated that mass media such as telephone and internet are used frequently. At the same time, these developments allow individuals to surf the Internet, especially social networking sites (e.g. Snapchat, Facebook, Twitter, WhatsApp) (Samaha & Havwi, 2016, Fu, Chen & Zheng, 2020). Social media addiction, which is accepted as a type of internet addiction, is reported to contribute to the increase in internet addiction rates and continue to increase its popularity (Şahin, 2017; Zivnuska et al., 2019). According to the Global Digital Report, the top three most popular social networks

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in the world are Facebook, YouTube and Watsapp. According to the Global Digital Report, it is stated that there are 4.20 billion social media users worldwide. In the same report, it is stated that an average of 9.4 million people between the ages of 18-64 have social media accounts in our country (Global Digital Report, 2021).

The addictive use of social media (e.g. Facebook, Twitter) is seen as a specific form of technology addiction that shares common phenomenology with the "Internet gaming disorder" diagnostic criterion recently included in DSM-5 (Turel, Brevers & Bechara, 2018). Social media addiction is pronounced (preoccupation with behavior), mood change (making behavior to alleviate or reduce uncomfortable emotional states), tolerance (increasing participation in behavior over time), withdrawal (psychological and physical discomfort when behavior decreases or is prohibited), conflict (social is manifested by addiction-like symptoms such as delaying or neglecting one's own and others 'needs due to entertainment, work, education, household activities, as well as behavior) and relapse (failure to reduce or control behavior) (He, Turel & Bechara, 2017; D' Arienzo, Boursier & Griffiths, 2019). Therefore, it can be considered as a situation where the individual is overly interested in social media activities, is guided by an uncontrollable motivation to perform the behavior, and spends a lot of time and effort on him, thereby interfering with other important areas of life (Turel et al., 2018). It is emphasized that physical exercise programs have a positive effect on controlling such addictions (Liu et al., 2019; Li et al., 2020).

Physical activity is an important strategy for dealing with stressful experiences. It is an important resource for physical and mental health as well as mood enhancement (Klaberski et al. 2013). It is also stated that internet addiction can be an alternative or adjunctive therapy, as exercise has psychological benefits such as reducing depression, anxiety and anger (Li et al., 2020). Studies have reported that exercise can significantly reduce Internet addiction (Liu, Nie & Wang, 2017; Kocak, 2018; Brailovskaia, Teismann & Margraf, 2018). In a study evaluating the related factors of Internet addiction, it was reported that the most common online activity among the participants was to spend time on social media sites (Hassan et al., 2020). It is reported that socio-demographic characteristics such as being young and single play a role in increasing the risks such as social media, gaming and internet addiction (Kuss et al., 2014; Andreassen, 2015; Andreassen, Pallesen & Griffiths, 2016). In this direction, this study will create a database for the studies to be carried out in this field. At the same time, it is thought that revealing the relationship between social media addiction and physical activity level will be a guide for intervention studies. For these reasons, this study aims to determine the level of physical activity and social media addiction in adult individuals; It was conducted to examine the relationship between these variables.

2. Material and methods

Purpose of research and questions of the research

The aim of this study is to determine the level of physical activity and social media addiction in adult individuals and to evaluate the relationship between

physical activity and social media addiction.

1. What are the sociodemographic characteristics of adults?
2. Does social media addiction change according to the socio-demographic characteristics of adults?
3. Does physical activity level change according to the socio-demographic characteristics of adult individuals?
4. Is there a relationship between physical activity level and social media addiction?

Type of research

This study is descriptively planned as relational.

The place and features of the research

The study was carried out in Konya city center, Selçuklu district. Selcuklu district is one of Konya's most populous central districts.

Study group of the research

The population of the study consisted of individuals between the ages of 18-65 living in Selçuklu district of Konya province. The sample size of the research was calculated in G * Power 3.1.9.2 analysis program. With 0.25 effect size, 90% power, 5% margin of error, it was calculated as 163 by taking into account the average score of the "Social Media Addiction Scale (81.50 ± 21.53) in Erdogan's (2019) study. The inclusion criteria of the study are individuals between the ages of 18-65 who reside in all neighborhoods of Konya's Selçuklu district and those who have the opportunity to fill out the questionnaire online.

