

The Relationship of Social Media Use with Depression and Loneliness in Adolescents: A Descriptive Study

Adölesanlarda Sosyal Medya Kullanımının Depresyon ve Yalnızlık ile İlişkisi: Tanımlayıcı Çalışma

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ABSTRACT Objective: The purpose of this study is to determine the relationship of social media use with depression and loneliness in adolescents. **Material and Methods:** The sample of the descriptive study was determined as 599 students by power analysis and the students were selected by simple random method. To collect the data of the study Descriptive Characteristics Form, Social Media Addiction Scale for Adolescents, UCLA Loneliness Scale, and Reynolds Adolescent Depression Scale were used. In the analyses of the data percentage, mean and the linear regression analysis were used. **Results:** Social media addiction total score average of adolescents was 6.21±2.50 (moderate), depression total score average 67.60±15.59 (moderate), loneliness total score average 58.65±9.90 (moderate). In the study, it was determined that adolescents' social media addiction has statistical significance in explaining depression and loneliness ($p<0.05$). Social media addiction explains depression with 8% and loneliness with 3%. **Conclusion:** It was determined that social media addiction has been found to affect depression and loneliness in adolescents.

Keywords: Adolescent; depression; nursing; internet addiction disorder; loneliness

ÖZET Amaç: Bu araştırmanın amacı, adölesanlarda sosyal medya kullanımının depresyon ve yalnızlık ile ilişkisini belirlemektir. **Gereç ve Yöntemler:** Tanımlayıcı türde yapılan araştırmanın örneklemini yapılan güç analizi ile 599 öğrenci olarak belirlendi ve öğrenciler basit rastgele yöntemle seçilmiştir. Verilerin toplanmasında; Tanımlayıcı Özellikler Formu, Ergenlerde Sosyal Medya Bağımlılığı Ölçeği, UCLA Yalnızlık Ölçeği ve Reynolds Ergenlerde Depresyon Ölçeği kullanılmıştır. Verilerin analizinde yüzdelik dağılım, ortalama ve lineer regresyon analizi kullanılmıştır. **Bulgular:** Adölesanların sosyal medya bağımlılığı toplam puan ortalaması 6,21±2,50 (orta düzey), depresyon toplam puan ortalaması 67,60±15,59 (orta düzey), yalnızlık toplam puan ortalaması 58,65±9,90 (orta düzey) olarak saptanmıştır. Araştırmada adölesanların sosyal medya bağımlılığının depresyon ve yalnızlığı açıklamada istatistiksel öneme sahip olduğu belirlenmiştir ($p<0,05$). Sosyal medya bağımlılığı depresyonu %8, yalnızlığı ise %3 oranında açıklamaktadır. **Sonuç:** Sosyal medya bağımlılığının adölesanlarda depresyon ve yalnızlığı etkilediği belirlenmiştir.

Anahtar Kelimeler: Adölesan; depresyon; hemşirelik; internet kullanım bozukluğu; yalnızlık

Individuals can face with bad habits during adolescence period when psychological and physical changes are intense.¹ Some of these bad habits are smoking, alcohol or substance addiction. Additionally different types of addiction have emerged nowa-

days as a result of the advancement of technology. One of them is the social media addiction that affects adolescents more in the development period.^{1,2} In addition, another mental disorder frequently encountered in adolescence period is loneliness.¹⁻³

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Social media, which eases our lives in many ways, can cause addiction when used unconsciously and excessively. Social media can have positive effects such as easy access to information and negative effects such as reducing people's social relations.¹⁻³ In the study conducted by Erdogan based on the negative social effects of internet, stated that internet use caused the individual to be isolated from the society and some consequences such as loneliness and depression.³ In addition, in their study conducted using the time of social media use, Echeburua et al. emphasized that excessive use of new media (especially online social networks) could lead to addiction, loneliness and depression which is a potential mental problems in young people.¹ Studies have determined that excessive use of social media is associated with loneliness and depression.^{2,4,5} Kessler et al. reported that 25% of the possible depression that occur in people's whole lives develop in adolescence period.⁶

