MEDIATING ROLE OF SOCIAL APPROVAL NEED IN THE RELATIONSHIP BETWEEN SOCIAL MEDIA ADDICTION AND SOCIAL APPEARANCE ANXIETY

Mehtap SEZGİN

Asst.Prof.Dr., Ankara Social Sciences University, Nicosia, North Cyprus, mehtap.sezgin@asbu.edu.tr
ORCID: 0000-0003-3830-6112

N.Bilge UZUN

Assoc.Prof.Dr., Mersin University, Mersin, Türkiye, buzun@mersin.edu.tr
ORCID: 0000-0003-2293-4536

ABSTRACT

This study aimed to examine whether the need for social approval plays a mediating role in the relationship between social appearance anxiety and social media addiction. This research was conducted with the relational screening model, predictive correlation design. The study group consists of 302 undergraduate students pursuing their education 2018-2019 academic year in Turkiye. The study group was selected by the convenience sampling. Social Appearance Anxiety Scale, Social Media Addiction Scale and Need for Social Approval Scale were used in the research. As a data analysis technique, the mediation model was tested in this study. When testing the mediation model, direct and indirect relationships and changes in these relationships were examined, using the Lisrel Package program within the scope of structural equation modeling (SEM).The findings of this research indicate that as the social appearance anxiety of individuals increases, social media addiction increases with an increasing social approval need. The model proposed in the research suggesting that the need for social approval mediates the relationship between social appearance anxiety and social media addiction is statistically significant. The need for social approval fully mediates the relationship between social appearance anxiety and social media addiction. The study found out that social appearance anxiety is a predictor of the need for social approval, and the need for social approval is a predictor of social media addiction. The whole model explains 52% of social media addiction. To conclude, individuals' social appearance anxiety and their unsatisfied needs for approval seem to account for social media addiction together.

Keywords: Social media addiction, social appearance anxiety, social approval need, mediation

INTRODUCTION

Social media addiction is defined as "excessive use of social media networks, failure to stop craving for using social media, neglect of social activities and daily routines due to excessive use, damage to social relations, using to escape from existing negative emotions, failure to reduce the use of social media networks, and being nervous and stressed in environments where access to social media networks is not possible and there is no internet" (Young, 1998; Kwon, et al., 2013; Savcı & Aysan; 2017). According to American Psychiatric Association (2013), social media addiction is not defined as a disorder in DSM-V. However, when we examine the literature, social media addiction is considered a behavioral addiction (Kuss & Griffiths, 2011; Griffiths & Szabo, 2014). When one speaks of addiction, what occurs in our minds are chemicals such as alcohol, cigarettes, and drugs we take into our bodies (Çakır, Horzum, & Ayas, 2013). However, there are also behavioral-oriented addictions (e.g. sex, internet, eating, games, social media) apart from the substances taken physically into the body (Kim & Kim, 2002; Sussman, 2012).

The proportion of using social media has increased day by day with the development of technology (Ayas & Horzum, 2013; Gürmen, 2016; Gökkaya, et al., 2020).   Moreover, inclinations to social media have increased because of the need for being noticed, body satisfaction, approval, acceptance, identity search and social anxiety (Rodgers, et al,, 2013; Tiggemann & Slater, 2013; Tiggemann & Slater, 2014; Fox & Ronney, 2015; Tutgun, 2019).

Many studies also show that social media addiction has a negative relation with academic achievement (e.g., Zhao, 2021), mental health issues (e.g., Pantic, 2014), emotional issues (e.g., Liu & Ma, 2019), relational issues, and well-being (e.g., Christensen, 2018). In addition, social media addiction is known to be correlated with personal characteristics (e.g., Blackwell, et al., 2017). According to the results of a meta-analysis study including 63 studies examining the relations between social media addiction and personality traits, adaptability and responsibility are protective factors for social media addiction, whereas neuroticism is a risk factor (Huang, 2022). Neurotic individuals tend to experience negative emotions like anxiety (Cloninger, 2004). At the same time, research findings show that there are positive relations between social media addiction, narcissistic personality traits, and the desire to be liked (e.g., Çağlar, 2021). In addition, social media addiction is known to have a negative relation with self-efficacy (e.g., Hawi & Samaha, 2017). Specifically, social appearance anxiety and the social approval need are positively correlated with social media addiction (Ceyhan & Ceyhan, 2008; Wan & Choi, 2010; Tezer & Arkar, 2013; Siyez, 2015; Gökkaya, et al., 2020).

