Examining the Relationships Between Adolescents' Emotion Regulation Strategies and Social Media Addiction

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ABSTRACT

Objective: This study aims to examine the relationship between adolescents' emotional regulation strategies and social media addiction.

Methods: 1151 adolescents aged between 14 and 18 participated in the study (Mage = 14.44, SD =4.97). 63.8% of the participants in the study were girls and 36.2% were male. Researchers used the Emotion Regulation Scale and the Social Media Addiction Scale. In the study, we performed correlation analysis to determine the relationships between the variables. We used the structural equation model to test the predictive relationship between emotion regulation on social media addiction. We used SPSS 22, LISREL 9.1 program for statistical analysis.

Results: The results show that there are low-level, negative correlations between social media addiction and reappraisal of emotions. Similarly, there are low-level, positively significant relationships between suppression of emotions and social media addiction. Another result of the study reveals that reappraisal and suppression of emotions have a predictive effect on social media addiction.

Conclusion: The results show that reappraisal emotions reduce social media addiction, while suppression increases social media addiction.

Keywords: Emotion regulation, social media addiction, adolescents

1. INTRODUCTION

In the last 15 years, communication and socialization among adolescents have changed dramatically. Especially social networking sites such as Twitter, Instagram, and Facebook are among the social media tools that adolescents use to communicate with their friends. Adolescents can use technological tools to explore the world, express themselves and maintain friendships. Tzavela et al. (1) revealed that there are relationships between the use of new technology and adolescent needs. Despite the convenience provided by the use of new technology among adolescents, excessive use can cause psycho-social problems such as arguments with other people, decreased academic success and social withdrawal (2).

Social media addiction is a mental problem that negatively affects the cognitive, behavioral and emotional state of individuals, and causes problems in communication with others (3; 4). Recent studies show that social media addiction is an important problem in adolescents (5; 6). For example, Güney and Taştepe (7) determined that approximately 64% of adolescents experience moderate and high levels of social media addiction.

Emotion regulation is the expression, monitoring, and evaluation of emotions (8). Gross, Richards, and John (9) describe emotion regulation as a subtype of affect regulation, referring to attempts to consciously or unconsciously influence emotional experience. Gratz and Roemer (10) evaluate emotion regulation as an effort to regulate emotions in the face of events.

Cognitive reappraisal and suppression are two commonly used strategies to regulate emotions. Reappraisal involves changes in negative emotional contexts in the way a situation is interpreted in a way that reduces its emotional impact. Suppression prevents the external symptoms of emotions and behaviors expressing emotions (8).

Relationships Between Emotion Regulation and Social Media Addiction

Previous research has shown that difficulties in emotion regulation are associated with problematic internet use (11). Difficulties in emotion regulation can continue problematic Facebook use (12). Yu et al. (13) determined that adolescents'

unhealthy emotion regulation strategies lead to problematic internet use. Caselli and Spada (14) revealed links between emotion regulation and the use of social networking sites. Therefore, studies in the literature reveal that emotion regulation strategies are related to social media addiction.

Theoretical Theory

Emotion regulation refers to efforts to reduce the time it takes to experience negative emotions and to re-experience them in a positive way (15). Through emotion regulation, individuals can control, direct and understand their emotions (16; 17).

According to the Emotion Regulation Process Model (18; 9), the first step that constitutes the emotion regulation step begins with a trigger situation that will activate the emotions of the person. In the second stage, when individuals encounter a situation or event that they cannot change, they try to regulate their emotions by changing the direction of their attention instead of changing the situation. In the next stage, the individual organizes the emotions by reappraisal the event that led to the formation. In the last stage, individuals prevent the emergence of negative emotions by adding different meanings to the event.

According to the Emotion Regulation Process Model, individuals use cognitive reappraisal and suppression strategies for cognitive and response change of their emotions (8). Cognitive reappraisal is a way of changing the perception of the event that caused the emotion (19). Reappraisal emerges early as a leading strategy before emotional response tendencies. Individuals who cognitively reappraisal their emotions feel more positive emotions (20). Individuals who use a suppression strategy may feel inadequate, their negative emotions and depressive symptoms may increase (21). In this context, suppression is considered as maladaptive regulation strategy.

In summary, in terms of the emotion regulation process model approach, social media addiction may be associated with a lower level of social media addiction in individuals who reappraisal their emotions, and social media addiction at a higher level in individuals who suppress their emotions.

Purpose of the study

Emotion regulation is the process of adapting to the environment (8). The inability to deal with or regulate negative emotions can lead to impulsivity and the development of dysfunctional behaviors (22). Difficulties with emotion regulation can be a risk factor for addiction (23; 24). Previous studies have revealed significant relationships between emotion regulation and problematic internet use (25) and pathological use of social networking sites (26). However, it is noteworthy that studies investigating the relationship between emotion regulation and social media addiction are limited. Accordingly, current research suggests that a certain emotion regulation strategy (cognitive reappraisal and suppression) can predict social media addiction.