Adolescents do activities such as reading books, watching TV, playing sports, playing online games on computer or mobile smart phones and using social networks in order to cope with their loneliness. However, the amount of time spent on smart phones mentioned among these activities increases gradually and turns into an addiction level.⁷ Individuals spend a lot of time using social media with their smartphones to relieve their loneliness.^{7,8} In their study, Cakir et al. found that there was a significant correlation between the smartphone addiction with loneliness levels of adolescents.⁸

The increase in the use of technological tools in the world and accordingly the increase use of social media ensure the subject to remain current and increase its popularity. Identifying mental problems such as social media addiction, depression and loneliness in adolescents and explaining what can be done by the family and society to prevent this situation is important for psychiatric nursing. The results of this study are particularly thought to contribute to the goal of psychiatric nursing to protect the mental health of adolescents. The purpose of this study is to determine the relationship of social media use with depression and loneliness in adolescents.

MATERIAL AND METHODS

TYPE OF THE STUDY

This study was conducted as descriptive design.

PLACE OF THE STUDY

The study was conducted with high school students studying in Mardin city center.

POPULATION AND SAMPLE OF THE STUDY

The population of the study consists of 10,584 high school students studying in 24 secondary schools in the city center of Mardin. The population of the study was selected from five high schools (including 2,000 students) by drawing lot according to the numbers of the students. The sample of the study was composed of 599 students determined by the power analysis at significance level of 0.05, confidence interval of 0.95, effect size of 0.3 and universe representation ability of 0.95. The students were selected from the classroom lists by using simple random sampling method. Inclusion criteria of the study are being open to collaboration and communication; exclusion criteria of the study are having a physical or mental health problem that will prevent communication.

DATA COLLECTION TOOLS

Descriptive Characteristics Form

Descriptive Characteristics Form is composed of a total of 7 questions containing socio-demographic characteristics of adolescents (age, gender, parents' education level, parents' profession, income status perception).

Social Media Addiction Scale for Adolescents

The scale was developed by Van Eijnden et al., in 2016.⁹ Its Turkish validity and reliability was made by Tas in 2017 and Cronbach's alpha internal consistency coefficient was found to be 0.82.¹⁰ The scale is scored between 0-9 and the cut-off point is 5. According to the scale, those who responded "Yes" to 5 or more items from 9 items are considered as social media addicted. In this study, the Cronbach's alpha coefficient of the scale was determined as 0.89.

Reynolds Adolescent Depression Scale

The scale was developed by Reynolds in 1986.¹¹ Its Turkish validity and reliability was made by Oksay and Cronbach's alpha internal consistency coefficient was found to be 0.75. The scale consists of 30 items with a 4-point Likert scale. Seven of these items (1, 5, 10, 12, 23, 25, 29) are scored reversely. The critical items of the scale are the items 6, 14, 20, 26, 29 and 30. Minimum and maximum scores are 30 and 120 points, respectively. High scores show that the depressive symptoms are at high level.¹² In this study, Cronbach's alpha coefficient of the scale was determined as 0.81.

UCLA Loneliness Scale

The scale was developed by Russel et al. in 1978.¹³ Its Turkish validity and reliability was made by Demir in 1989 and Cronbach's alpha internal consistency coefficient was found to be 0.96.¹⁴ The scale is rated on 4-point Likert type scale and composed of a total of 20 items including reversely coded 10 items. The total score obtained from all items gives the "General Loneliness Score". Maximum and minimum scores of the scale are 80 points and 20 points, respectively. The high scores obtained from the scale indicate that the loneliness level is high. In this study, the Cronbach's alpha coefficient was determined as 0.97.

DATA COLLECTION

The data were collected between March and May 2019 by the researchers conducting the face-to-face interviews with the students in class environment in the selected secondary schools affiliated with Mardin Provincial Directorate of National Education. Students were informed about the research. Their questions were answered. Later, the students who voluntarily accepted to participate in the study filled in the forms. The data were collected by giving questionnaires to the students and asking them to respond independently these forms. It took about 10-15 minutes for each student to complete the questionnaire.