Hart, et al, (1989) describe individuals' concerns about their body forms and structures (e.g., body fat, muscle structure, and overall body proportions) as social appearance anxiety to evaluate individuals' negative thoughts about their appearance and discomfort during physical evaluation. Social appearance anxiety is a broader concept, involving one's characteristics such as skin color and facial appearance (e.g., nose, the distance of eyes, smiling, etc.) beyond their general physical appearances such as height, weight, and muscle structure. Social appearance anxiety arises as a result of individuals' perceived negative body images relating to their bodies and appearance (Hart et al., 2008).

People who want to be approved and accepted by others may be too concerned with their appearance. Indeed, from past to present, appearance has played a significant role in individuals' lives (Çetinkaya, et al., 2019). However, today, people are much more concerned with the appearance of themselves and others than in the past (Kılıç & Karakuş, 2016). Their physical appearances are of great significance to them. However, thinking of being unable to make a good impression on other people with one's appearance is worrying (Leary & Kowalski, 1995).

Criticism and mocking of individuals by their peers (Tantleff-Dunn & Gokee, 2002) and family members (Rieves & Cash, 1996; McKinley, 1999; Kearney-Cooke, 2002) for their physical appearance can cause negative effects. The social appearance anxiety experienced because of physical appearance often hinders individuals' characteristics of being a social being and hinders the relation they establish to socialize with their environment. In this case, it may increase the use of social media.

Hofmann and Di Bartolo (2010) state that human beings, who are social beings, have an irresistible need to be loved, valued, and approved by the people around them. Leite and Beretvas (2005) defined the social approval need as a concept that involves individuals' efforts to be approved by others and avoid disapproval. However, Chiba, et al., (2009) defined the need for approval as a need for being accepted as a good person. According to Crowne & Marlowe, (1960) The social approval need represents social desirability or an individual's tendency to gain approval from relevant others. It is seen that individuals who need social approval experience social anxiety (Leary & Kowalski, 1995; Chiba, et al., 2009; Antony & Swinson, 2009). In addition, it has been found that self-oriented perfectionism and perfectionism determined by others are associated with the need for approval (Karaşar & Öğülmüş, 2016). In order to obtain social approval, people may have tendencies to look or act like a different person, either physically or personally (Millham & Kellog, 1980; Gökkaya, et.al,, 2020). The emulation of people's need for the approval of social media lifestyles may cause them to perceive themselves (e.g., physical appearance, personal characteristics, etc.) differently from the way they are. It may cause people with a constant need for approval to spend more time on and satisfy their needs for approval through social media. Individuals may try to fill this need through social media.

The relations between the social media addiction, social appearance and social approval need are explicit. However, existing researches have not examined the mediating role of the social approval need in the relation between social appearance anxiety and social media addiction. The relation between the other two variables could be controlled by studying the mediating role of the social approval need in the relation between appearance anxiety and addiction, and by organizing activities, seminars, and studies on the relevant feature in case of obtaining evidence concerning this mediating role. In this case, studying this model is considered important, with a prediction that the social approval need could be manipulated. The purpose of this study is to test whether the social approval need plays a mediating role in the relation between social appearance anxiety and social media addiction. For this purpose, the following research questions were asked.

Q1. Is there a positive significant relationship between social appearance anxiety and social media addiction?

Q2. Is there a positive significant relationship between social appearance anxiety and the social approval need?

Q3. Is there a positive significant relationship between the social approval need and social media addiction?

Q4. Does the social approval need play a mediating role in the relation between social appearance anxiety and social media addiction?

METHOD

Research Model

The study used a predictive correlational survey model. Studies conducted to determine the relationship between two or more variables are defined as correlational research. Predictive correlational research can focus both on direct effects and indirect-mediating effects (Büyüköztürk et al., 2016). In the study, the mediating role of the social approval need is tested in the relation between social appearance anxiety and social media addiction. The research model is presented in Figure 1.
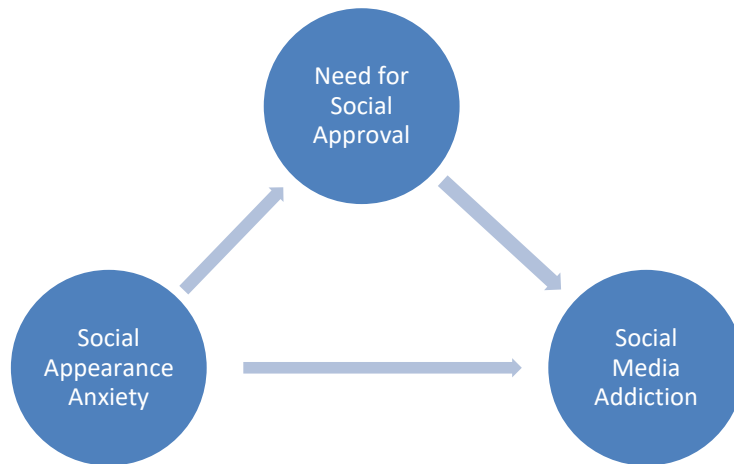

