



THE EFFECTS OF SOCIAL MEDIA ADDICTION, SOCIAL APPEARANCE ANXIETY AND BODY MASS INDEX ON SELF-ESTEEM OF UNIVERSITY STUDENTS WITH PLS-SEM APPROACH

Fisun KAŞKIR KESİN¹

¹ Vocational School of Social Sciences, Division of Property Protection and Security, Düzce University, Düzce, Türkiye

ARTICLE INFO

Article Type: Research Paper
Article history:
Received: 19.04.2025
Received in revised form: 08.05.2025
Accepted: 09.05.2025
Published Online: 01.07.2025

Keywords:
Self-Esteem
Social Media Addiction
Social Appearance Anxiety
Body Mass Index
PLS-SEM

Corresponding Author:
Fisun KAŞKIR KESİN

ABSTRACT

The aim of this study is to examine the effects of social media addiction, social appearance anxiety and body mass index (BMI) on self-esteem in university students. 415 randomly selected students studying at Düzce University were included in the study. Data were collected using a personal information form, Social Media Addiction Scale, Social Appearance Anxiety Scale, and Rosenberg Self-Esteem Scale. Partial least squares structural equation modeling (PLS-SEM) approach was used in the analysis of the data. As a result of the analysis, it was found that the PLS-SEM model was valid and reliable. It was determined that social appearance anxiety and social media addiction had negative and significant effects on students' self-esteem, but BMI did not have a significant direct effect. Also, BMI had a negative and significant indirect effect on self-esteem through social appearance anxiety. The direct effects of BMI on social appearance anxiety and social appearance anxiety on social media addiction were found to be significant ($p < 0.05$). We thought that the results of this study may be important especially for researchers providing guidance and counseling services to university students.

1. INTRODUCTION

Today, with the rapid development of technology, there is an increase in social media usage. According to 2024 data, while the rate of social media users in the world is 62.3%, this rate is 66.8% in Turkey. The social media usage rate of individuals between the ages of 18-34 in Turkey is 25.9% (Dijital 2024). Social media usage is quite common, especially among university students, as it provides the convenience of communicating and interacting more and faster. The positive effects of social networks are that young people can make their voices heard, produce content, come together with people who think like them and create networks, create opportunities for those who hesitate to express themselves in the social environment, and increase their democratic participation by expressing their ideas on political or social issues (Çömlekçi & Başol, 2019; Papacharissi & Rubin, 2000). However, when the individual

overlooks daily life, spends more time on social media platforms, or experiences deprivation when unable to use social media, ignores socialization, disrupts relationships with the social environment, and cannot help but use social media platforms, social media addiction develops in the individual (Andreassen et al., 2017). Due to this addiction, in addition to the individual choosing an isolated life from social life, some psychological and physiological problems may also arise as it directs the individual to create a new life for himself in the virtual environment.

Factors such as the proliferation of social media, the influence of popular culture, and changes in social norms cause individuals to feel more pressure about how they present themselves and, as a result, to experience social appearance anxiety. Social appearance anxiety is the emotional state that people feel when their physical appearance is evaluated by others. It is thought that social appearance anxiety is mostly seen in adolescence, when the evaluations of others about physical appearance of a person cause the most intense anxiety (Amil & Bozgeyikli, 2015). Multiple factors such as races, ethnic groups, biological differences between individuals, psychosocial differences that occur within cultural processes, traumatic stress, social media use, participation in social activities can be effective in the formation of social appearance anxiety. This anxiety can also directly or indirectly cause psychological and physiological effects on the person and, most importantly, the weakening of the person's self-awareness and sense of self-esteem.

Self-esteem is the feeling of respect and value that an individual has for themselves. It is related to a person's belief in themselves, their self-esteem and their recognition of their own value. People with high self-esteem also have high expectations about their own capacities. Due to these positive attitudes about themselves and the successful results they have achieved, they accept their own views, believe in them and thus trust both their behaviors and the results they have achieved. The expectations and attitudes of people with high self-esteem direct them to more independence and creativity. Thus, it becomes possible for individuals to display more diligent social behaviors. High self-esteem requires positive spiritual qualities such as self-confidence, optimism, desire to succeed and not giving up on difficulties, as well as the belief that others value them. The situation of people with low self-esteem shows completely different characteristics. Individuals with low self-esteem have low self-confidence, easily fall into despair, worry that they will put forward a different or unacceptable idea and do not want to express themselves. They prefer to be listeners rather than participants in groups. Those with low self-esteem often exhibit characteristics such as lack of understanding and social withdrawal (Mann et al., 2004).

