

Relationship between Attachment Styles, Social Media Addiction, and Contingencies of Self-Worth

Bağlanma Stilleri, Sosyal Medya Bağımlılığı ve Koşullu Öz-Değer Arasındaki İlişki

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Abstract

Objective: The aim of this study is to examine the relationship between three-dimensional attachment styles and contingencies between self-worth with the level of social media addiction in university students.

Method: The sample of the research consists of 817 (Female: 507, Male: 310) university students studying at Ondokuz Mayıs University. Three Dimensional Attachment Styles Scale, Contingencies of Self-worth Scale, and Social Media Addiction Scale were used as data collection tools.

Results: There is a relationship between the contingencies of self-worth domains and the level of social media addiction in university students, and that physical appearance and getting approval self-worth domains have a mediating effect in the relationship between the anxious/ambivalent attachment style and the level of social media addiction. The independent variable anxious/ambivalent attachment in domains of approval and physical appearance affects the dependent variable social media addiction level.

Conclusion: When the values obtained are examined, each unit of change in independent variables causes 2.1 times change in the dependent variable social media addiction level.

Keywords: Social media addiction, attachment styles, contingencies of self-worth

Öz

Amaç: Bu çalışmanın amacı, üniversite öğrencilerinde üç boyutlu bağlanma stilleri, koşullu öz-değer ve sosyal medya bağımlılık düzeyi arasındaki ilişkiyi incelemektir.

Yöntem: Araştırmanın örneklemini Ondokuz Mayıs Üniversitesinde öğrenim gören 817 (Kadın: 507, Erkek: 310) üniversite öğrencisi oluşturmaktadır. Veri toplama araçları olarak Üç Boyutlu Bağlanma Tarzları Ölçeği, Kendine Değer Ölçeği ve Sosyal Medya Bağımlılığı Ölçeği kullanılmıştır.

Bulgular: Üniversite öğrencilerinde koşullu öz-değer ile sosyal medya bağımlılık düzeyi arasında bir ilişki olduğu, kaygılı/kararsız bağlanma stili arasındaki ilişkide fiziksel görünüm ve onay alma öz-değer alanlarının aracı etkisinin olduğu ortaya çıkmıştır. Sonuç olarak, bağımsız değişkenler kaygılı/kararsız bağlanma ile onay alma ve fiziksel görünüm bağımlı değişken olan sosyal medya bağımlılık düzeyini etkilemektedir.

Sonuç: Bağımsız değişkenlerdeki her bir birim değişimin bağımlı değişken sosyal medya bağımlılık düzeyinde 2,1 kat değişime neden olduğu görülmektedir.

Anahtar kelimeler: Sosyal medya bağımlılığı, bağlanma stilleri, koşullu öz değer

Introduction

Trust has an important role in the development of personality. Individuals' sense of self-trust and trust in others affect their feelings, thoughts, behaviours, and communication fundamentally. According to the personality development theory put forward by (1), the stage "trust versus mistrust" which covers the 0-1,5 age range affects individuals' view of the world and is important in terms of whether trust develops. In this period, especially the interaction with the caregiver determines the quality of the feeling of trust. All of the interaction and communication between the caregiver and the infant is defined as an attachment and plays a major role in the development of personality (2). The process of attachment which starts with birth is affected by the approach of the mother or the caregiver to the infant, by the mother or the caregiver's consistency in emotions, thoughts and behaviors, and the level of intimacy. The mother's caring, compassionate, and sensitive approach to the baby, especially until the age of 2, affects the establishment of a feeling of trust. A feeling of trust that develops in this period shapes the individual's communication with the self and others and maintains its trace in all aspects of the individual's life (3).

John Bowlby, who placed the concept of attachment at the center of personality, formed the basis of his theory by examining the interactions of baby monkeys with their mothers (4). Later, in their study "Strange Situation Test" (5) first separated babies from their mothers, left them alone, and later observed their reactions in the presence of a stranger. As a result of the study, they classified babies according to their reactions and they showed different attachment styles. Bartholomew and Horowitz extended Bowlby and Ainsworth's study and developed the model they called the "Four-category Model" (6). According to this model, they specified individuals' views of themselves and others as positive and negative and formed four different attachment styles. The style in which the individual had a positive view about the self and others was called secure; a positive view of the self and negative view of others was called dismissive, negative evaluation towards self and positive evaluation towards others was called preoccupied and negative view about the self and others was called fearful attachment style. According to this model which discussed adult behaviors in these four dimensions, differentiation in the level of self-esteem and being loved affects the individual's self-model (7). All these characteristics shape individuals' social relationships, work life, and communication with family and friends and emerge in their emotions, thoughts, and behaviors.