Figure 1. The Theoretical Model Planned to Be Tested

Participants

A total of 349 undergraduate students participated in current research pursuing their education 2018-2019 academic year in Turkiye. The study participants were selected using convenience sampling. In fact, the researcher selected the sample group from the university where they worked at. For outlier analysis, the boxplots of univariate outliers were examined and 47 outliers were excluded from the analysis. Therefore, the participants of the study consisted of 302 students: N=208 (68.9%) female, N= 94 (21.5%) male. In addition, 50 participants (16.6%) studied at 1st year, 142 participants (47%) at2nd year, 65 participants (21.5%) at 3rd year, and 44 participants (14.5%) at 4th year.

Data Collection

The data of the research were collected through social media using Google forms. The research link was shared on the social media accounts of the university where the researcher worked. Before the study, the participants were asked to approve the research consent form which explained the research. Participants who approved the consent form were able to provide data collection instruments. Social Media Addiction Scale (Bakır Aygar and Uzun, 2018), Social Appearance Anxiety Scale (Doğan, 2010), and Social approval need Scale (Karaşar and Öğülmüş, 2016) were utilized.

***Social Media Addiction Scale* (SMAS):** It is a self-reporting scale which aims to measure the social media addiction levels of undergraduate students. It developed by Bakır Aygar and Uzun (2018) is a 5-point Likert type scale, consisting of 25 items and three dimensions. The dimensions have been called functional deterioration, control difficulty and deprivation, social isolation. The score for social media addiction is obtained by adding the items from all three sub-dimensions. As the score on the scale increases, the level of addiction to social media also increases. Considering the exploratory factor analysis results, of three factors, the "functional deterioration" factor alone explains 42.626% of the common variance, "control difficulty and deprivation" alone explains 9.517% of the common variance, and "social isolation" alone explains 5.608% of the common variance. The factor loadings of the measurement tool range between .493 and .792. For criterion validity, the correlation between the social media addiction scale and the problematic internet use scale was 0.75. Cronbach's internal consistency coefficient was $\alpha = .95$ for the scale, $\alpha = .92$ for the control difficulties and deprivation sub-dimension, $\alpha = 91$ for the deterioration in functionality, $\alpha = 81$ for the social isolation. In this study, however, Cronbach's alpha international consistency coefficient was $\alpha = .93$ for control difficulties and deprivation sub-dimension, $\alpha = .92$ for deterioration in functionality, and $\alpha = .85$ for social isolation.

Social Appearance Anxiety Scale (SAAS): It is developed by Hart et al. (2008) was adopted into Turkish by Doğan (2010). It is a self-report unidimensional scale which aims to measure affective, cognitive and behavioral anxieties individuals experience concerning their appearance. It is a 5-point Likert type scale, consisting of 16 items. As a result of exploratory factor analysis, the item-total correlation in the Turkish form of the scale ranged between .32 and .82. For criterion validity, the correlation between the social appearance anxiety scale and the fear of negative evaluation scale was .60. Cronbach's alpha internal consistency was .93 for the SAAS, the test-retest reliability coefficient was .85, and the reliability coefficient calculated using the test halving method was .88. As a result of the confirmatory factor analysis, the Chi-square value (χ^2=381.21, *p*< .001) was significant. The fit index values were RMSEA=0.051, NFI=0.98, CFI=0.99, IFI=0.99, RFI=0.98, GFI=0.93, and AGFI=0.90. These fit index values show that the model is fit (Doğan, 2010). However, in this study, the Cronbach alpha internal consistency coefficient was .95.

Need for Social Approval Scale (NfSAS): The scale developed by Karaşar and Öğülmüş (2016) is a 5-point Likert type scale, consisting of 25 items. The social approval need regarding others expectations and judgments as important and showing compliance-oriented behaviors defined as a concept. There three dimensions which have

