

## Mindfulness, Psychological Well-being, Social Media Use, and Internet Use Time among Adolescents: A Structural Equation Modeling

## Ergenlerde Farkındalık, Psikolojik İyi Oluş, Sosyal Medya Kullanımı ve İnternet Kullanım Süresi: Bir Yapısal Eşitlik Modellemesi

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#### Abstract

**Objective:** Psychological well-being is a concept associated with mindfulness and the use of social media. Limited information is available in the literature on the nature of this relationship and the underlying intermediary mechanisms. We also aimed to determine the mediator role of social media use and time spent online in the association between mindfulness and psychological well-being.

**Method:** This study included 429 teenagers. Data was collected through introductory information form, social media use scale, psychological well-being scale, and mindful attention awareness scale. Structural equation modeling method was used in the analysis of the data.

**Results:** A significant positive correlation was found between mindfulness and psychological well-being, and a significant negative correlation was found between mindfulness and time spent online. Social media use did not play a mediator's role in the correlation between mindfulness and psychological well-being, while the daily time spent online played a mediator's role.

**Conclusion:** As mindfulness increases in adolescents, psychological well-being increases and the time spent on the internet decreases. While the use of social media does not have a mediating role in the relationship between mindfulness and psychological well-being, the time spent on the internet has a mediating effect. Future research should be conducted with different groups and variables on the impact of social media use on psychological well-being and mindfulness.

Keywords: Adolescents, mindfulness, psychological well-being, social media use, internet use

#### Öz

**Amaç:** Psikolojik iyi oluş, farkındalık ve sosyal medya kullanımı ile ilişkili bir kavramdır. Literatürde bu ilişkinin doğası ve altında yatan aracı mekanizmalar hakkında sınırlı bilgi mevcuttur. Ayrıca bilinçli farkındalık ve psikolojik iyi oluş arasındaki ilişkide sosyal medya kullanımı ve internette geçirilen zamanın aracı rolünü belirlemek amaçlanmıştır.

Yöntem: Bu çalışmaya 429 genç dahil edilmiştir. Veriler, tanıtıcı bilgi formu, sosyal medya kullanım ölçeği, psikolojik iyi oluş ölçeği ve bilinçli farkındalık ölçeği aracılığıyla toplanmıştır. Verilerin analizinde yapısal eşitlik modelleme yöntemi kullanılmıştır.

**Bulgular:** Bulgular, bilinçli farkındalık ve psikolojik iyi oluş arasında anlamlı bir pozitif korelasyon bulunduğunu ve farkındalık ile internette harcanan zaman arasında anlamlı bir negatif korelasyon bulunduğunu göstermiştir. Farkındalık ve psikolojik iyi oluş arasındaki ilişkide sosyal medya kullanımı bir aracı rolü oynamazken, internette harcanan zaman bir aracı rolü olduğu görülmektedir.

**Sonuç:** Adölesanlarda bilinçli farkındalık artıkça psikolojik iyi oluşun arttığı, internette harcanan zamanın azaldığı saptanmıştır. Bilinçli farkındalık ile psikolojik iyi oluş arasındaki ilişkide sosyal medya kullanımının aracı bir rolü yokken, internette geçirilen süre aracı bir etkiye sahiptir. Sosyal medya kullanımının psikolojik iyi oluş ve bilinçli farkındalık üzerindeki etkisi konusunda gelecekte farklı grup ve değişkenlerle araştırma yapılması gerektiği düşünülmektedir.

Anahtar kelimeler: Ergenler, bilinçli farkındalık, psikolojik iyi oluş, sosyal medya kullanımı, internet kullanımı

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## Introduction

Mindfulness can be defined as the consciousness of what occurs at the present time. This process entails an approach to everything that arises in the conscience in a non-judgmental, open, and well-accepted manner, without trying to change it (1). The literature shows that mindfulness helps one to accept undesired feelings, increases the capacity for tolerance to negative feelings, and has a positive relationship with physical and emotional well-being (2,3).