Data collection technique and tools

The data of the research were collected through Google Forms between 20-30 April 2021. The questionnaires were delivered to the participants via social media; After reaching the sufficient number of samples, the data collection process was terminated. In collecting data; The personal information form prepared by the researchers questioning socio-demographic characteristics, the International Physical Activity Questionnaire and the Social Media Addiction Scale were used.

*Personal Information Form***,** which was created by the researchers based on the literature, consists of six questions evaluating the sociodemographic characteristics of the individuals (Azizi, Soroush & Khatony, 2019; Baz, 2018; Hassan, 2020).

International Physical Survey (UFAA)

In this study, the International Physical Activity Questionnaire (IPAQ) short form will be used to determine the physical activity levels of individuals. International validity and reliability studies Craig et al. (2003), validity and reliability studies in Turkey were carried out by Sağlam (2010) to university students. There are 7 questions in total in the questionnaire. The 1st and 2nd questions inquire about vigorous activities, the 3rd and 4th questions about moderate activities, the 5th and 6th questions about the time spent by the individual on walking, and the 7th questions about sitting. In the evaluation of all activities, the criterion is that each activity is done at least 10 minutes at a time. A score is

obtained as "MET-minute / week" by multiplying the minute, day and MET value (multiples of resting oxygen consumption).

In the calculation of energy consumption related to physical activities, the weekly duration (minutes) of each activity was multiplied by the BAT energy values created for the International Physical Activity Questionnaire. The walking time (minutes) was multiplied by 3.3 MET in calculating the walking score. In the calculation, 4 METs were taken for moderate activity and 8 MET values were taken for vigorous activity. Thus, the energy consumption for each individual for intense, moderate, walking, sitting, and total physical activities was obtained in MET-min / Week. According to the total physical activity score, the physical activity levels of the participants were "inactive (less than 600 MET-min / week), moderate (minimally active) (between 600-3000 MET-min / week) and very active (3000 MET-min / week and above) "(Craig et al., 2003, Sağlam et al., 2010).

Social Media Addiction Scale

The scale was developed by Şahin and Yağcı (2017). The scale is applied to determine the social media addiction of individuals between the ages of 18-60. Cronbach Alpha internal consistency coefficient for the overall scale, 94; 92 for virtual tolerance and 91 for virtual communication. The scale is five-point Likert type. It consists of 2 sub-dimensions (virtual tolerance and virtual communication) and 20 questions. It consists of items 1-11 for virtual tolerance sub-dimension and items 12-20 for virtual communication. Items 5 and 11 are reverse-coded. The highest score that can be obtained from the scale is 100, and the lowest score is 20. It is concluded that the person evaluates himself as "social media addict" if he gets a high score (Şahin and Yağcı 2017).

Data Evaluation

The data of the study were evaluated using the SPSS for Windows 22.0 (Statistical Package for Social Science) statistical package program. Unit number (n), percentage (%), mean ± standard deviation (mean (SD)) values were used as summary statistics. Normal distribution of data was evaluated by Kolmogorov-Smirnov test and Q-Q graph. Chi-square, independent groups t test, Mann Whitney U and One Way Anova analysis were used to evaluate the data. Results were evaluated at 95% confidence interval and $p < 0.05$ significance level.

Ethical Procedure

Ethical permission was obtained from the Faculty of Sport Sciences Ethics Committee (Date: 25.03.2021 / Decision number: 50) for the ethical permission of the study. Before starting the research, online permissions of individuals were obtained.

3. Results and Discussions

The average age of the participants was 34.75 ± 6.02, 52.8% were male, 47.2% were female, 28.2% were associate degree graduates, 54.6% were married, 45.4%. It was determined that the fame was single, 38.7% perceived his income as medium, 41.7% perceived his health as medium, and 58.3% did not have any chronic disease.

The distribution of physical activity levels and social media addiction scale score averages of the participants is presented in Table 1.

It was observed that 54.0% of the individuals were in the physically inactive (inactive) group, while 46.0% were in the group with a low level of physical activity. Social media addiction scale score average of the participants is 69.11 ± 15.92.