The concept of trust, which has a significant place in interpersonal interaction, has gone from face-to-face to a virtual aspect that is revealed through screens with the change in the perspective of others and digitalization and development of communication. The most basic source of this is seen as social media platforms with the development in technology and especially the internet (8). Digital environments that allow individuals to create an open or private profile and share their pages, make friends, follow each other, send messages, and make a video or audio conversation are defined as social media platforms (8). Social media platforms, which can be classified as social networks, blogs, wikis, Picture/video sharing networks, and instant communication networks platforms (9) can be used by individuals to make use of leisure time and communicate with others to meet emotional and psychological needs. Social media platforms that appeal to different purposes such as messaging friends, uploading or following photos or videos, reaching old friends, making new friends, joining a group, or using for professional work life (10) have become one of the most important areas in which individuals spend their time.

A large number of social media platforms such as Instagram, YouTube, Twitter, Facebook, and WhatsApp are used for a long time by individuals for different purposes. According to the 'We Are Social' report, there are 4.3 billion active social media users in the world (11). While Facebook ranks first with 2.7 billion users, it is followed by YouTube with 2.2 billion and WhatsApp with 2 billion users. While there are 46 million Instagram users in Turkey, 50 million people use YouTube. All these data show that the use of social media platforms is gradually becoming widespread in the world and Turkey and therefore, addictive behaviors occur as a result of excessive use (12). Social media addiction is defined as a psychological problem that affects individuals negatively in terms of emotional, social, and cognitive aspects and leads to the deterioration of their work life and social relationships (13). The fact that social media's aspects such as eliminating the

feeling of loneliness, allowing users to make use of leisure time, learn new information and follow others cause an increase in the frequency and time of using social media platforms, resulting in addiction by spending longer time in social media (14). Especially the social media platforms used by young and young adult individuals can lead to addictive behaviors in university students. In addition, the time spent on social media platforms causes a loss of interest in other areas and deterioration in academic life or business life, and causes a decrease in an individual's functionality (15).

The widespread use of social media platforms affects individuals' self-states and causes a change in their views of the self. Always displaying the best, the happiest, the most beautiful and the most ideal on social media platforms affects individuals' self-respect negatively and decreases self-esteem. Low or high self-esteem shows the individual's level of self-worth (16). However, argued that self-esteem is a concept that changes according to conditions and that needs to be addressed in different dimensions rather than its level (17). Contingencies of self-worth state that the self-worth of an individual is affected by different contingencies (18). Self-worth is evaluated in seven different sub-dimensions as academic competence, family support, competition, love of God, approval, virtue, and physical appearance. While family support, virtue, and love of God represent intrinsic conditions, approval, academic competence, competition and family support represent extrinsic conditions. According to this model, an individual who has structured his/her self-worth in academic competence shows more effort academically and can be more directed to studying. In addition, the individual feels more valuable and happy when he/she is academically successful. An individual who has structured his/her self-worth in physical appearance attaches importance to doing sports and being fit and at the same time can pay more attention to personal care than others (19).

It is thought that attachment style, which develops in infancy and determines the feelings, thoughts, and behaviors of individuals for a lifetime, and the domains individuals structure their self-worth, which starts to be shaped with adolescence, affect the level and frequency of use of social media platforms, where they spend most of their time. There are studies in the literature that have examined the relationship between attachment styles and social media addiction levels (20, 21, and 22). There are also studies that have shown the effects of contingencies of self-worth on attachment styles (23). However, no studies were found in the literature in which the effects of the domains self-worth are structured and attachment styles on social media addiction level were examined. As a result, it is thought that the present study will be a step in filling this gap in the literature and it will be useful to find a solution by better understanding the causes of social media addiction behavior.

Within the scope of the study, the relationships between attachment styles, contingencies of self-worth, and social media addiction levels in university students were examined. The study also discussed the predictive power and mediating role of attachment styles and contingencies of self-worth on social media addiction levels. In conclusion, this study aims to determine the mediating role and the effect of contingencies of self-worth in the relationship between attachment styles and social media addiction among university students.

Method

The correlational survey method, one of the quantitative research designs, was used in this study which examined the relationship between attachment styles and contingencies of self-worth and social media addiction. The correlational survey model is a method that aims to determine the presence and direction of the correlations and changes between two or more variables (24).

Sample

The research sample was determined by the G-power method and shown in Table 1. The study group consists of 850 ($M = 19.12$, $Sd. = 1.17$) university students studying in different faculties at Ondokuz Mayıs University in Samsun during the 2018-2019 academic year. This group was determined by using the convenient sampling method, one of the non-random sampling methods. A convenience sample is a type of non-probability sampling method where the sample is taken from a group of people easy to contact or reach

(24). A scale was applied to the departments selected from each faculty to represent the faculty. Vocational school students were excluded from the application because they had an insufficient sample size.