The concept of psychological well-being, on the other hand, concerns the questions of whether individuals are aware of their potentials and goals in life and whether they lead a high-guality life in their relationships with those around them in the course of their lives (4). It is known that as the levels of mindfulness and mindful awareness of individuals increase, their psychological well-being levels increase as well (5-11). However, Catak and Ögel found that mindfulness-based interventions increase the capacity for orientation toward undesired and best-left-avoided experiences in a manner similar to exposure. Their study also revealed that individuals were more willing to watch a visual material that had harmful content after a mindfulness exercise (3). The Internet and widely-used social media provide unlimited access to all kinds of information and images. Social media use is reportedly one of the most popular forms of entertainment. particularly among the young (12-14). Their prominent levels of curiosity and extensive use of social media make the young more likely to be affected by the negative messages on social media. It was demonstrated that most adolescents use the Internet for up to 10 hours a week; Facebook and Twitter are the most commonly used social networks; and the use of multiple social media networks became more widespread (15). It was argued that social media use and life satisfaction are closely linked to psychological well-being (16-18). However, it was also indicated that the increase in the time spent on the Internet negatively affects social media use and triggers social media addiction, while the increasing frequency of social media use negatively affects psychological well-being (16,19-22). Also, earlier review and meta-analysis studies highlighted that Internet use disorders have adverse effects on psychological well-being (23-25). Gámez-Guadix and Calvete (26) found that problematic Internet use and time spent on online social interactions had a negative relationship with mindful awareness. It was suggested that activities to promote conscience and mindfulness be implemented to protect adolescents from the harmful effects of Internet use instead of prohibitive measures (1).

Therefore, this study, through structural equation modeling (SEM), sought to test the validity of the hypothesis that there is a relationship and effect level between mindful awareness and spiritual well-being. The second aim of the study was to determine the level of assumed relationship of time spent on the Internet with mindful awareness, psychological well-being, and social media use. The third aim was to determine the mediating role of social media use and time spent on the Internet in the assumed relationship between mindful awareness and psychological well-being.

## Method

#### Sample

The study was conducted in a high school in the Black Sea region. High school students who met the inclusion criteria participated in the study. The participants of the study were 429 adolescents. There is no clear consensus on the number of samples in structural equation modeling (Gürbüz ve Şahin, 2018; Kline 2011). In line with the literature recommendation, attention was paid to ensure that the sample of the study was not less than 200 and that the number of variables in the model was between 10-20 times (Gürbüz ve Şahin, 2018; Kline 2011). Adolescents without a diagnosis of any psychiatric disorder were included in the study. The participants, 65.3% of whom were female. The mean age (min = 14, max = 18) of the participants was 15.62  $\pm$  1.02; 48.2% studied in Grade 9, 32.4% studied in Grade 10, 8.4% studied in Grade 11, and 11.0% studied in Grade 12. The average time that the participants spent daily on the internet was 201.94  $\pm$  163.10 minutes (min = 6, max = 1080), and the average number of social media logins per

day was  $13.48 \pm 30.45$  (min = 0, max = 420). Of the participants, 52.7% indicated that they cared about the likes and comments on social media, 44.8% were criticized on social media, 50.6% considered deleting their social media accounts, and 36.6% attempted to delete them actually. The rate of the participants feeling guilty of using social media was 30.1%, and the rate of those feeling uneasy was 28.9%. Also, it was found that 40.3% of the participants checked their social media accounts as soon as they woke up.

#### Procedure

Ethical approval was received for the study from the Erciyes University Ethics Committee of Social and Humanitarian Sciences (Approval No. 94; Approval Date: 30.07.2019). Also, "Informed Voluntary Consent Form" was taken from the adolescents. Adolescents participating in the study were reached through their teachers. Participation in the study was based entirely on independent volition, and the participants received no fee for their participation. All participants were briefed about the study, and they signed the voluntary consent form before their participation in the study. In addition, verbal explanations were made to the parents of the adolescents and their consent was obtained. It took 15–20 minutes to fill out the forms, during which time, the researchers stayed with the adolescents. The study included an inclusion criterion such as for them to have attended a formal secondary school, have the ability to speak and understand Turkish and have signed the informed consent.

#### Measures

The data were collected through the Introductory Information Form, the Social Media Use Integration Scale, the Psychological Well-Being Scale and the Mindful Attention Awareness Scale.

#### Introductory Information Form

The Introductory Information Form includes questions about gender, age, family income and social media use.