2. METHOD

2.1. Study Group

We created the following criteria to identify participants. (I) Residing in Erzurum, Turkey. (II) be between the ages of 14-19. (III) Reading and understanding Turkish. (IV) using at least one of the social networking sites in the last 6 months (Instagram, Twitter, Facebook, etc.). (V) Obtaining parent informed consent form approval to administer the scale to students.

The population of the research consists of 12.000 students studying in 46 secondary schools in Erzurum, Turkey in December of the 2020 academic year. We applied the random sampling method to determine which schools would participate in the study. We identified 11 schools using the random method. We used the power analysis method to calculate the sample size of the study. Results revealed that at least 955 sample sizes are required for models with an alpha level of .05 and power level of .80. This number obtained is sufficient for the sample size in the current study. Considering the possible data losses, we applied the scales to 1175 students. We did not use the data of 15 students who did not meet the normality criteria and 9 students who filled in the scales incompletely. As a result, we conducted the analysis with the dataset of 1151 students.

The age of the participants ranges from 14 to 18 (Mage = 14.44, SD =4.97). 63.8% of the students in the final sample were girls (n= 734), 36.2% were boys (n= 417). 08% of the students were in the preparatory class (n = 9), 13% in the 9th grade (n = 150), 26%, 6 in the 10th grade (n = 306), 27.5% in the 11th grade. in the 12th grade (n = 316) and 32.1% (n = 370) in the 12th grade.

2.2. Measures

2.2.1. Social Media Addiction Scale for Adolescents

We used the scale developed by Özgenel, Canpolat, and Ekşi (27) to determine the social media addiction levels of adolescents. The scale consists of a five-point Likert type, nine questions, and a single factor structure. The Cronbach's Alpha value of the scale is .90. In this research, Cronbach's Alpha value was found to be .88. The highest score that can be obtained from the scale is 45, and the lowest score is 9. The scale is evaluated by taking a total score.

2.2.2. Emotion Regulation Scale

We used the scale developed by Özgüle and Sümer (28) to determine the emotion regulation strategies of adolescents. The scale consists of two sub-dimensions as reappraisal, and suppression and ten questions. Cronbach's Alpha value of the scale was found as .78 and .64, respectively. In this study, Cronbach's Alpa value was found as .80 and .70, respectively.

The highest score that can be obtained from the scale is 50, and the lowest score is 10. The scale is evaluated according to the total scores obtained from the sub-dimensions.

2.3. Data Collection Process

Data was collected online as no face-to-face training in schools due to COVID-19. Therefore, online data collection scales prepared using Google Forms were sent to the participants. To apply the online scales, the researchers contacted the teachers working in the guidance services in 11 schools determined by the random method. The researchers explained the purpose of the study to the psychological counselors in the guidance service. Teachers were then asked to send the online scales to classroom messaging groups.

We also asked individuals who agreed to participate in the study to fill in informed consent forms. We ensured that only volunteers were included in the study. We also informed the individuals that they could stop completing the scales at any time and that the results would be kept confidential. The online data collection process was completed within 20 days. The data collected online were analyzed in computer. Since it is not possible to pass the next question without checking the answer in the online application, there is no missing data in the study.

2.4. Data Analysis

Before analyzing the data, we examined the outlier and normality values. In this dataset, we found that the data of 24 individuals violated the parametric conditions and we excluded these data from the dataset. In the final step, we examined Mardia's skewness and kurtosis values using Lisrel 9.1 software to test the multivariate normality of the dataset. As a result of this process, Mardia's assumptions of multivariate normality were confirmed (p>.05). After all these processes, we decided to analyzed process based on 1151 data. We performed a Pearson correlation analysis to determine whether there is a relationship between emotion regulation and social media addiction. We used the SPSS-22 program for descriptive and correlation analysis between variables. Then, next, we performed a structural equation model (SEM) analysis to test the predictive level of emotion regulation on social media addiction. Lisrel 9.1 program was used for this process.

2.5. Ethical Approval

The approval of the ethics committee of the study was obtained from the Ethics Committee of Atatürk University Educational Sciences Unit on 12.11.2020.

3. RESULTS

The Relationships Between Emotion Regulation and Social Media Addiction and Descriptive Results

Pearson correlation analysis was used to reveal the relationship between the reappraisal and suppression sub-dimensions of the students' emotion regulation scale and their social media addiction scores. In addition, descriptive statistical operations related to variables were made. Both descriptive and correlation results for variables are presented in Table 1.

Table 1. *Descriptive and Correlation Results Regarding the Variables*

Degişkenler	M	SD	Reappraisal	Supression	Social Media Addiction
Reappraisal	22.80	6.59	1		
Supression	15.25	4.95	-.31,4*	1	
Social Media Addiction	17.75	5.85	-.08*	.21*	

*p<.01

When Table 1 is examined, among the reappraisal (r = – .08, p <.01) sub-dimension of the emotion regulation scale of social media addiction, there is a low level, negative direction; It was found that there were low level and positive significant relationships between suppression subscale (r = .21, p <.01).