Table 1. *Distribution of Participants' Physical Activity Level and Social Media Addiction Scale Mean Scores*

Scales	**Number (n)**	**Percent (%)**
Physical Activity Questionnaire		
Physically inactive (Inactive) (<600 MET-min / week)	88	54,0
With a low level of physical activity (600-3000 MET-min / week) (Minimal Active)	75	46,0
	Mean±SD	**Min-Max**
Social Media Addiction	69,11±15,92	40-93

When the distribution of the social media addiction scale mean scores of the participants according to their sociodemographic characteristics was examined; The average social media addiction score of men was higher than the social media addiction average of women, and the difference was statistically significant ($p < 0.05$). It was determined that the social media addiction average of married people was higher than the social media addiction average of singles, and the difference was statistically significant ($p < 0.05$).

While there was a significant difference between the perceived health status and the mean score of the social media addiction scale, it was observed that the difference was due to those who perceived their health as bad ($p < 0.05$). While there was a significant difference between perceived income and social media addiction scale average score, it was observed that the difference was due to those who perceived their income as bad ($p < 0.05$).

It was determined that the average score of the social media addiction scale of those with any chronic disease was higher than the average score of the social media addiction scale of those without chronic disease, and the difference was statistically significant ($p < 0.05$).

In addition, there was no significant difference between educational status and social media addiction scale ($p > 0.05$) (Table 2).

Table 2. *Distribution of the Social Media Addiction Scale Scores of the Participants by Sociodemographic Characteristics*

Variables	Social Media Addiction Scale Mean±SD	Test value P value
Gender		
Female	68,27±16,07	t: 0,684
Male	69,86±15,84	p:0,006*
Education Status		
Primary education	69,95±15,23	
High school	72,93±14,41	F: 1,624
Associate Degree	65,13±16,63	p:0,186
University	69,84±16,43	
Marital status		
Married	67,59±16,20	U:76,50
Single	70,93±15,48	p:0,003*
Perceived Income Level		
Good	71,26±16,63	F: 1,012
Middle	68,30±16,13	p:0,003*
Bad	67,12±14,64	
Perceived Health Level		
Good	64,94±16,34	F: 3,811
Middle	69,70±14,73	p:0,024*
Bad	73,82±16,20	
Presence of Chronic Disease		
Yes	70,35±15,08	U:245,00
No	68,22±16,51	p:0,003*

F: One Way Anova, t: t test, U:Mann Whitney U Test, *p<0,05

When the sociodemographic characteristics of the participants and the distribution of physical activity levels are examined; It was observed that women were more inactive than men, and the difference was statistically significant (p <0.05). It was observed that married individuals were more inactive than singles, and the difference was found to be statistically significant (p <0.05). It was determined that there was a statistically significant difference between perceived health status and physical activity, and those who perceived their health moderately were more inactive than those who perceived their health at a moderate level (p <0.05).

No statistically significant difference was found between education, perceived income, having a chronic disease and physical activity level (p> 0.05). (Table 3).

Table 3. *Distribution of Participants' Physical Activity Levels by Sociodemographic Characteristics*

Variables	Physical Activity Levels		
	Inactive n (%)	Minimal active n (%)	Test value P value
Gender			
Female	46(%28,2)	31(%19,0)	X^2: 1,944
Male	42(%25,8)	44(%27,0)	p:0,002*
Education Status			
Primary education	13(%8,0)	30(%18,4)	
High school	18(%11,0)	12(%7,4)	X^2: 13,372
Associate Degree	29(%17,8)	17(%10,4)	p:0,461
University	28(%17,2)	16(%9,8)	
Marital status			
Married	56(%34,4)	33(%20,2)	X^2: 6,298
Single	33(%20,2)	42(%25,8)	p:0,012*
Perceived Income Level			
Good	27(%16,6)	26(%16,0)	X^2: 0,930
Middle	37(%22,7)	26(%16,0)	p:0,628
Bad	24(%14,7)	23(%14,1)	
Perceived Health Level			
Good	36(%22,1)	19(%11,7)	X^2: 10,656
Middle	39(%23,9)	29(%17,8)	p:0,005*
Bad	13(%8,0)	27(%16,6)	
Presence of Chronic Disease			
Yes	40(%24,5)	28(%17,2)	X^2: 1,098
No	48(%29,4)	47(%28,8)	p:0,187