#### Social Media Use Integration Scale

The original form of the scale was developed by Jenkins-Guarnieri et al., (27). Scale aiming to measure social media usage the Turkish validity study of the scale was carried out by Akın et al. (28). The scale has ten 6-point Likert-type items. Item 8 is reverse-scored. The maximum score on the scale is 60, whereas the lowest is 10. A high score on the scale indicates a high level of social media use. The Cronbach's alpha internal consistency reliability coefficients of scale were .80 for the whole scale31. This value is .82 for our study.

#### Psychological Well-Being Scale

The Psychological Well-Being Scale defines the essential elements of human functioning ranging from positive relationships, to feelings of competence, to having meaning and purpose in life. The scale was developed by Diener et al., (7). Scale aiming to measure psychological well-being the Turkish validity study of the scale was carried out by Telef (29). The scale has eight 7-point Likerttype items. There are no reverse-scored items in the scale. The lowest score on the scale is 8, whereas the highest score is 56. A high score on the scale indicates that the individual possesses various psychological resources as well as power. The Cronbach's alpha internal consistency coefficient of the scale was found to be .87 (29). In our study, this value is .79.

#### Mindful Attention Awareness Scale

The scale shows the general tendency toward being aware of the instant experiences within daily life and being careful about them. The scale was developed by Brown & Ryan (30). Scale aiming to measure conscious awareness the Turkish validity study of the scale was carried out by Özyeşil et al. (2). The scale includes fifteen 6-point Likert-type items. The lowest score on the scale is 15, whereas the highest score is 90. High scores on the scale indicate a high level of mindfulness. The Cronbach's alpha internal consistency coefficient of the scale was .82 (2). This value is .78 for our study.

Demographic	The scales		· · · · · · · · · · · · · · · · · · ·			•	
Variables	MAA	PWB	SMU	SIEC	ISR	DMSI	
Gender			·			-	
Female	61.16±10.24	42.6±7.89	16.78±9.54	8.38±5.29	8.40±5.11	207.66±161.67	
Male	61.60±13.04	42.44±7.83	17.56±9.59	8.91±5.74	8.65±4.85	191.19±165.7	
Р	0.694	0.704	0.425	0.341	0.628	0.320	
Caring about L	ikes and Comn	nents	·				
Yes	60.76±11.13	42.76±7.47	18.73±11.38	9.63±6.70	9.14±5.48	220.50±175.25	
No	61.94±11.44	42.53±8.30	15.14±6.49	7.38±3.21	7.76±4.36	181.28±146.07	
Р	0.280	0.759	0.001	0.001	0.004	0.013	
<b>Getting Criticis</b>	m						
Yes	59.42±10.76	41.48±7.52	17.73±10.41	9.00±6.08	8.73±5.15	238.48±180.03	
No	62.85±11.48	43.60±8.03	16.51±8.77	8.21±4.87	8.29±4.92	172.34±141.59	
Р	0.002	0.005	0.187	0.141	0.364	0.001	
Considering D	eleting Social N	ledia Accounts	6				
Yes	60.35±9.92	42.57±8.09	16.30±8.79	8.20±4.80	8.09±4.86	191.01±131.08	
No	62.30±12.47	42.74±7.64	17.83±10.23	8.93±6.04	8.89±5.16	213.12±190.06	
Р	0.024	0.824	0.024	0.165	0.102	0.161	
Attempting to I	Delete Social M	edia Accounts	·				
Yes	60.03±10.50	41.69±8.39	16.40±9.42	8.33±5.36	8.06±4.88	206.54±157.50	
No	62.06±11.66	43.20±7.50	17.43±9.62	8.70±5.51	8.73±5.09	199.29±166.48	
Р	0.036	0.040	0.045	0.506	0.183	0.658	
Feeling Guilty	of Social Media	Use	·				
Yes	59.40±10.10	42.75±7.97	17.58±9.57	8.75±5.04 8.82±5.39		205.51±143.51	
No	62.14±11.67	42.61±7.83	16.83±9.55	8.48±5.63	8.34±4.85	200.41±171.04	
p	0.009	0.957	0.805	0.635		0.767	
Feeling Uneasy	/ Due to Social	Media Use	·			·	
Yes	58.41±10.45	41.20±7.46	18.59±12.02	9.94±7.23	8.65±5.36	242.51±182.02	
No	62.49±11.41	43.24±7.96	16.43±8.28	28 7.98±4.40 8.42±4.89		185.96±152.14	
p	0.001	0.013	0.033	0.001	0.667	0.001	
Social Media C	heck Right Afte	er Waking up	·			-	
Yes	59.94±10.48	42.25±7.56	19.19±11.74	9.71±7.05	9.47±5.59	264.81±197.89	
No	62.24±11.72	42.92±8.07	15.61±7.41	7.77±3.83	7.83±4.48	8 160.43±117.13	
р	0.045	0.175	0.005	0.001	0.001	0.001	
Who Controls	the Time Spent	on the Internet	1				
Myself	61.55±11.02	42.29±7.96	16.96±9.46	8.42±5.33	8.53±5.03	208.31±169.49	
Parents	61.38±8.55	44.41±8.24	18.00±9.84	9.91±5.69	8.08±4.99	149.08±95.58	
Other	57.27±17.73	45.81±3.50	17.13±10.86	8.72±6.85	8.40±5.03	180.95±121.74	
р	0.469	0.036	0.898	0.288	0.796	0.095	