been called sensitivity to others' judgments, social withdrawal, and leaving positive impression. High scores obtained from the NfSAS show an increase in the social approval need. As a result of the factor analysis, it was determined that the social approval need scale measures three sub-dimensions (sensitivity to others' judgments, leaving positive impression, and social withdrawal). The construct validity of the scale was examined through factor analysis. The fit values of the results of CFA carried out on two groups were at a good level. The goodness-of-fit values were x^2/df= 2.11, RMSEA= .06, NNFI= .94, CFI= .95, RMR= .06, NFI= .90, and IFI= .95 for the first group, while they were x^2/df= 2.25, RMSEA= .06, NNFI= .95, CFI= .95, RMR= .06, NFI= .92, and IFI=.96 for the second group. For criterion validity, the relation between the scale and the Fear of Negative Evaluation Scale was examined and the correlation between them was .79. Cronbach's alpha reliability coefficient was examined within the scope of the reliability study. The reliability coefficients relating to sub-dimensions were .83 for sensitivity to others' judgments, .80 for social withdrawal, and .80 for leaving positive impression. However, the internal reliability coefficient for the whole scale was .90. In this research, the Cronbach alpha internal consistency coefficient was .89 for sensitivity to others' judgments, .89 for social withdrawal, and .91 for leaving positive impression.

Data Analysis

As a data analysis technique, the mediation model was tested in this study. When testing the mediation model, direct and indirect relations and changes in these relations were examined, using the Lisrel Package program within the scope of structural equation modeling (SEM). The mediating role of the social approval need in the relation between social appearance anxiety and social media addiction was tested with Baron and Kenny's mediation model. According to Baron and Kenny (1986), the prerequisites must be met before testing the mediation model. (i) There should be a statistically significant relation between the dependent and independent variables, (ii) There should be a statistically significant relation between the dependent and mediating variables, (iii) the mediating variable has a statistically significant relation when tested together with dependent and independent variables within the model, and lastly (iv) when the independent and mediating variables are included in the model, there should be a negative relation between the independent and mediating variables (full mediation) or the level of the relation should have decreased (partial mediation) (Gürbüz & Şahin, 2018).

Preparing the Data for Analysis: Before running the data analysis, assumptions must be tested within the scope of structural equation modeling (Çokluk, et al. 2014). The Pearson Moments Correlation Coefficient was calculated between the variables to test the mediation model. Table 1 shows the findings regarding correlation analysis.

Table 1. Pearson Correlation Coefficient Values between the Variables

Variables	Social Appearance Anxiety	Social Media Addiction
1. Social Appearance Anxiety	-	
2. Social Media Addiction	.396**	-
3. Social Approval Need	.714**	.453**

$**p < 0.01$

Table 1 shows that there is a positive and significant relation between social appearance anxiety and social media addiction ($r=.396$, $p<0.01$). Also, there is a positive and significant relation between social appearance anxiety and the social approval need ($r=.714$, $p<0.01$). In addition, there is a positive and significant relation between the social approval need and social media addiction ($r=.453$, $p<0.01$). Moreover, this study examined whether the model data goodness-of-fit measures of the measurement models are satisfied, which is another prerequisite for the analysis of relevant structural equation models. As another prerequisite for mediation studies, the suitability of measurement models for independent, dependent, and mediator variables in the research was evaluated. In this evaluation, the model-data fit was evaluated by examining the relevant literature and considering the perfect and acceptable fit criteria (Marsh, et al, 2006; Kline, 2011; Schermelleh-Engel, et al., 2003). Model data goodness-of-fit and criteria relating to the established measurement model are presented in Table 2.

Table 2. Model Fit Indices

Variables	X^2 / df	RMSEA	SRMR	CFI	NFI	NNFI
Measurement model	794/206=3.85	.097	.048	.98	.97	.98
Perfect fit	≤ 3	≤.05	≤.05	≥.95	≥.95	≥.95
Good fit	≤3x²/ df ≤ 5	.05≤RMSEA ≤ .10	.05 ≤ SRMR ≤ .10	.90≤CFI <.95	90≤NFI<.95	90≤NFI<.95

When we evaluate the model in Table 2 by considering the goodness-of-fit statistics, the measurement model tested in the study matched the perfect fit and good fit indicators. After testing the relation between the variables and the model-data fit of the measurement model, the mediation model was calculated using the Lisrel program and the path coefficients were examined.