DATA EVALUATION

In the study, percentage distribution and arithmetic mean were used to evaluate the total mean score of

the scales and socio-demographic characteristics. Also, linear regression and correlation analysis were used to evaluate the relationship between three scales. The level of significance was set at $p < 0.05$.

ETHICAL CONSIDERATIONS

Approval from the Scientific Research and Publication Ethics Committee of Health Sciences in Inonu University (approv no: 2019/8-5; 11.04.2019) and legal permission from the related schools managements were obtained in order to conduct the study. Before starting the study, the students and their parents were informed about the purpose of the study and their verbal and written consents were obtained. And both parents and students signed their written consent. It was explained to the students that participation in the research was voluntary and that they could leave the research at any time. Our study was carried out in accordance with the Helsinki Declaration Principles.

RESULTS

It was determined in the study that 65.6% were female, mothers of 35.7% had primary school education, fathers' education level of 29.4% were high school, mothers of 90.3% were unemployed, fathers of 43.2% were self-employed, and 50.08% were perceived their income as high level. The average age of adolescents is 14.15 ± 2.13 years (Table 1).

It was found that the social media addiction scale total mean score was 6.21 ± 2.50 , Depression Scale total mean score was 67.60 ± 15.59 , and Loneliness Scale total mean score was 58.65 ± 9.90 . According to our data, it has been determined that adolescents are addicted to social media. It can be said that the level of depression and loneliness in adolescents is middle (Table 2).

In the study, social media addiction total score has a statistical significance in explaining depression and loneliness ($p < 0.05$) levels. Social media addiction explained depression at the rate of 8% and loneliness at the rate of 3%. In addition, the study found that there is a statistically strong positive correlation between social media and loneli-

TABLE 1: Distribution of the adolescents according to their descriptive characteristics (n=599).

Descriptive characteristics	n	%
*Age groups		
13-15	275	45.9
16-18	324	54.1
Gender		
Female	393	65.6
Male	206	34.4
Mother's education level		
Illiterate	144	24.0
Primary school	214	35.7
Secondary school	120	20.0
High school	94	15.7
Undergraduate and higher	27	4.5
Father's education level		
Illiterate	21	3.5
Primary school	143	23.9
Secondary school	156	26.0
High school	176	29.4
Undergraduate and higher	103	17.2
Mother's profession		
Unemployed	541	90.3
Civil servant	32	5.3
Worker	8	1.3
Self-employed	18	3.0
Father's profession		
Unemployed	61	10.2
Civil servant	161	26.9
Worker	118	19.7
Self-employed	259	43.2
Perceived income status		
High	300	50.0
Moderate	194	32.3
Low	105	17.6
Total	599	100.0

*Age (mean±standard deviation)=14.15±2.13.

ness and depression among adolescents ($p<0.05$) (Table 3, Table 4).

TABLE 3: Explanation of the effect of Social Media Addiction on Depression and Loneliness with regression analysis.

	Social media						
	R	R ²	ΔR ²	β	t value	p*	F
Depression	0.295	0.087	0.086	-0.295	-7.556	0.001	2.423
Loneliness	0.178	0.032	0.030	0.178	4.408	0.001	1.128

Test: linear regression analyze; * $p<0.05$.

TABLE 2: Total mean scores of Social Media Addiction, Depression and Loneliness Scales.

Scales	Minimum-maximum	mean±SD
Social media addiction	0-9	6.21±2.50
Depression	33-110	67.60±15.59
Loneliness	25-79	58.65±9.90

SD: Standard deviation.

DISCUSSION

The data obtained from this study, which was conducted to determine the effect of social media addiction on depression and loneliness in adolescents, were evaluated in accordance with the literature.