Table 1. The results of the power analysis indicating 817 participants

Effect	Value	F	Hypothesis df	Error df	p	Noncent. Parameter	Observed Power
Wilks' Lambda	.104	2375.424	3.000	825.000	.000	7126.272	1.000
Pillai's Trace	.896	2375.424	3.000	825.000	.000	7126.272	1.000
Hotelling's Trace	8.638	2375.424	3.000	825.000	.000	7126.272	1.000
Roy's Largest Root	8.638	2375.424	3.000	825.000	.000	7126.272	1.000

The study population was determined as 50 participants per group with G*Power program, $\alpha=0.05$, power $(1-\beta)=0.80$ at a confidence level of 95%. In addition, power analysis data are given in table 1.

Table 2. Descriptive statistics of the university students by the variables of gender and faculty

		n (=817)	%
Gender	Female	507	62.1
	Male	310	37.9
Faculty	Education	203	24.8
	Science and letters	119	14.6
	Engineering	100	12.2
	Agriculture	142	17.4
	Veterinary	53	6.5
	Economics and administrative sciences	115	14.1
	Medicine	85	10.4

When Table 2 is examined, 507 (62.1%) of the students were female, while 310 (37.9%) were male. The faculty with the highest number of participants was the Faculty of Education with 203 students; the faculty with the lowest number of participants was the Faculty of Veterinary with 53 students.

Procedure

Before starting the study, required permission was taken from OMU Social and Human Ethics Committee (decision number: 2019/44 and 22.02.2019). Consent was obtained from the participants during the application. The scale application was made face-to-face, and a brief briefing was first given to the students by the researcher, and then the scale-filling process, which lasted 10 minutes, started. A total of 850 students were included in the study. After the data were obtained, 33 forms filled in incompletely were removed from the data set. Descriptive statistics of the remaining 817 forms are given in Table 1.

Measures

Personal Information Form

The Personal Information Form includes questions on the demographic information of students, the faculty students are studying in, their years of study, and the time they spend daily on social media.

Three-Dimensional Attachment Style Scale

The 18-item 5 point Likert-type scale was developed by (25) and it includes three dimensions. 5 items measure secure attachment style, 6 items measure anxious-ambivalent attachment style, and 7 items measure avoidant attachment style. There are no reversely coded items in the scale. The internal consistency coefficient of the scale was measured with the Cronbach Alpha method and it was found as .80 for the avoidant attachment style, .69 for the secure attachment style, and .71 for the anxious-ambivalent

attachment style. According to the results of the confirmatory factor analysis for the construct validity of the scale, RMSEA was .05, and χ^2/df ratio was found as 2.48, while GFI was found as .93 and AGFI was found as .90. In the Cronbach Alpha internal consistency test, conducted with the data obtained from this study, the coefficients were measured as .79 for avoidant attachment style, as .73 for secure attachment style and as .63 for anxious-ambivalent attachment style.

Social Media Addiction Scale

The 5 point Likert-type scale which consists of 3 sub-dimensions and 26 items was developed by (26). While the minimum possible score on the scale is 26, the maximum possible score is 130. There are 12 items in the functional deterioration sub-dimension, 10 items in the control difficulty and deprivation sub-dimension, and 4 items in the social isolation sub-dimension. As a result of Cronbach Alpha analysis, internal consistency values of the scale were found as .95 for a total score, .91 for the functional deterioration sub-dimension, .81 for the social isolation sub-dimension, and .92 for control difficulty and deprivation sub-dimension. A validity study of the scale was determined with exploratory factor analysis and factor loads were found to be between .493 and .792. In the present study, since only the total score of the scale was used, the internal consistency value was found as .91.

Contingencies of Self-Worth Scale

The 7-factor, a 35-item scale was developed by (27) and adapted into Turkish culture by (28). There are 6 reversely coded items in this study and Cronbach Alpha reliability values of the sub-dimensions were found to range between .82 and .91, and as a result of the confirmatory factor analysis, validity values were calculated as GFI .96, AGFI .94, RMSEA .04, RFI .96, NFI .97, CFI .98 and IFI .99. When the reliability results were calculated from the data obtained in this study, Cronbach Alpha internal consistency coefficients were found to range between .66 and .85 for sub-dimensions.

Statistical Analysis

The data obtained for the study was entered in SPSS 21.0 Data Analysis package programs for social sciences, and 33 incompletely or incorrectly filled-in forms were deleted from the data set. Later, normality analysis was made and the data were found to show a normal distribution. After the normality assumption was met, Pearson correlation analysis was conducted to determine the relationship between attachment styles, social media addiction, and sub-dimensions of contingencies of self-worth.