FINDINGS

In this study, which examined the mediation of the social approval need in the relation between social appearance anxiety and social media addiction, findings on social appearance anxiety predicting social media addiction and non-standardized beta coefficients of the social approval need are given in Figure 2.
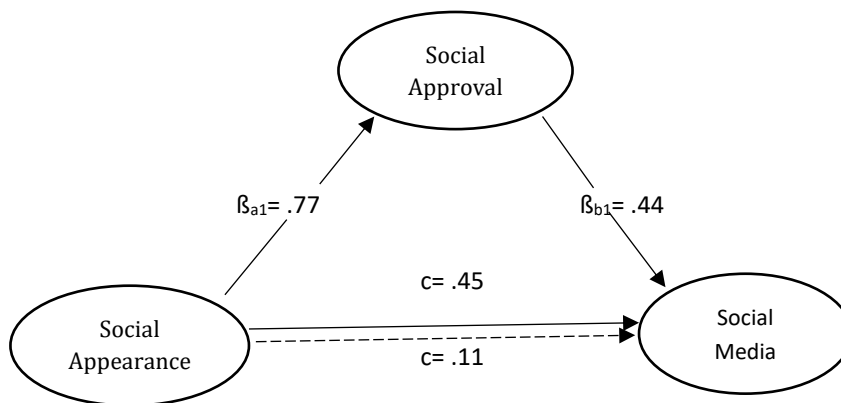

Figure 2. Mediation Model

Figure 2 shows that the social approval need plays a full mediator role in the relation between social appearance anxiety and social media addiction. According to the fit indices of the model created in Figure 2, the model is confirmed by indicating perfect fit (x^2=794.17, *df*= 206, *p*=1>.001; RMSEA=.0097, x^2/*df*=3.85, SRMR= 0.048, TLI (NNFI) = 0.98, NFI=0.97, CFI=0.98). In addition to the fit indices for the confirmation of the structural model, t values were also examined as criteria. The t values and standardized *β* and error variance values for Figure 2 are given in Table 3.

Table 3. Path Coefficients for Figure 1

Path	Standardized β	Error Variance	t
Path coefficients for Figure 1			
Social appearance anxiety→Social media addiction	.45	0.80	6.47**
Path coefficients for Figure 2			
Social appearance anxiety→Social approval need	.77	0.41	12.68**
Social appearance anxiety→ Social media addiction	.11	0.80	1.09
Social approval need→ Social media addiction	.44	0.72	4.26**

*p<.05, **p<.01

As seen in Table 3 and Figure 2, the total effect of social appearance anxiety on social media addiction (*β*=.45, *t*=6.47; *p*<.01) is positive and significant (Stage 1). The direct effect of social appearance anxiety on the mediating variable, the social approval need (*β*=.77, *t*=12.68; *p*<.01), is positive and significant (Stage 2). However, the direct effect of the social approval need, the mediating variable, on social media addiction (*β*=.44, *t*=4.26; *p*<.01) is positive and significant (Stage 3).When social appearance anxiety and the mediating variable, the social approval need, were included in the model simultaneously (Stage 4), the level of relation between social appearance anxiety and social media addiction decreased by .34 ((*β*=.11, *t*=1.09; *p*<.01).When the mediator variable was included, the relation between social appearance anxiety and social media addiction was non-significant. Therefore, one could say that the social approval need is a full mediator. In addition, the whole model was significant ($F_{(2-299)}$ =160.080, *p*<.01). The whole model explained 52% of social media addiction. According to all findings, the mediation model established is significant and the social approval need fully mediates between social appearance anxiety and social media addiction.

CONCLUSION and DISCUSSION

As it is known, the disproportionate and excessive utilization of social media that interferes with daily life indicates social media addiction. Some users may be at risk in terms of social media addiction. The findings of this research indicate that as the social appearance anxiety of individuals increases, social media addiction increases with an increasing social approval need. The model proposed in the research suggesting that the social approval need mediates the relation between social appearance anxiety and social media addiction is statistically significant. The social approval need fully mediates the relation between social appearance anxiety and social media addiction. The study found that social appearance anxiety is a predictor of the social approval need, and the social approval need is a predictor of social media addiction. The whole model explains 52% of social media

addiction. To conclude, individuals' social appearance anxiety and their unsatisfied needs for approval seem to account for social media addiction together.

The results of this study revealed that social media addiction is positively related to social appearance anxiety and social approval needs. As the social appearance anxiety of individuals increases, their social media addiction also increases. Boursier, et al. (2020) found that social appearance anxiety is influential in problematic social media use in boys but not in girls. At the same time, as individuals' social approval need increases, their social media addiction also increases. Similar to these findings, research shows that people who need high social approval have high social media addictions (Gökkaya, et al. 2020; Savcı, et al. 2021). In addition, there is a positive relation between social appearance anxiety and social approval needs. In other words, as individuals' social appearance anxiety increases, their social approval needs also increase. No study examining the relation between social appearance anxiety and the social approval need was found in the literature. However, research findings show that social anxiety, which is correlated with social appearance anxiety (Claes et al., 2012), is correlated with the social approval need (Leary & Kowalski, 1995; Chiba, et al., 2009; Karasar & Baytemir, 2018).