Measurement Model

The measurement model was established with 3 latent variables (reappraisal, suppression and social media addiction) and 19 observed variables. The established measuring model was found to fit well [χ2/sd=4.20, GFI=.93, CFI=.92, NFI= .93, IFI= .95, SRMR= .051 ve RMSEA=.055]. Besides, it was found that all observed variables place a significant load on the relevant latent structures (p<.01 between .42 and .78).

Structural Model

Three models were established during the research process. In this context, the relationship between reappraisal and suppression of emotions and social media addiction was examined (Model I). In Model 1, the researchers determined that the predictive effect of re-evaluation (β = – .22. t = – 5.26, p < .01) and suppression of emotions (β = .32, t = 6.82, p < .01) on social media addiction was significant. It can be said that the goodness of fit indices of the structural model are at acceptable levels (Table 2). Reappraisal and suppression of emotions explain 10% of the variance of social media addiction. Model fit indices are shown in Table 2.

Table 2. *Model Fit Indexes*

Model	x2/df	GFI	CFI	NFI	IFI	SRMR	RMSEA
Model I	4.64	.94	.94	.92	.94	.052	.056

In Figure 1, the road diagram of the structural equation model is given.
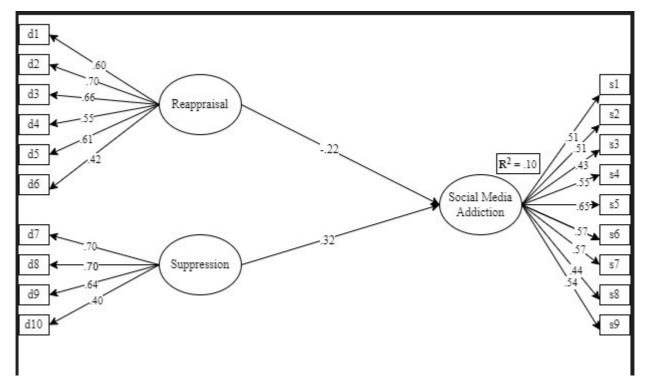
Figure 1. *Relationships Between Reappraisal and Suppression of Emotions and Social Media Addiction*
Standardized Values for the Level of Reappraisal and Repression of Emotions Predicting Social Media Addiction

4. DISCUSSION

In this study, we examined the predictive level of adolescents' emotion regulation on social media addiction. In this direction, we tested the relationship between emotion regulation and social media addiction with a structural model. The results show that there are low-level, negative correlations between social media addiction and reappraisal of emotions. Similarly, there are low-level, positively significant relationships between suppression of emotions and social media addiction. Another result of the study reveals that reappraisal and suppression of emotions have a predictive effect on social media addiction.

In the study, we found that the reappraisal dimension of the emotion regulation scale predicted social media addiction at a negative and significant level. These findings coincide with the findings obtained from studies examining the relationship between emotion regulation and problematic internet, Facebook and social media use, which are evaluated within the scope of social media use. For example, the negative prediction of positive emotion on internet addiction is similar to the result of this study (29). Reporting that reappraisal emotions reduce internet addiction in similar studies support the result of this study (30; 31). Satıcı and Deniz (32) reported that the emotion regulation reappraisal strategy negatively predicted smartphone addiction, which is consistent with this finding.

Social media addiction of individuals who reappraisal their emotions may be at a lower level. Individuals who experience and express their emotions more healthily by reappraisal the events they experience in daily life may use social media less. Emotional changes and emotional intensity can be experienced frequently during adolescence. At such times, individuals who reassess their emotions can display behaviors that can protect themselves against negative behaviors. In other words, adolescents who reevaluate their emotions may spend less time on social media.

The study found that the suppression dimension of the emotions regulation scale positively and significantly predicted social media addiction. The positive prediction of negative emotion on internet addiction is similar to the result of this study (29). In a similar study, individuals who suppress their emotions experience more internet addiction (31) and smartphone addiction (32) parallel to the results of the study. The positive prediction of dysfunctional emotion regulation on social media addiction is in line with the results of this study (33). Individuals who have problems in emotion regulation can use problematic Facebook (34).

Social media addiction of individuals who suppress their emotions may be at a higher level. Individuals who use Facebook experience emotional avoidance, lack of awareness and acceptance of their own emotional reactions, or inadequate impulse control, which can negatively affect their mood (35). Rozgonjuk and Elhai (36) emphasize that

suppressing emotions harms mental health and is not very effective against addictions. Suppressing emotions may not reduce negative emotional experiences. Therefore, suppression can be a factor that increases social media addiction.

5. CONCLUSIONS

The results of this study reveal that adolescents' use of social media increases when they suppress their emotions, and social media use decreases when they reappraisal their emotions.

Limitations and Recommendations

This study has some limitations that must be accepted. Firstly, the findings obtained from this study were collected with self-reported measurement tools based on the perceptions of the participants. Therefore, new studies using different data collection methods may be recommended. The second limitation is the cross-sectional collection of data. Therefore, experimental work can be done. In this context, the preparation of psycho-educational programs in which adolescents can express their feelings can reduce their social media addiction.

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