A mediating role analysis based on bootstrap analysis was conducted to get approval from self-worth domains and to determine the mediator role of physical appearance in the effect of anxious/ambivalent attachment style on the level of social media addiction. Since it is known that anxious/ambivalent attachment style leads to addictive behavior in the literature, it is aimed to address the effect of social media on the level of addiction. In addition, the external dimensions of the conditional self-worth model, which are approval and physical appearance, were chosen as mediator variables, considering that they would increase the level of social media addiction. Other sub-dimensions were excluded from the model since they do not directly affect social media addiction. Later, multiple parallel mediation analysis methods were used to calculate the predictive effects and mediating role between the variables. The approach developed by (29) was used to determine the mediating role. According to modern the approach, while the method developed by (30) is weak when calculating the mediating role, it is determined that analyses based on the bootstrap technique are more valid and more reliable.

According to the Bootstrap confidence interval technique, all the data in the data set are analyzed again and again, different data sets are reached and thus, the mediating role is calculated. While the SPSS program was used to calculate t-test and correlation values for these analyses, R based statistics program Jamovi was used to analyze multiple mediating roles.

Results

The results of the Pearson Product Moments Correlation Analysis examining the correlations between attachment styles, contingencies of self-worth, and social media addiction in university students are shown in Table 3.

Table 3. Correlation table regarding the relationship between attachment styles, social media addiction level, and contingencies of self-worth domains in university students

Variables	Social media addiction	Secure attachment	Anxious/ambivalent attachment	Avoidant attachment
Social media addiction	-	-.111*	.280**	.147**
Physical appearance	.305**	-.134**	.168**	.059
Love of God	.069*	.144**	.096*	-.110*
Competition	.169**	.117**	.201**	.114**
Virtue	.016	.134**	.078*	-.123**
Approval	.251**	-.241**	.094*	-.092*
Family support	.076*	.245**	.061	-.154**
Academic competence	.112**	.104*	.112**	-.101*

* $p \leq .05$ ** $p \leq .01$

According to the Table 3, social media addiction has a positive and moderate correlation with physical appearance, while it has a positive and low correlation with competition, approval, and academic competence domains. In addition, while there is a positive and low correlation between social media addiction level and anxious/ambivalent attachment style and avoidant attachment style, there is a negative and low correlation between social media addiction level and secure attachment style.

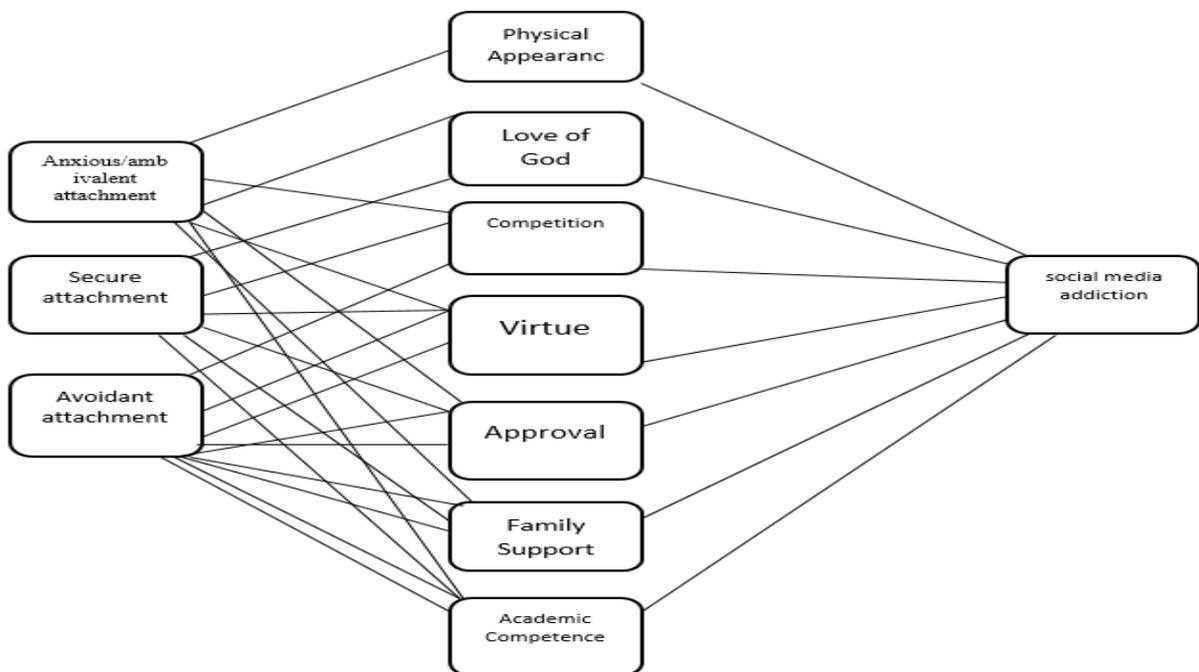


Figure 1. Targeted model diagram

Jamovi, which is an R-based statistical program, was used to find out the mediating role of contingencies of self-worth in the relationship between attachment styles and social media addiction levels in university