SUGGESTIONS

Based on the findings of this study, one can suggest that experts working on preventing social media addiction and intervening in social media addiction should address the issues of satisfying the social approval needs of individuals and reducing their social appearance anxiety in their interventions. Put differently, studies that reduce people's social appearance anxiety will reduce people's social approval need, and therefore will be a preventive factor in social media addiction.

Although this research was the first in Turkiye to examine the mediating role of the social approval need in the relation between social appearance anxiety and social media addiction in undergraduate students, the fact that the research data were collected from a university is a limitation of this research. Hence, it would be useful to replicate the study with different sample groups. As such, examining social media addiction with different socio-demographic variables and other related psychological variables in future studies may contribute to obtaining extensive information on the topic.

ETHICAL TEXT

In this article, the journal writing rules, publication principles, research and publication ethics, and journal ethical rules were followed. The data of this study was collected in the 2018-2019 academic year. The responsibility belongs to the author for any violations that may arise regarding the article.

Author(s) Contribution Rate: In this study, the contribution rate of the first author is 60% and the contribution rate of the second author is 40%.

REFERENCES

American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th. Ed.). APA.

Antony, M. M. & Swinson, R. P., (2009). *When perfect isn't good enough: strategies for coping with perfectionism*. New Harbinger Publications.

Ayas, T. & Horzum, M.B. (2013). İlköğretim Öğrencilerinin İnternet Bağımlılığı ve Aile İnternet Tutumu. *Türk Psikolojik Danışma ve Rehberlik Dergisi,4* (39), 46–57.

Bakır, Aygar, B. & Uzun, B. (2018). Sosyal Medya Bağımlılığı Ölçeği'nin geliştirilmesi: Geçerlik ve güvenirlik çalışmaları*. Addicta: The Turkish Journal on Addictions*, 5, 507–525. http://dx.doi.org/10.15805/addicta.2018.5.3.0046

Baron, R. M. & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Blackwell, D., Leaman, C., Tramposch, R., Osborne, C. & Liss, M. (2017). "Extraversion, neuroticism, attachment style and fear of missing out as predictors of social media use and addiction," *Personality and Individual Differences*, vol. 116, pp. 69–72.

Boursier, V., Gioia, F. & Griffiths, M.D. *(2020).* Do selfie-expectancies and social appearance anxiety predict adolescents' problematic social media use? *Computers in Human Behavior, 110, 106395.* https://doi.org/10.1016/j.chb.2020.106395

Büyüköztürk,.Ş, Kılıç Çakmak, E., Akgün, Ö., Karadeniz, Ş. & Demirel, F. (2016). *Bilimsel Araştırma Yöntemleri.* Pegem Akademi.

Ceyhan, A. A. & Ceyhan, E. (2008). Loneliness, depression, and computer self-efficacy as predictors of problematic internet use. *Cyber Psychology & Behavior*, 11(6), 699–701.

Chiba, T., Iketani, S., Han, K. & Ono, A. (2009). A comprehensive model of anxiety in gift giving. *International Review of Business Research Papers*, *5*(4), 322–334.

Christensen, S. P. (2018). *Social media use and its impact on relationships and emotions*. Brigham Young University, Theses and Dissertations. Retrieved from https://scholarsarchive.byu.edu/etd/6927

Claes, L., Hart, T.A., Smits, D., Van Den Eynde, F., Mueller, A. & Mitchell, J. E. (2012). Validation of the social appearance anxiety scale in female eating disorder patients. *European Eating Disorder Review*, *20*, 406–409.

Cloninger, S.C. (2004). *Theories of personality. Understanding persons*. (7th Ed.). Pearson Education, Inc.

Crowne, D. P. & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24*, 349–354.

Çağlar, F. (2021). *Sosyal Medya Bağımlılığı ile Narsistik Kişilik Özellikleri ve Beğenilme Arzusu Arasındaki ilişkinin incelenmesi* (Master's Thesis).Institute of Forensic Medicine and Sciences, İstanbul University Cerrahpaşa.

Çakır, Ö., Horzum, M. B. & Ayas, T. (2013). İnternet bağımlığının tanımı ve tarihçesi. M. Kalkan& C. Kaygusuz (Ed.), *İnternet bağımlılığı sorunlar ve çözümler* (pp. 1–25). Anı Yayıncılık.

Çetinkaya, B., Gülaçtı, F. & Çiftçi, Z. (2019). Lise öğrencilerinin sosyal görünüş kaygı düzeylerinin bazı değişkenlere göre incelenmesi. *OPUS–Uluslararası Toplum Araştırmaları Dergisi*, *10*(17), 904–922. https://doi.org/10.26466/opus.523444

Çokluk, Ö., Şekercioğlu, G. & Büyüköztürk, Ş. (2014). *Sosyal bilimler için çok değişkenli istatistik: SPSS ve LISREL uygulamaları.* Pegem Akademi.