# Table 1. Comparison of the scores on psychological well-being, mindful attention awareness, as well as social media use integration scales and subscales, based on demographic variables

p<0.05\* MAA: Mindful Attention Awareness, PWB: Psychological Well-Being, SMU: Social Media Use, SIEC: Social Integration and Emotional Connection, ISR: Integration into Social Routine, DMSI: Daily Minutes Spent on the Internet

#### Statistical Analysis

The data obtained from the research were evaluated in the SPSS 25 (IBM SPSS Statistics Standard Concurrent User V 25) package program. Validity analysis and explanatory factor analysis were performed on the scales before evaluating the data. Cronbach's alpha internal consistency coefficients of the scales are given in the introduction part of the scales. The principal component analysis was applied for the Exploratory Factor analysis. It was determined that the Kaiser-Meyer-Olkin (KMO) test value was> 0.80 for all scales and p<0.01 for Bartlett's test of sphericity. According to this information, the scales can be used safely without removing any items from the scales (31). A Shapiro-Wilk test was administered to evaluate normal distribution. Pearson's correlation test was administered for correlation. The selection of the variables in the structural equation modeling was made by considering the theoretical background. The following indices were used to test the appropriateness of the structural equation modeling implemented through the LISREL 8.71 (32) program: CMIN/df 0.90; AGFI>0.90; and GFI>0.90 were considered significant. As the data are normally distributed, the maximum likelihood estimation method has been applied (31,33). A value of p<0.05 was considered statistically significant in comparisons.

## Results

In the present study; Table 1 shows the results of correlation between the dependent variables. Figure 1 and Table 2, Table 3 demonstrate the results of the direct and indirect (mediating) effect of daily minutes spent on the internet and social media use in the relationship between mindful awareness and psychological well-being.

Variables	Х	SD	1	2	3	4	5	6
MAA	61.31	11.28	-					
PWB	42.65	7.86	0.263**	-				
SMU	17.05	9.55	-0.027	-0.043	-			
SIEC	8.56	5.45	-0.047	-0.055	0.919**	-		
ISR	8.48	5.02	0.000	-0.023	0.903**	0.661**	-	
DMSI	201.94	163.10	-0.186**	-0.160**	0.098*	0.097*	0.082	-

Table 2. Mean scores and standard deviation and correlation values of the scales and subscales of psychological well-being, mindful attention awareness, and social media use integration

MAA Mindful Attention Awareness, PWB: Psychological Well-Being, SMU: Social Media Use, SIEC: Social Integration and Emotional Connection, ISR: Integration into Social Routine, DMSI: Daily Minutes Spent on the Internet, \*p<0.05, \*\*P<0.01