students, and all paths were included in the analysis and calculated. For this purpose, the bootstrap confidence interval analysis technique was used in the regression analysis conducted to determine the mediating roles. Direct, indirect, and total effect powers between these variables were calculated for mediation path analysis. The targeted model is shown in Figure 1.

In this step of the analysis, the correlations between the subscales of contingencies of self-worth (physical appearance, love of God, competition, virtue, approval, family support, academic competence), which is expected to mediate between anxious/ambivalent attachment style and dependent variable social media addiction, were discussed. At this step, the indirect effects of contingencies of self-worth, which is expected to mediate the relationship, were found as .049 ($p = .047$; within the range of $BootLLCI = -7.13$ and $BootULCI = .099$) for the love of God, as .053 ($p = .061$; within the range of $BootLLCI = -.002$ and $BootULCI = .108$) for competition, as $-.052$ ($p = .028$; within the range of $BootLLCI = -.098$ and $BootULCI = .005$) for virtue, as .002 ($p = .899$; within the range of $BootLLCI = -.041$ and $BootULCI = .047$) for family support and as $-.009$ ($p = .699$; within the range of $BootLLCI = -.056$ and $BootULCI = .037$) for academic competence. However, the indirect effect is not statistically different from zero at 95% bootstrap confidence interval. For this reason, in this data set, the model leading to the independent variable anxious/ambivalent attachment and dependent variable social media addiction and to which the subscales of contingencies of self-worth (love of God, competition, virtue, family support, academic competence) are expected to mediate were not found to be statistically significant.

After this stage of the analysis, the variables, the mediating effects of which were found to be significant were examined and regression analysis results regarding these variables with the Bootstrap technique are shown in Table 4. The results showing the indirect effects of the model obtained are summarized in Table 5. The diagram of the path model obtained as a result is shown in Figure 2.

Table 4. Analysis of the mediating role of contingencies of self-worth in the relationship between attachment styles and social media addiction level

	Result variables					
	Approval		Physical appearance		Social media addiction	
Prediction variables	β	S.H.	β	S.H.	B	S.H.
Anxious/ambivalent attachment	.105***	.037	.151***	.046	.197***	.144
	$R^2 = .108$	$p < .001$	$R^2 = .186$	$p < .001$	$R^2 = .749$	$p < .001$
Approval	-	-	-	-	.171***	.123
					$R^2 = .627$	$p < .001$
Physical appearance	-	-	-	-	.191***	.100
					$R^2 = .589$	$p < .001$

* $p < .05$, ** $p < .01$, *** $p < .001$; S.H.: Standard error

In Table 4, it can be seen that independent variable anxious/ambivalent attachment had a significant and direct effect on contingencies of self-worth domains of approval (95% confidence interval within the range of lower limit: .035 and upper limit: .182, $p < .05$) and physical appearance (95% confidence interval within the range of lower limit: .096 and upper limit: .277, $p < .01$), and also a significant and direct effect on the dependent variable social media addiction (95% confidence interval within the range of lower limit: .466 and upper limit: 1.03, $p < .01$). It was also found that contingencies of self-worth domain approval had a significant and direct effect on the dependent variable social media addiction level (95% confidence interval within the range of lower limit: .386 and upper limit: .868, $p < .01$), while physical appearance also had significant and direct effect on social media addiction level (95% confidence interval within the range of lower limit: .392 and upper limit: .786, $p < .01$).

When Table 5 is examined, it can be seen that structuring the independent variable anxious/ambivalent attachment in domains of approval and physical appearance affects the dependent variable social media

addiction level. When the values obtained are examined, it can be seen that each unit of change in independent variables causes 2.1 times change in the dependent variable social media addiction level.

Table 5. Analysis of the direct effects of anxious/ambivalent attachment and approval and physical appearance on social media addiction

Effect	Coefficient		95% confidence int.	
	Prediction	Standard error	Lower Limit	Upper limit
Total indirect effect	2.143	.140	.697	1.24
A/a attachment → approval → social media	.068	.027	.015	.121
A/a attachment → physical appearance → social media	.110	.033	.045	.174
A/a attachment → social media	.749	.144	.466	1.32
Approval → social media	.627	.123	.386	.868
Physical appearance → social media	.589	.100	.392	.786

n=817; A/a attachment: anxious/ambivalent attachment; social media: social media addiction level.