There are intricate relationships between social appearance anxiety, social media addiction and self-esteem. Most social media users want to be liked on these platforms and gain a status for themselves, so they want to look more beautiful, attractive and rich. Especially individuals with social appearance anxiety or negative body image try to create a different life in the virtual environment by using developed filters and special applications. At the same time, most individuals who receive negative feedback from their social media profiles may experience anxiety about their appearance and develop a negative body image (Doğan & Çolak, 2016; Boursier et al., 2020). There are positive significant relationships between social media addiction and social appearance anxiety, and negative significant relationships between high self-esteem and social media addiction and social appearance anxiety in the literature. However, the causality relationship between self-esteem and social media addiction is still unclear (Andreassen et al., 2017; Hou et al., 2019; Çömlekçi & Başol, 2019). Similarly, the causality relationship between self-esteem social and appearance anxiety remains unclear.

In this context, it is important to evaluate the effects of social media addiction, social appearance anxiety and body mass index on self-esteem of university students together and to examine possible direct and indirect relationships. The main purpose of study aimed to examine the effects of social media addiction, social appearance anxiety and body mass index on self-esteem of university students using the partial least squares structural equation modeling approach.

2. MATERIAL AND METHODS

2.1. Research Model

A quantitative research model was created to explore the factors (such as social media addiction, social appearance anxiety and BMI) affecting the self-esteem levels of university students and this model is given in Figure 1. The hypotheses for this research were constructed below as H1-H5.

H1: Social appearance anxiety negatively affects self-esteem.

H2: Social media addiction negatively affects self-esteem.

H3: Body mass index negatively affects self-esteem.

H4: Social appearance anxiety positively affects social media addiction.

H5: Body mass index positively affects social appearance anxiety.

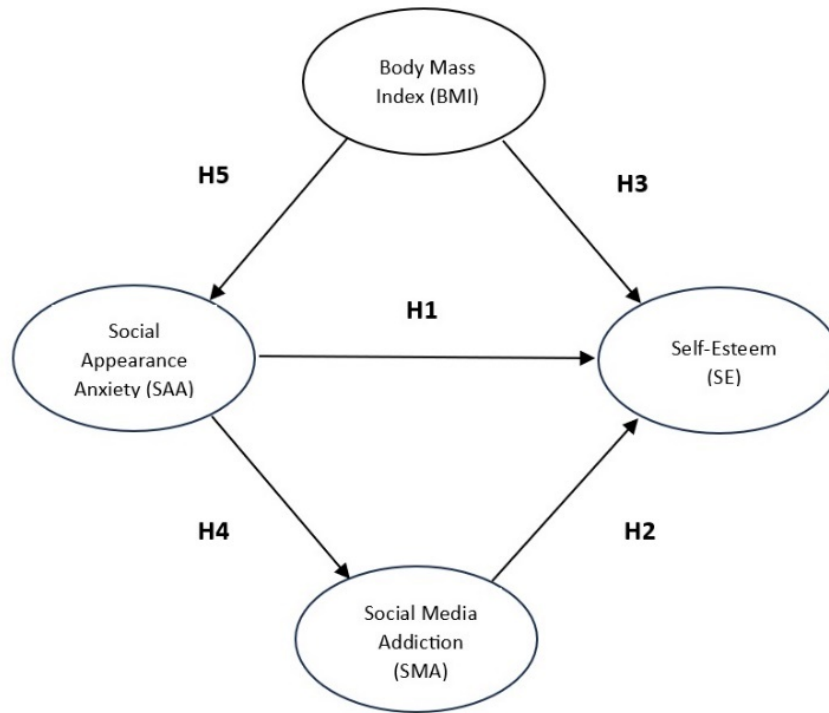


Figure 1. Research model

Table 1.

Factors and Expressions

Factors	Expression/Items
Self-Esteem (SE)	RSE1-RSE10
Social Appearance Anxiety (SAA)	SAA1-SAA16
Social Media Addiction (SMA)	SMA1-SMA7
Body Mass Index (BMI)	BMI

The factors of the research model and their expansions are given in Table 1.

2.2. Research Population and Sample

The research population is all of the approximately 30,000 students studying at Düzce University in the 2024-2025 academic year. It was decided to include at least 380 students who were randomly chosen from the faculties and agreed to participate in the study by applying the proportional stratified sampling method with a 5% margin of error, 95% confidence level and 50% survey response rate. A total of 415 students who agreed to participate in the study during the data collection process constituted the research sample.

2.3. Data Collection Tools

A personal information form including socio-demographic characteristics, Social Media Addiction Scale, Social Appearance Anxiety Scale, Rosenberg Self-Esteem Scale were used for collecting the data. Data were collected from individuals through face-to-face interviews.

Personal Information Form: The prepared form included the socio-demographic characteristics of the students (gender, age, income status, etc.) and some questions.

Social Media Addiction Scale: This scale was created by Çömlekçi & Başol (2019) by revising the functional impairment section, which is a sub-dimension of the internet addiction scale developed by Günüş (2009) and whose validity-reliability study was conducted. There are 7 items in the scale. The items of this scale were measured with a 5-point Likert-type assessment (1: Never; 2: Rarely; 3: Sometimes; 4: Often; 5: Always). An increase in the total scale score indicates an increase in social media addiction. The Cronbach' alpha was obtained to be 0.85 (Çömlekçi & Başol, 2019).