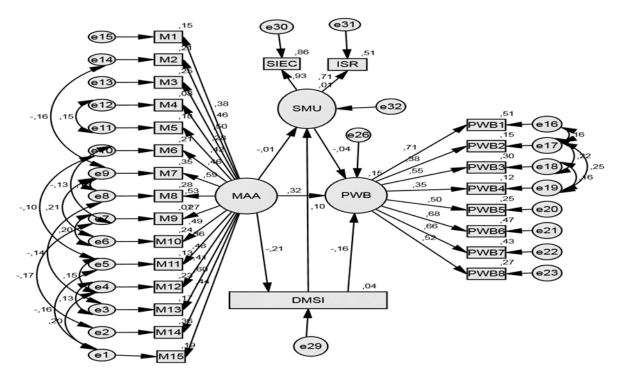
Table 1 shows that the mean score on mindful awareness was  $61.31 \pm 11.28$  and that the mean score on psychological well-being was  $42.65 \pm 7.86$ . Mindful awareness has a positive relationship between psychological well, and a negative statistically significant relationship with daily minutes spent on the internet (p <0.05). The mean score on social media use was  $17.05 \pm 9.55$ , the mean score on the subscale of Social Integration and Emotional Connection was  $8.56 \pm 5.45$ , and the mean score on the subscale of Integration into Social Routines was  $8.48 \pm 5.02$ . There were positive statistically significant relationships (p <0.05) between social media use scores and subscale scores at a very high level and within the subscales at a high level.

When the fit statistics of the SEM in Figure 1 were analyzed, it was seen that the degrees of freedom value was 277 and the p-value was lower than 0.05. Because the degrees of freedom value was higher than 0, the model was considered to be fully saturated. However, because the p-value was lower than 0.05, the extent to which model fit indexes supported the model was analyzed. The model fit index values were found to be CMIN/df = 1.41; GFI = 0.93; AGFI = 0.91; CFI = 0.95; RMSEA = 0.03. On the basis of these values, the data supported the model and the fit indexes were acceptable (34,35).

Variables			Estimate					
			Unstandardized β Sta		ndardized β	S.E.	t	Р
DMSI	<	MAA	-47.224		-0.207	13.208	-3.564	0.001
SMU	<	MAA	-0.083		-0.015	0.417	-0.199	0.842
SMU	<	DMSI	0.003		0.102	0.002	1.942	0.052
PWB	<	MAA	0.525		0.323	0.114	4.534	0.001
PWB	<	DMSI	-0.001		-0.156	0.000	-2.931	0.003
PWB	<	SMU	-0.009		-0.040	0.013	-0.706	0.480
			SMC					
DMSI	0.043							
SMU	0.011							
PWB	0.153							

Table 3. Regression weights, standardized regression weights, and squared multiple correlations
for the model

\*: MAA Mindful Attention Awareness, PWB: Psychological Well-Being, SMU: Social Media Use, DMSI: Daily Minutes Spent on the Internet, S.E.: Standard Error, SMC: Squared Multiple Correlations



## Figure 1 The SEM among mindful attention awareness, psychological well-being, social media use, and time spent on the internet

\*: MAA Mindful Attention Awareness, PWB: Psychological Well-Being, SMU: Social Media Use, SIEC: Social Integration and Emotional Connection, ISR: Integration into Social Routine, DMSI: Daily Minutes Spent on the Internet

According to the regression weights values in Table 2, an increase by one point in mindful awareness level led to a decrease in daily minutes spent on the internet by 47.07 minutes and an increase in psychological well-being level by 0.51 point. An investigation of standardized regression weights values revealed that a change in mindful awareness level worth one standard deviation led to a negative standard deviation worth 0.20 in daily minutes spent on the internet and a positive standard deviation worth 0.32 in psychological well-being. A change in daily minutes spent on the internet worth one standard deviation led to a change in psychological well-being worth 0.15 negative standard deviation. It was seen that these changes were

statistically significant (p < 0.05). It was also seen that this model explained 15.3% of the changes of variance in psychological well-being.

According to the results in Table 3, while mindful awareness having a statistically significant effect daily minutes spent on the internet (effect value = -0.21) and psychological well-being ((effect value = 0.32) (p 0.05)). In addition, it was found that there was a statistically significant effect of daily minutes spent on the internet on psychological well-being ((effect value = -0.16) (p> 0.05)). In addition, it was found that there was a statistically significant effect of daily minutes spent on the internet on psychological well-being ((effect value = -0.16) (p> 0.05)). In addition, it was found that there was a statistically significant effect of daily minutes spent on the internet on psychological well-being ((effect value = -0.16) (p> 0.05)). These data suggested that the data fitted and supported the model, although social media use did not have a mediating effect in the relationship between mindful awareness and psychological well-being, daily minutes spent on the internet had a mediating role.