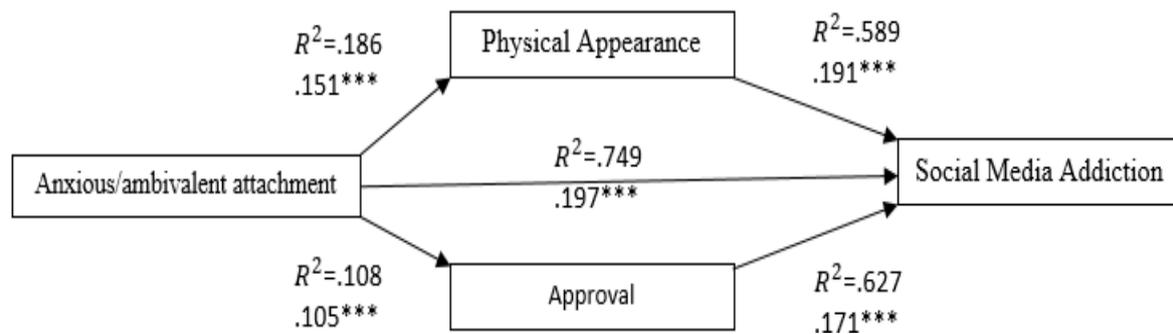


Figure 2. Model diagram obtained as a result of bootstrap technique

*** $p < .01$

Discussion

This study aims to add a new dimension to the field in line with the needs within the scope of the literature. Intensive problem and crisis-oriented research are carried out in psychology, guidance, and psychological counselling, and in all humanities. Social media addiction, which is the dependent variable of the study, has recently been increasingly investigated and examined. However, there are quite a few studies examining the developmental periods and the factors causing the problem of social media addiction, which is a current and very common problem (9, 12, 14). Especially, the results of social media addiction, whose relationship with psychological disorders such as depression and anxiety were examined, were mostly discussed, but to prevent it, first of all, its source and causes were ignored. In this study, the focus is on the precedent of the problem and the concepts that cause it, rather than the results. Thus, it will be possible for young and adult individuals to use social media more consciously and to prevent addiction. As a matter of fact, in this study, the relationship between the attachment styles formed in infancy and childhood in university students and the various areas in which self-worth is structured during the adolescence period were examined, and it was aimed to contribute to the prevention of addiction by researching and discussing within the scope of the conceptual framework and other studies carried out.

It was found that the variables of anxious/ambivalent attachment, approval, and physical appearance are the dependent variable of the study social media addiction, the dependent variable of the study. It is understood in the resulting model that structuring self-worth in approval, and physical appearance domains has a

mediating role in the effect of anxious/ambivalent attachment on social media addiction level. When the literature is reviewed, although there are few studies that showed that attachment styles affect social media addiction (20, 21), no studies were found that examined the effects of contingencies of the self-worth model on social media addiction. In addition, no studies were found that showed the effects of these two variables together on social media addiction or the effects of domains structured by self-worth on the mediating role.

As a result, when the resulting model is examined, it can be seen that anxious/ambivalent attachment style and structuring self-worth in the domains of approval and physical appearance have a significant effect on the dependent variable social media addiction level. It is an expected situation for individuals with an anxious/ambivalent attachment style, which is one of the attachment styles that occurs as a result of the communication and interaction between the mother and the baby, to be more open to the influence and direction of other individuals since they do not receive regular care, attention, and love. Similarly, individuals who structure their self-worth in the domain of approval take the attitudes, reactions, and behaviors of others as a reference and determine their value and attitude accordingly. Social media channels appear as areas where the importance given to other individuals is observed at the most extreme. The degree of this importance is understood more clearly in an environment where sharing, commenting, or any action taken is followed by the friends, relatives of the individual, and even by many people the individual does not know. Higher social media addiction levels of individuals who have anxious/ambivalent attachments and who structure their self-worth in the approval domain can be explained in this way. This need of individuals who have few people they can communicate with and be close to within their social environment leads them to meet this need through social media (31). This in turn leads to an increase in the level of social media addiction as the use of social media increases. Similarly, individuals who feel valued and loved with the approval of others structure their self-worth in the approval domain. The environment in which this need is met most frequently and most directly is social media (32). It is known that variables such as having more followers and having shares watched, and liked with a high rate increase individuals' importance and popularity in social media environments. A system that works in this way attracts individuals who build their self-worth completely on approval. Individuals who structure their self-worth in this domain spend more time on social media and as a result, they become addicted to social media at higher levels. Considering the structuring of social media in the physical appearance domain, it can be seen as a normal situation for such people to spend more time on social media where the values placed on individuals are completely built on appearance and beauty, and the perception of attraction (33). The value placed on the perception of appearance, which manifests itself especially with sharing photos can continue until the bodily perception deteriorates. This is one of the factors that cause the increase in social media use and therefore addiction levels (34, 35, 36, 37).