X^2:Chi-square test, *p<0,05

When the social media addiction scale mean score was compared according to the physical activity level of the participants, the social media addiction score average of the physically inactive (inactive) was found to be higher than the social media addiction scale score average of those with low physical activity level, and the difference was found to be statistically significant (p <0, 05). It was observed that those who do not do physical activity have more social media addiction (Table 4).

Table 4. *Comparison of Individuals' Physical Activity Level and Social Media Addiction Average Score*

Physical Activity Questionnaire	Social Media Addiction Mean±SD	Test value P value
Physically inactive (Inactive) (<600 MET-min / week)	72,64±15,62	
With a low level of physical activity (600-3000 MET-min / wk) (Minimal Active)	66,10±15,63	U: 452,0 p:0,009*

U:Mann Whitney U Test, *p<0,05

Discussions

In this study, it was aimed to evaluate the relationship between social media addiction and physical activity. At the same time, the relationship of social media addiction with other socio-demographic characteristics was also examined. In our study, it was determined that there is a relationship between physical activity and social media addiction. It has been found that the rate of inactive individuals is higher and the social media addiction average of these individuals is higher. At the same time, in this study, it was determined that women, married people and those who perceive their health to be medium were more inactive. A study reported that there is an inverse relationship between daily smartphone use and weekly physical activity levels in Thai university students (Penglee et al., 2019). A meta-analysis study concluded that sports interventions can significantly reduce internet addiction (Liu et al., 2017). In a study, it was shown that exercise can significantly reduce the time spent online and the severity of internet addiction (Kocak, 2018). In another study, it was reported that physical activity contributed to the decrease in Facebook use (Brailovskaia et al., 2018). According to the results of the study, it can be said that physical activity has a positive effect on reducing the types of addiction such as the internet and the use of smartphones, social media.

Addiction types such as social media and online gaming can potentially develop in anyone with internet access. In addition to physical activity level, certain socio-demographic characteristics such as age and gender have an effect on the increase in this risk of addiction (Kuss et al., 2014; Andreassen et al., 2016). In this study, it was determined that the social media score averages of men are higher than women. Similar to our work, Azizi et al. (2019) reported that male students have higher social network addiction. In some studies different from our study, it was reported that there is no relationship between gender and social media addiction (Aktan, 2018; Baz, 2018). On the other hand, it has been reported that being a woman is associated with social network addiction, and being a man is associated with video games (Andreassen et al., 2016; Tang, Koh & Gan, 2017). This situation can be explained by the fact that female-oriented behaviors include social interaction and cooperation, and male-oriented behaviors reflect competitive and “aggressive” characteristics (Andreassen et al., 2016).

In this study, it was determined that singles are more disadvantageous than married people in terms of social media addiction. Similar to our study, it was reported that there is a relationship between marital status and social media addiction, and single individuals are more social media addicts than married individuals (Andreassen et al., 2016; Sağar, 2019). According to the results of the study, it can be said that married individuals spend less time using social media due to their responsibilities towards their families. In addition, social networks can reflect a more important social function for single individuals and a meeting place with their partners. In this study, the social media addiction mean scores of those who perceive their income well are higher. This situation may suggest that individuals without economic concerns are interested in social media usage. Different from the results of this study, it has been reported that there is no

significant difference between monthly income level and social media addiction (Hassan et al., 2020; Sağar, 2019). On the other hand, in this study, it was determined that the social media addiction mean scores of those who perceive their health level badly and individuals with any chronic disease were higher. In this case, it can be said that individuals can use social media in terms of their own health needs or to relax themselves.