### **Discussion**

As one of the most critical milestones in the life of an individual, adolescence is a period of physiological, social, and psychological maturation in which the individual gets ready for life (36). At this stage, adolescents' bodies maturate rapidly, their psychological condition changes because of new hormonal changes, and emotional turbulences ocur (37). As one of the essential tasks in this turbulent period, identity development has a significant function in problematic internet usage (38). The emergence of adversities in various parts of the lives of adolescents who have no awareness of the issue of problematic internet usage will perhaps become inevitable, particularly in their psychosocial development (39). Therefore, this study investigated the relationship, mediator, and effect level among mindfulness, psychological well-being, time spent on the internet and social media use.

In line with the first hypothesis of our study, we found that there was a positive relationship between mindfulness and psychological well-being and that mindfulness detected 0.32 of the effect value on psychological well-being. In line with of these findings, we accepted our first hypothesis. Howell et al., (6) reported that mindfulness was closely linked to emotional, psychological, social, and overall well-being. Numerous studies in the literature indicate a similar relationship between mindfulness and psychological well-being (9,10). Apart from that, it was also argued that mindfulness-based training given to adolescents positively affected psychological well-being (40).

With respect to the second hypothesis of our study, we found a negatively significant relationship among time spent on the internet and mindfulness and psychological well-being and a positively significant relationship between time spent on the internet and social media use (Table 1, Figure 1). We accepted our second hypothesis. Problematic internet use and time spent on the social media had a negative relationship with mindfulness. They argued the reason was that mindfulness reduces people's fear of interpersonal evaluation and increases their capacity for preferring face-to-face interaction and controlling negative feelings (26). It is also known that time spent on the internet poses a risk in terms of the frequency of social media use (41). Moreover, it is indicated that the increase of the time spent on the internet increases social media use and triggers social media addiction and that the increase in the frequency of using social media negatively affects psychological well-being (20,22). In addition to many earlier studies (42,43), reviews and meta-analysis studies have also highlighted that internet use disorders have an adverse effect on psychological well-being (24,25).

We can interpret these results arguing that as mindfulness levels of adolescents who are going through the identity development phase increase, their abilities to control their internet and social media use behaviors increase as well because of the increase in their levels of realizing feelings and thoughts. As adolescents realize and control these internal experiences, their self-esteem increases and they feel better psychologically. Furthermore, increased mindfulness and psychological well-being levels may reduce internet and social media use among adolescents by helping them to control their fear of being evaluated negatively in their social interactions and encourage them to prefer face-to-face communication.

Concerning our third and fourth hypothesis, we saw that social media use did not have a mediating role in the relationship between mindfulness and psychological well-being and that time spent on the internet had a mediating role that was significant. In line with these findings, we rejected our third hypothesis and accepted our fourth hypothesis. Individuals with a prominent level of mindfulness perceive thoughts and feelings as "mere thoughts and feelings," do not generalize them, and know that they are temporary, which may contribute to psychological well-being. Adolescents who cannot realize and control the thought of using the internet and the feeling that emerges consequently might be spending more time on the internet. In addition, the weakening of, and isolation in, real social relationships, as well as overgeneralizing the relationships in virtual contexts, might lead to psychological distress in adolescents. Further studies are needed to shed light on this aim.

The present study will contribute to the literature by determining the relationship among mindfulness, psychological well-being, social media use, and time spent on the internet among adolescents, as well as effect level and mediating effects. However, the present study had specific limitations. The responses of the participants to the data collection tools were accepted as being accurate; however, their responses were limited by the items on the scales. Therefore, we believe that future studies on this topic should utilize other measurement and evaluation instruments (observation, interview, etc.). Another limitation was that the study was conducted within a specific amount of time. The data in this study reflect the participants' positions at that moment. Follow-up studies should be conducted to understand the relationship between the variables clearly. Last, this study was limited to adolescents in Turkish society. In this context, the generalizability of the study is valid only for the given societal framework and age group. It is recommended to include other different sample groups and different sociodemographic characteristics in future research.