This study has some limitations. This study, which was carried out in a state university in Central Black Sea Region, can be conducted on university students studying in different cities or regions. The data obtained from the study are limited to the "Three Dimensional Attachment Style Scale", "Social Media Addiction Scale" and "Contingencies of Self-Worth Scale". The results of the study are limited to students who were studying in different faculties of a state university in the Central Black Sea Region during the 2018-2019 academic year. The scope of the research is limited to only social media addiction, which is one of the digital addiction types. Attachment styles discussed in the study are limited to adult attachment types. Contingencies of self-worth domains are limited to the sub-dimensions of the scale used in the research.

The effect model shows the importance of attachment styles in examining social media addiction levels and structuring contingencies of self-worth, especially in terms of external factors. This result shows that contingencies of self-worth, a concept that occurs in adolescence as a result of the quality of interaction between the mother and the baby is one of the basic building blocks in personality development and with the emergence of the concept of self between the ages of 0 and 2 and which may change during a lifetime have an important place in understanding the causes, development, and process of social media addiction. As a result of the study, recommendations to other researchers and practitioners can be listed as the following:

In this study, attachment styles and conditional self-worth, which are among the factors affecting the level of social media addiction, were discussed. In addition to these, examining the effects of different variables such as parental attitude, family education level and social status that may affect the level of social media addiction can be presented as a suggestion to researchers. A psycho-education program can be created to ensure that social media can be used more consciously for the attachment styles and conditional self-worth model for the model obtained in the last hypothesis. In order to examine whether areas such as family support and virtue are effective in reducing addiction in the relationship between social media addiction and conditional self-worth, a study can be conducted especially for the childhood period when values begin to form. In addition to the contribution of secure attachment, which is one of the attachment styles, in the formation of a harmonious and healthy personality structure, as well as its protective effect against problems such as addiction, awareness can be raised about the importance of mother-infant communication, especially by giving training to expectant mothers. Studies dealing with the relationship of self-worth with other types of addiction such as smoking, alcohol, and gambling can be conducted with adult individuals and turned into addiction prevention programs.

References

1. Erikson EH, Erikson JM. *The Life Cycle Completed* (extended version). New York: WW Norton, 1998.
2. Bowlby J. *Bağlanma*, T. Soylu (Çev.). İstanbul: Pinhan Yayıncılık, 2012.
3. Muris P, Maas A. Strengths and difficulties as correlates of attachment style in institutionalized and non-institutionalized children with below-average intellectual abilities. *Child Psychiatry Hum Dev* 2004; 34(4): 317–328.
4. Bretherton I. Emotional availability: An attachment perspective. *Attach Hum Dev* 2000; 2(2): 233–241.
5. Ainsworth MDS, Blehar MC, Waters E, Wall SN. *Patterns of attachment: A psychological study of the strange situation*. London: Psychology Press 2015.
6. Bartholomew K, Horowitz LM. Attachment styles among young adults: a test of a four-category model. *J Pers Soc Psychol* 1991; 61(2): 226–244.
7. Sümer N, Güngör D. Yetişkin bağlanma stilleri ölçeklerinin Türk örneklemini üzerinde psikometrik değerlendirmesi ve kültürlerarası bir karşılaştırma. *Türk Psikoloji Dergisi* 1999; 14(43): 71–106.
8. Boyd DM, Ellison NB. Social network sites: Definition, history, and scholarship. *J Comput Mediat Commun* 2007; 13(1): 210–230.
9. Özutku F, Çopur H, Sığın İ, İltter K, Küçükıymaz M.M, Arı Y. *Sosyal Medyanın ABC'si*. İstanbul: Alfa, 2014.
10. Kujath CL. Facebook and MySpace: Complement or substitute for face-to-face interaction? *Cyberpsychol Behav Soc Netw* 2011; 14(1–2): 75–78.
11. Digital 2021: Global internet use accelerates. *Recuperado em*, 2. <https://wearesocial.com/global-digital-report-2021> (Access: 9.08.2021)
12. Aslanyürek M, Gürdal SA, Dursun S, Tunçel E, Ayan SMİ. Sosyal medya gerçeği ve meslek yüksekokulu öğrencilerinin sosyal medya algısının değerlendirilmesi. *Colleges* 2015; 6(5): 1–11.
13. Tutgun-Ünal A, Deniz L. Investigation of social media addiction of university students. *Route Educational and Social Science Journal* 2016; 3(2): 155–181.
14. Kuss DJ, Griffiths MD. Online social networking and addiction—a review of the psychological literature. *Int J Environ Res Public Health* 2011; 8(9): 3528–3552.
15. Çam, E, İşbulan OA. New addiction for teacher candidates: social networks. *Turkish Online Journal of Educational Technology* 2012; 11(3): 14–19.
16. Burrow AL, Rainone N. How many likes did I get?: Purpose moderates links between positive social media feedback and self-esteem. *J Exp Soc Psychol* 2017; 69: 232–236.
17. Crocker J, Wolfe CT. Contingencies of self-worth. *Psychol Rev* 2001; 108(3): 593–611.
18. Crocker J, Luhtanen RK, Lynne Cooper M, Bouverette A. Contingencies of self-worth in college students: theory and measurement. *J Pers Soc Psychol* 2003; 85(5): 894–908.
19. Luhtanen RK, Crocker J. Alcohol use in college students: Effects of level of self-esteem, narcissism, and contingencies of self-worth. *Psychol Addict Behav* 2005; 19(1): 99–103.
20. Demircioğlu Zİ, Göncü Köse A. Effects of attachment styles, dark triad, rejection sensitivity, and relationship satisfaction on social media addiction: A mediated model. *Curr Psychol* 2021; 40(1): 414–428.