4. Conclusions

As a result, it was determined that those who do not do physical activity (inactive) have a higher average score for social media addiction. In terms of physical inactivity, women, married people, and those who perceive their health to be moderate were found to be more inactive. It has been determined that the average score for social media addiction is higher in males, singles, those who perceive their health as bad and their income level as good, and those with any chronic disease. In order to reduce social media addiction, studies can be planned to encourage individuals to participate in physical activity programs and to keep their motivation high in this direction.

References

1. AKTAN, E. (2018). Üniversite Öğrencilerinin Sosyal Medya Bağımlılık Düzeylerinin Çeşitli Değişkenlere Göre İncelenmesi. *Erciyes İletişim Dergisi, 5*(4), 405-421. DOI.org/10.17680/erciyesiletisim.379886.
2. ANDREASSEN, C.S. (2015). Online social network site addiction: A comprehensive review. *Current Addiction Reports, 2*, 175–184. DOI.org/10.1007/s40429-015-0056-9.
3. ANDREASSEN, C.S., PALLESEN, S., & GRİFFİTHS, M.D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors, 64*, 287–293. DOI.org/10.1016/j.addbeh.2016.03.006.
4. AZİZİ, S.M., SOROUSH, A., & KHATONY, A. (2019). The relationship between social networking addiction and academic performance in Iranian students of medical sciences: a cross-sectional study. *BMC Pychology*, *7*(1), 28. DOI.org/10.1186/s40359-019-0305-0.
5. BAZ, F.Ç. (2018). Sosyal Medya Bağımlılığı: Üniversite Öğrencileri Üzerine Çalışma. *Uluslararası Toplum Araştırmaları Dergisi-International Journal of Society Researches,* 9(16), 275-295 https://doi.org/10.26466/opus.470118.
6. BRAİLOVSKAİA, J., TEİSMANN, T., & MARGRAF, J. (2018). Physical activity mediates the association between daily stress and Facebook addiction disorder (FAD)–A longitudinal approach among German students. *Computers in Human Behavior, 86*, 199-204. DOI.org/10.1016/j.chb.2018.04.045.
7. CRAİG, C.L., MARSHALL, A.L., SJÖSTRÖM, M., BAUMAN, A.E., BOOTH, M.L., AİNSWORTH, B. E., PRATT, M., EKELUND, U., YNGVE, A., SALLİS, J.F., & OJA, P. (2003). International physical activity

questionnaire: 12-country reliability and validity. *Medicine and Science in Sports and Exercise, 35*(8), 1381–1395. DOI.org/10.1249/01.MSS.0000078924.61453.FB.

8. D'ARİENZO, M.C, BOURSİER, V., & GRİFFİTHS, M.D. (2019). Addiction to Social Media and Attachment Styles: A Systematic Literature Review. *International Journal of Mental Health and Addiction, 1*7, 1094–1118. DOI.org/10.1007/s11469-019-00082-5.
9. ERDOĞAN, B. (2019). *Klinik Olmayan Örneklemde Sosyal Medya Bağımlılığının Sosyal Görünüş Kaygısı Ve İletişim Becerileri İle Arasındaki İlişkinin İncelenmesi*, Yayınlanmamış Yüksek Lisans Tezi, İstanbul, Turkey.
10. HASSAN, T., ALAM, M.M., WAHAB, A., & HAWLADER, M.D. (2020). Prevalence and associated factors of internet addiction among young adults in Bangladesh. *The Journal of the Egyptian Public Health Association*, *95*(1), 3. DOI.org/10.1186/s42506-019-0032-7.
11. HE, Q., TUREL, O., & BECHARA, A. (2017). Brain anatomy alterations associated with Social Networking Site (SNS) addiction. *Scientific Reports, 7*, 45064. DOI.org/10.1038/srep45064.
12. KLAPERSKİ, S., VON DAWANS, B., HEİNRİCHS, M., & FUCHS, R. (2013). Does the level of physical exercise affect physiological and psychological responses to psychosocial stress in women?. *Psychology of Sport and Exercise, 14*(2), 266-274. DOI.org/10.1016/j.psychsport.2012.11.003.
13. KOCAK, C.V. (2018). How does regular exercise affect internet addiction level in university students. Physical Education of Students, 23, 186–190. DOI: 10.15561/20755279.2019.0404.
14. KUSS, D.J., GRİFFİTHS, M.D., KARİLA, L., & BİLLİEUX, J. (2014). Internet addiction: A systematic review of epidemiological research for the last decade. *Current Pharmaceutical Design, 20*, 4026-4052. DOI .org/10.2174/1381612811319999061 7.
15. Lİ, S., WU, Q., TANG, C., CHEN, Z., & LİU, L. (2020). Exercise-Based Interventions for Internet Addiction: Neurobiological and Neuropsychological Evidence. *Frontiers in Psychology*, *11*, 1296. DOI.org/10.3389/fpsyg.2020.01296.
16. LİU, J., NİE, J., & WANG, Y. (2017). Effects of group counseling programs, cognitive behavioral therapy, and sports intervention on internet addiction in East Asia: a systematic review and meta-analysis. *Int. J. Environ. Res. Public Health, 14*, 1470. DOI.org/10.3390/ijerph14121470.
17. LİU, S., XİAO, T., YANG, L., & LOPRİNZİ, P. D. (2019). Exercise as an Alternative Approach for Treating Smartphone Addiction: A Systematic Review and Meta-Analysis of Random Controlled Trials. *International Journal of Environmental Research and Public health*, *16*(20), 3912. DOI.org/10.3390/ijerph16203912.
18. FU, S., CHEN, X., & ZHENG, H. (2020). Exploring an adverse impact of smartphone overuse on academic performance via health issues: a stimulus-