The results of the study demonstrate a positive relationship between mindfulness and psychological wellbeing. In addition, mindfulness significantly explains changes in psychological well-being. It is seen that there is a negative relationship between the time spent on the internet and mindfulness and psychological well-being. It is observed that there is a statistically significant positive relationship between the time spent on the internet and the use of social media. It is determined that the use of social media does not have a mediator role in the relationship between mindfulness and psychological well-being, and the time spent on the internet has a mediator role. According to these results, the time adolescents spend on the internet and their level of social media use negatively affect their level of psychological well-being. In order to correct this negative impact, it is considered appropriate to implement mindfulness-based interventions to increase adolescent mindfulness levels.

### References

- 1. Cigolla F, Brown D. A way of being: bringing mindfulness into individual therapy. Psychother Res 2011; 21(6): 709-721.
- 2. Özyeşil Z, Arslan C, Kesici Ş, et al. Adaptation of the mindful attention awareness scale into Turkish. Education and Science 2011; 36(160): 224-235.
- 3. Çatak P, Ögel K. Farkındalık temelli terapiler ve terapötik süreçler. Klinik Psikiyatri Dergisi 2010; 13(1): 85-91.
- 4. Ryan RM, Deci EL. On happiness and human potentials: a review of research on hedonic and eudaimonic wellbeing. Annu Rev Psychol 2001; 52(1): 141-166.
- 5. Kline R. Principles and Practice of Structural Equation Modelling, 4th edition, New York: Guilford Press, 2005.
- Howell AJ, Digdon NL, Buro K, et al. Relations among mindfulness, well-being, and sleep. Pers Individ Dif 2008; 45(8): 773–777.
- 7. Diener E, Wirtz D, Tov W, et al. New well-being measures: short scales to assess flourishing and positive and negative feelings. Soc Indic Res 2010; 97(2): 143-156.
- 8. Parto M, Besharat MA. Mindfulness, psychological well-being and psychological distress in adolescents: assessing the mediating variables and mechanisms of autonomy and self-regulation. Procedia Soc Behav Sci 2011; 30: 578-582.
- 9. Branström R, Duncan LG, Moskowitz JT. The association between dispositional mindfulness, psychological wellbeing, and perceived health in a Swedish populationbased sample. Br J Health Psychol 2011; 16(2) 300–316.