21. Worsley JD, McIntyre JC, Bentall RP, Corcoran R. Childhood maltreatment and problematic social media use: The role of attachment and depression. *Psychiatry Res* 2018; 267: 88–93.
22. Seo M, Kang HS, Yom YH. Internet addiction and interpersonal problems in Korean adolescents. *CIN - Comput Inform Nurs* 2009; 27(4): 226–233.
23. Cheng ST, Kwan KW. Attachment dimensions and contingencies of self-worth: The moderating role of culture. *Pers Individ Dif* 2008; 45(6): 509–514.
24. Büyüköztürk Ş, Çakmak EK, Akgün ÖE, Karadeniz Ş, Demirel F. *Bilimsel Araştırma Yöntemleri*. Ankara: Pegem, 2017.
25. Erzen E. Üç boyutlu bağlanma stilleri ölçeği. *İnönü Üniversitesi Eğitim Fakültesi Dergisi* 2016; 17(3): 1–21.
26. Ayğar BB, Uzun B. Sosyal medya bağımlılığı ölçeğinin geliştirilmesi: geçerlik ve güvenilirlik çalışmaları. *Addicta* 2018; 5(3): 1-19.
27. Wolfe C, Crocker J. What does the self want? contingencies of self-worth and goals. In SJ Spencer, S Fein, M. P Zanna, JM Olson (Eds.), *Motivated Social Perception: The Ontario Symposium*, 2003; 9: 147–170). New Jersey: Lawrence Erlbaum, 2003.
28. Çetin B, Akın A, Eroğlu Y. Koşullu öz-değer ölçeğinin geçerlik ve güvenilirliği. *Uluslararası İnsan Bilimleri Dergisi* 2011; 8(1): 410-426.
29. Hayes AF. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. New York: Guilford, 2017.
30. Baron RM, Kenny DA. The moderator–mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *J Pers Soc Psychol* 1986; 51(6): 1173-1182
31. Yamini P, Pujar L. Effect of social media addiction on mental health of emerging adults. *Indian Journal of Extension Education* 2022; 58(4): 76-80.
32. Akdeniz S. Personality traits and narcissism in social media predict social media addiction. *Journal of Ahmet Kelesoglu Education Faculty* 2022; 4(2): 224-237.
33. Kocaay F, Demir BT, Biçer BK. Üniversite öğrencilerinde internet, sosyal medya ve oyun bağımlılığının değerlendirilmesi. *Sağlık Bilimlerinde Değer* 2022; 12(3): 511-519.
34. Özmen E, Şenay Güzel H. The relationship between attachment style, eating behavior, emotion regulation, and social media addiction during COVID-19 pandemic. *Neuropsychiatr Invest* 2022; 60(3):78-84.
35. Soh F, Smith K, Dhillion G. The relationship between social capital and social media addiction: the role of privacy self-efficacy. *AJIS* 2022; 26, 1-16.
36. Cheng C, Lau YC, Chan L, Luk JW. Prevalence of social media addiction across 32 nations: Meta-analysis with subgroup analysis of classification schemes and cultural values. *Addict Behav* 2021; 117, 1-8.
37. Sagar ME. Predictive role of cognitive flexibility and self-control on social media addiction in university students. *International Education Studies* 2021; 14(4): 1-10.

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