organism-response perspective. *Behaviour & Information Technology*, 1-13. DOI.org/10.1080/0144929X.2020.1716848.

19. PENGLEE, N., CHRİSTİANA, R.W., BATTİSTA, R.A., & ROSENBERG, E. (2019). Smartphone Use and Physical Activity among College Students in Health Science-Related Majors in the United States and Thailand. *International Journal of Environmental Research and Public Health*, *16*(8), 1315. DOI.org/10.3390/ijerph16081315.
20. SAĞAR, M.E. (2019). Yetişkin Bireylerde Sosyal Medya Bağımlılığının İrdelenmesi. Sağlık Bilimlerinde Eğitim Dergisi, 2(1), 29-42. (in Turkish)
21. SAGLAM, M., ARIKAN, H., SAVCI, S., INAL-INCE, D., BOSNAK-GUCLU, M., KARABULUT, E., & TOKGOZOGLU, L. (2010). International physical activity questionnaire: reliability and validity of the Turkish version. *Perceptual and Motor skills, 111*(1), 278–284. DOI.org/10.2466/06.08.PMS.111.4.278-284.
22. SAMAHA, M, & HAWİ, N.S. (2016). Relationships among smartphone addiction, stress, academic performance, and satisfaction with life, *Computers in Human Behavior, 57*, 321–325. DOI.org/10.1016/j.chb.2015.12.045.
23. ŞAHİN, C., & YAĞCI, M. (2017). Sosyal medya bağımlılığı ölçeği- yetişkin formu: geçerlilik ve güvenirlik çalışması. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD), 18(1), 523- 538, Turkey.
24. TANG, C.S., KOH, Y.W., & GAN, Y. (2017). Addiction to Internet Use, Online Gaming, and Online Social Networking Among Young Adults in China, Singapore, and the United States. *Asia-Pacific Journal of Public Health*, *29*(8), 673–682. DOI.org/10.1177/101053951773955.
25. TUREL, O., BREVERS, D., & BECHARA, A. (2018). Time distortion when users at-risk for social media addiction engage in non-social media tasks. *Journal of Psychiatric Research*, *97*, 84–88. DOI.org/10.1016/j.jpsychires.2017.11.01.
26. GLOBAL DİGİTAL REPORT. (2021). WeAreSocial. Retrieved May 2021, from https://datareportal.com/reports/digital-2021-global-overview-report.
27. ZİVNUSKA, S., CARLSON, J.R., CARLSON, D.S., HARRİS, R.B., & HARRİS, K.J. (2019). Social media addiction and social media reactions: The implications for job performance. *The Journal of Social Psychology*, *159*(6),746–760. DOI.org/10.1080/00224545.2019.1578725.