In this study, it has been determined that adolescents are addicted to using social media. Deniz and Gürültü, Ellison et al., Franchina et al. determined that the use of social media and networks is high among adolescents.¹⁵⁻¹⁷ In their study, Durke et al., Ding et al., Xin et al., found that internet addiction is high in adolescents.¹⁸⁻²⁰

With the widespread use of the internet, adolescents make friends, this may be due to the fact that he moved his behaviors of maintaining friendship relationships to the virtual environment. The literature supports the research findings.

Depression levels of the adolescents participating in the study were determined to be middle. In the study conducted by Anlayisli and Bulut-Serin with adolescents, depression level was found to be middle.²¹ Naicker et al. and Johnson et al., stated that the adolescence period is risky for the onset of depression and that depression is at moderate levels in adolescents.^{22,23} The biopsychosocial changes that the adolescent has to cope with, adapting to the changes that occur biologically in the body of the adolescent

TABLE 4: Explanation of the relationship of social media use with depression and loneliness with correlation analysis.

Social media		
Depression	r value	0.085
	*p value	0.001
Loneliness	r value	0.087
	*p value	0.001

Test: Pearson correlation analyze; r: a strong positive correlation, *p<0.05.

during adolescence can be considered as the cause of depression. The results of the study are compatible with the literature.

In the study, loneliness level of adolescents was determined to be 58.65±9.90. Considering that the highest score that can be obtained from the scale is 80, this value may indicate that loneliness is slightly higher. In the study of Çakır and Oguz, Galanaki, Duyan et al., conducted with adolescents, loneliness level was found to be high.^{8,24,25} The adolescent individual goes through an intense cognitive, social and emotional process. The negative experiences she will experience during this process may be the reason she feels lonely. The results of the study are compatible with the literature.

In the study, social media addiction of the adolescents was determined to have statistical significance in explaining depression. Social media addiction accounted for the depression at the rate of 8%. In the study, it was determined that social media addiction of the adolescents had statistical importance in explaining loneliness. Social media addiction explained loneliness at the rate of 3%. In the study, it was determined that social media use has a positive relationship between adolescents' depression and loneliness. In the study, it can be said that as the use of social media increases, depression and loneliness increase. In the study conducted by Kelly et al., by Tang et al. and by Demirci on adolescents, a significant correlation was found between social media addiction with depression.²⁶⁻²⁸ The negative impact of the increase in social media use on social support systems in adolescents can be considered as the cause of depression.⁸ In their study, Turkel and Dilmac, by Dogan and Karakas determined that there was a pos-

itive and linear correlation between social media use and loneliness level.^{29,30} Internet use may cause loneliness among individuals and decrease in face-to-face communication. Thus, this situation is thought to be a factor leading to depression.

The increased levels of depression and loneliness along with social media may be associated with the fact that situations like location notifications and photo sharing in social network web sites may lead people to have jealousy feelings. Likewise, the fact that the majority of users show their lives as more exaggerated in their social media posts and they highlight positive and fun sides of their lives causes their followers to make a comparison like "everybody's life is beautiful and everything is fine but mine is bad" and this is thought to cause them to feel a depressive emotional state and loneliness.²¹⁻²⁶

CONCLUSION

In this study conducted to determine the effect of social media addiction on depression and loneliness in adolescents, it can be said that adolescents are addicted to social media, their depression levels are at a middle level and their loneliness is at a high level. Nurses, together with other healthcare team members, have an important responsibility for the protection and maintenance of the health of adolescents and performing the necessary procedures. Psychiatric nurses should have the knowledge and equipment to distance adolescents from social media addiction and the negative consequences such as depression and loneliness, with different approaches. Psychiatric nurses, who act in cooperation with school nurses, provide adolescents with conscious and correct media use, positive and negative aspects of social media use, training on methods to cope with them, directing them to sports activities, creating different hobby areas, and providing adolescents with social media. It contributes to the fight against addiction. In addition for psychiatric nurses; creating a safe environment, teaching skills to cope with negative emotions and thoughts, and allowing them to express their feelings can be effective in reducing depression and loneliness in adolescents.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

All authors contributed equally while this study preparing.

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