- Yobas PK, Ramirez D, Fernandez Z, et al. Examining the predicting effect of mindfulness on psychological wellbeing among undergraduate students: a structural equation modelling approach. Pers Individ Dif 2016; 91: 63– 68.
- 11. Demirci İ, Şar AH. Kendini bilme ve psikolojik iyi oluş arasındaki ilişkinin incelenmesi. Itobiad: Journal of the Human & Social Science Researches 2017; 6(5): 2710-2728.
- 12. Carter MA. Protecting oneself from cyber bullying on social media sites—a study of undergraduate students. Procedia Soc Behav Sci 2013; 93(2) 1229-1235.
- 13. Tartari E. Benefits and risks of children and adolescents using social media. European Scientific Journal, ESJ 2015; 11(13): 321-332.
- 14. Lev-On A. The third-person effect on facebook: the significance of perceived proficiency. Telemat Inform 2017; 34(4): 252-260.
- 15. Akar F. Purposes and characteristics of internet use of adolescents' and a study of internet use purposes of adolescents with various variables (example of Yozgat province). Bozok University International Bozok Symposium, Proceedings, 2016; 147-165. Yozgat, Turkey
- 16. Ahn J. The effect of social network sites on adolescents' social and academic development: current theories and controversies. J Am Soc Inf Sci Technol 2011; 62(8): 1435-1445.
- 17. Kuyumcu B. Examining the relationship between university students' emotional awareness, expressing feelings, self-construct and subjective well-being. International Journal of Social Sciences Education 2011; 1(2): 104-113.
- 18. Mulisa F, Getahun DA. Perceived benefits and risks of social media: ethiopian secondary school students' perspectives. J Technol Behav Sci (2018); 3: 294-300.
- 19. Mathers M, Canterford L, Olds T, et al. Electronic media use and adolescent health and well-being: cross-sectional community study. Acad Pediatr 2009; 9(5): 307–314.
- 20. Cağır G, Gürgan U. The relationship between the levels of high school and university students' problematic use of internet and their perceived wellness and loneliness levels. Journal of Balikesir University Institute of Social Sciences 2010; 13(24): 70–85.
- 21. Jung Y, Pawlowski SD, Kim HW. Exploring associations between young adults' facebook use and psychological well-being: a goal hierarchy approach. Int J Inf Manage 2017; 37(1): 1391-1404.
- 22. Söner O, Yılmaz O. The relationship between social media dependency and psychological well-being levels of high school students. Journal of Ufuk University Institute of Social Sciences 2018; 7(13): 59-73.
- 23. Huang C. Internet use and psychological well-being: a meta-analysis. Cyberpsychol Behav Soc Netw 2010; 13(3): 241-249.
- 24. Çikrıkci Ö. The effect of internet use on well-being: meta-analysis. Comput Human Behav 2016; 65: 560-566.
- 25. Marino C, Gini G, Vieno A, et al. The associations between problematic facebook use, psychological distress and well-being among adolescents and young adults: a systematic review and meta-analysis. J Affect Disord 2018; 226: 274-281.
- 26. Gámez-Guadix M. Calvete E. Assessing the relationship between mindful awareness and problematic internet use among adolescents. Mindfulness 2016; 7: 1281–1288.
- 27. Jenkins-Guarnieri MA, Wright SL, Johnson B. Development and validation of a social media use integration scale. Psychol Pop Media Cult 2013; 2(1): 38-50.
- 28. Akin A, Özbay A, Baykut İ. Sosyal medya kullanimi ölçeği'nin türkçe formu'nun geçerliği ve güvenirliği. Journal of International Social Research 2015; 8(38): 647-650.
- 29. Telef BB. The adaptation of psychological well-being into Turkish: a validity and reliability study. Hacettepe University Faculty of Education Journal 2013; 28(3): 374-384.
- 30. Brown KW, Ryan RM. The benefits of being present: mindfulness and its role in psychological well-being. J Pers Soc Psychol 2003; 84(4): 822-848.
- 31. Gürbüz S, Şahin F. Sosyal bilimlerde araştırma yöntemleri: felsefe-yöntem analiz. Seçkin Yayıncılık 2018; 2: 322-335.
- 32. Jöreskog K, Sörbom D. LISREL. Lincolnwood, IL: Scientific Software International, 2004.
- 33. Kline RB. Principles and Practice of Structural Equation Modeling. New York: Guilford Press, 2011.
- 34. Marsh HW, Balla JR, McDonald RP. Goodness-of-fit indexes in confirmatory factor analysis: The effect of sample size. Psychol Bull 1988; 103(3): 391-410.
- 35. Sun J. Assessing goodness of fit in confirmatory factor analysis. Meas Eval Couns Dev 2005; 37(4): 240-256.
- 36. Nar E. Nobody Understands Me? Everything Wondered in the Name of Youth and Adolescent Psychology. Istanbul: Porte Culture Publishing, 2007.
- 37. Steyer JP. Raising A Child İn The Age Of Facebook. A. Birkan (trans.) Istanbul: Doğan Book (original edition 2012). 2014.

#### Bağımlılık Dergisi | Journal of Dependence

- 38. Huang YR. Identity and intimacy crisis and their relationship to internet dependence among college students. Cyberpsychol Behav 2006; 9(5): 571-576.
- 39. Ceyhan AA. Predictors of adolescents' problematic internet use levels. Journal of Child and Youth Mental Health 2011; 18(2): 85-94.
- 40. Ngar-sze L, Ming-tak H. Preliminary outcomes of a mindfulness-based programme for Hong Kong adolescents in schools: well-being, stress and depressive symptoms. International Journal of Children's Spirituality 2011; 16(4): 315-330.
- Savci M, Aysan F. Technological addictions and social connectedness: predictor effect of internet addiction, social media addiction, digital game addiction and smartphone addiction on social connectedness. Dusunen Adam 2017; 30(3): 202-216.
- 42. Cardak M. Psychological well-being and internet addiction among university students. The Turkish Online Journal of Educational Technology 2013; 12(3): 134-141.
- 43. Mei S, Yau YH, Chai J, et al. Problematic internet use, wellbeing, self-esteem and self-control: data from a highschool survey in China. Addict Behav 2016; 61: 74-79.

Yazar Katkıları: Tüm yazarlar ICMJE'in bir yazarda bulunmasını önerdiği tüm ölçütleri karşılamışlardır

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