Doğan, T. (2010). Adaptation of the Social Appearance Anxiety Scale (SAAS) to Turkish a Validity and Reliability Study. H. U. Journal of Education, 39(39), 151-159. Retrieved from https://acikerisim.sakarya.edu.tr/handle/20.500.12619/44395

Fox, J. & Rooney, M. C. (2015). The dark triad and trait self-objectification as predictors of men's use and self-presentation behaviors on social networking sites. *Personality and Individual Differences, 76*(1), 161–165.

Gökkaya, F., Deniz, İ. & Gedik, Z. (2020). Sosyal medya bağımlılığının sosyal onay ihtiyacı ve beden memnuniyeti ile ilişkisi. *Klinik Psikoloji Dergisi.* 4(2), 94-105. https://doi.org/10.5455/kpd.26024438m000023

Griffiths M.D. & Szabo, A. (2014). Is excessive online usage a function of medium or activity? An empirical pilot study. *Journal of Behavioral Addictions*, 3, 74–77. https://doi.org/10.1556/jba.2.2013.016

Gürbüz, S. & Şahin, F. (2018). Sosyal bilimlerde araştırma yöntemleri (5. Baskı). Seçkin Yayıncılık.

Gürmen, S. (2016, May). *Bağlanmak ya da bağlanmamak: Teknoloji bağımlığının aile ilişkileri üzerindeki etkisi*. Paper presented at the 3rd International Congress on Technology Addiction, İstanbul.

Hart, E. A., Leary, M.R., & Rejeski, W. J. (1989). The measurement of social physique anxiety. *Journal of Sport and Exercise Psychology*, *11*, 94–104.

Hart, T. A., Flora, D. B., Palyo, S. A., Fresco, D. M., Holle, C. &Heimberg, R. C. (2008). Development and Examination of the Social Appearance Anxiety Scale. *Assessment*, *15*, 48–59.

Hawi, N. S. & Samaha, M. (2017). The Relations among Social Media Addiction, Self-Esteem, and Life Satisfaction in University Students. *Social Science Computer Review*,*35*(5), 576–586. https://doi.org/10.1177/089443931666034

Hofmann, S. G. & Di Bartolo, P. M. (2010). Introduction: Toward an understanding of social anxiety disorder. In S. G. Hofmann., P. M. Di Bartolo (Eds.). *Social anxiety: clinical, developmental, and social perspectives.* Elsevier/Academic Press.

Huang, C. (2022). Social media addiction and personality: A meta-analysis. *Asian Journal of Social Psychology*. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/ajsp.12531

Karasar, B. & Baytemir, K. (2018). Need for Social Approval and Happiness in College Students: The Mediation Role of Social Anxiety. *Universal Journal of Educational Research*, *6*(5), 919–927.

Karaşar, B. & Öğülmüş, S. (2020). Sosyal Onay İhtiyacı Ölçeği'nin ergenler üzerinde geçerlik ve güvenirliğinin incelenmesi. *Anadolu Journal of Educational Sciences International*, 10(2), 871-886. https://doi.org/10.18039/ajesi.758456

Kearney-Cooke, A. (2002). Familial influences on body image development. In T.F. Cash & T. Pruzinsky (Eds.), *Body image: A handbook of theory, research, and clinical practice* (pp. 99–107). New York: Guilford Press.

Kılıç, M., & Karakuş, Ö. (2016). Üniversite öğrencilerinin sosyal görünüş kaygıları ile benlik saygıları ve yalnızlık düzeyleri arasındaki ilişkinin incelenmesi. *Journal of Human Sciences, 13*(3), 3837–3852. doi:10.14687/jhs.v13i3.4054

Kim, S., & Kim, R. (2002). A study of internet addiction: Status, causes, and remedies. *Journal of Korean Home Economics Association, 3*(1), 1–19.

Kline, R. B. (2011). *Convergence of structural equation modeling and multilevel modeling*.

Kuss, D.J. & Griffiths, M.D., (2011). Online social networking and addiction--a review of the psychological literature. *Int J Environ Res Public Health*. 8 (9): 3528-52. https://doi.org/10.3390/ijerph8093528

Kwon, M., Lee, J. Y., Won, W. Y., Park, J. W., Min, J. A., Hahn, C., ... & Kim, D. J. (2013). Development and validation of a smartphone addiction scale (SAS). *PloS one*, *8*(2), e56936.

Leary, M. R. & Kowalski, R. M. (1995). *Social Anxiety*. New York: Guilford.

Leite, W. L. & Beretvas, S. N. (2005). Validation of scores on the Marlowe-Crowne social desirability scale and the balanced inventory of desirable responding. *Educational and Psychological Measurement. 65*, 140–154.

Liu, C. & Ma, J. L. (2019). Adult attachment style, emotion regulation, and social networking sites addiction. *Frontiers in psychology*, *10*, 2352.

Marsh, H. W., Hau, K. T., Artelt, C., Baumert, J. & Peschar, J. L. (2006). OECD's brief self-report measure of educational psychology's most useful affective constructs: Cross-cultural, psychometric comparisons across 25 countries. *International Journal of Testing*, *6*(4), 311–360.

McKinley, N.M. (1999). Women and objectified body consciousness: Mothers' and daughters' body experience in cultural, developmental, and familial context. *Developmental Psychology*,*35*, 760–769.

Millham, J. &Kellog, R. (1980). Need for social approval: Impression management or self-deception? *Journal of Research in Psychology*, *14*(4)*, 445–457.*

Pantic, I. (2014). Online social networking and mental health. *Cyberpsychology, Behavior, and Social Networking*, *17*, 652–657. https://doi.org/10.1089/cyber.2014.0070

Rieves, L. & Cash, T.F. (1996). Reported social developmental factors associated with women's body image attitudes. *Journal of Social Behavior and Personality*, *11*, 63–78.

Rodgers, R. F., Melioli, T., Laconi, S., Bui, E. & Chabrol, H. (2013). Internet addiction symptoms, disordered eating, and body image avoidance. *Cyberpsychology, Behavior, and Social Networking, 16*(1), 56–60.

Savcı, M. & Aysan, F. (2017). Technological addictions and social connectedness: predictor effect of internet addiction, social media addiction, digital game addiction and smartphone addiction on social connectedness. *Dusunen Adam: Journal of Psychiatry & Neurological Sciences*, *30*(3), 202–216.

Savcı, M., Turan, M. E., Griffiths, M. D. & Ercengiz, M. (2021). Histrionic personality, narcissistic personality, and problematic social media use: Testing of a new hypothetical model. *International Journal of Mental Health and Addiction*, *19*(4), 986–1004.

Schermelleh-Engel, K., Moosbrugger, H. & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, *8*(2), 23–74.

Siyez, D. M. (2015). Validity and reliability of a Turkish version of the career locus of control scale. *Journal of Career Development, 42*(4), 281- 293. https://doi.org/10.1177/0894845314557814

Sussman, S. (2012). Steve Sussman on Rudolf H. Moos's iatrogenic effects of psychosocial interventions: Treatment, life context, and personal risk factors a clarification. *Substance Use & Misuse*, *47*, 1601–1602.

Tabachnick B.G & Fidell LS. (2015). *Using multivariate statistics*. (6th edition). Pearson.

Tantleff-Dunn, S. &Gokee, J.L. (2002). Interpersonal influences on body image development. In T.F. Cash & T. Pruzinsky (Eds.), Body image: *A handbook of theory, research, and clinical practice* (pp. 108–116). Guilford Press.

Tezer, N. & Arkar, H. (2013). Does personality affect social relationships? Assessing mediator role of social network, loneliness, and perceived social support. *Anatolian Journal of Psychiatry*, *14*(1), 46–52.

Tiggemann, M. & Slater, A. (2013). Net girls: The internet, Facebook, and body image concern in adolescent girls. *International Journal of Eating Disorders, 46*(6), 630–633.

Tiggemann, M. & Slater, A. (2014). Net tweens: The internet and body image concerns in preteenage girls. *Journal of Early Adolescence, 34*(5), 606–620.

Tutgun Ü., A. (2019). You tube kullanıcısı z kuşağının sosyal media kullanım alışkanlıkları ve tercihlerinin incelenmesi. *İletişim Çalışmaları Dergisi, 2*(16), 61–85.

Wan, C. S. & Chiou, W. B. (2010). Inducing attitude change toward online gaming among adolescent players based on dissonance theory: The role of threats and justification of effort. *Computers & education*, *54*(1), 162–168.

Young, K. S. (1998). *Caught in the net: How to recognize the signs of internet addiction and a winning strategy for recovery*. John Wiley & Sons.

Zhao, L. (2021). Social Media Addiction and Its Impact on College Students' Academic Performance: The Mediating Role of Stress. *The Asia-Pacific Education Researcher*, 1–10.