Social Appearance Anxiety Scale: It is a self-report scale developed by Hart et al. (2008) to measure the emotional, cognitive and behavioral concerns experienced by the individual regarding his/her appearance. It is a 5-point Likert-type scale consisting of 16 items (1: Not at all appropriate, 2: Not appropriate, 3: Somewhat appropriate, 4: Appropriate, 5: Completely appropriate). The first item is reverse scored. The Turkish adaptation research of the scale was carried out by Doğan (2010). An increase in the total scale score indicates an increase in social appearance anxiety. The Cronbach' alpha was found to be 0.93 (Doğan, 2010).

Rosenberg Self-Esteem Scale: This scale was developed by Rosenberg (1965) to measure global self-esteem, which includes both positive and negative emotions. The scale consists of 10 items and is one-dimensional. Different scoring approaches can be used in this scale using the Guttman scale. In this study, the total score was calculated using a 1-4 scoring system (1: Strongly Disagree, 2: Disagree, 3: Agree, 4: Strongly Agree). Items 2, 5, 6, 8, and 9 in the scale are reverse scored. Higher scores indicate higher self-esteem. The Turkish adaptation research of this scale was performed by Çuhadaroglu (1986) using a different scoring system (0-3 points). The Cronbach' alpha was found to be 0.88 (Çuhadaroglu, 1986).

2.4. Research Ethics Committee Permission

The study was conducted in accordance with the Declaration of Helsinki and approved by the Scientific Research and Publication Ethics Committee of Düzce University with the decision date of 23/01/2025 and the approval number 2025/35. In addition, students who agreed to participate in the study were informed about the purpose of the research and their approval was obtained.

2.5. Statistical Analysis

Before applying structural equation modeling, multivariate normality and multicollinearity assumptions and linearity of variables were evaluated with Mardia multivariate normality test, variance inflation factor (VIF) approach and scatter plots, respectively. Partial least squares structural equation modeling (PLS-SEM) approach was applied to examine the measurement model and structural model. The convergent validity, discriminant validity and reliability of the constructs of the PLS-SEM measurement model were examined. To determine convergent validity, standardized factor loadings (>0.50), Cronbach' alpha ($CA>0.70$ good), composite reliability ($0.60<CR<0.70$ acceptable, $CR>0.70$ good), average variance extracted ($AVE>0.50$ good, $CR>0.60$, $AVE<0.50$ acceptable) values were examined. Discriminant validity was evaluated according to the Fornell-Larcker criterion (Fornell-Larcker criterion $>AVE$) and heterotrait–monotrait ratio (HTMT <0.85) measure. In evaluation of the structural model fit, VIF ($VIF<5$), goodness-of-fit index ($GoF<0.10$ poor, $0.10<GoF<0.25$ moderate, $0.25<GoF<0.36$ good, $GoF>0.36$ very good), effect size ($0.02<f^2<0.14$ weak, $0.15<f^2<0.34$ moderate, $f^2>0.34$ high) and R^2 values ($R^2\geq 0.75$ substantial, $0.74<R^2<0.50$ moderate, $0.49<R^2<0.25$ weak, $R^2<0.25$ very weak) were used (Fornell & Larcker, 1981; Hair et al., 2021; Tenenhaus et al., 2005; Yilmaz & Surmelioglu, 2024). The RStudio 2024.12.1 program was used for all statistical analyses. $p<0.05$ was statistically significant.

3. RESULTS

3.1. Demographic Characteristics of Students

A total of 415 students participated in the study, 60% were female and 40% were male, and the mean age was 20.0 ± 3.7 . 52% of the students stated that they lived in a residence, 57.8% stated that their incomes were equal to their expenses, 21.4% did sports, 35.9% were involved in art, 29.6% stated that they ate healthy, 85.5% did not drink alcohol, and 71.1% did not smoke. The demographic characteristics of the students are given in detail in Table 2.

3.2. Assumption Checks for the Data Set

Since the data did not fit the multivariate normality assumption (Mardia Kurtosis statistics=81.51 $p<0.001$), estimates were obtained by applying the PLS-SEM approach. The VIF values of each item in the data set ranged from 1.25 to 4.11. Since $VIFs<5$, it was decided that there was no multicollinearity between the variables.

Table 2.

Demographic Characteristics of Students

Variable	Variable levels	Frequency	Percent (%)
Gender	Male	166	40
	Female	249	60
Place of stay	Family	155	37.3
	Residence	216	52
	Friends/alone	44	10.6
Income status	Income<Expense	62	14.9
	Income=Expense	240	57.8
	Income>Expense	113	27.2
Status of sport doing	Yes	89	21.4
	No	326	78.6
Status of art-making	Yes	149	35.9
	No	266	64.1
Healthy nutrition status	Yes	123	29.6
	No	292	70.4
Alcohol use status	Yes	60	14.5
	No	355	85.5
Smoking status	Yes	120	28.9
	No	295	71.1
BMI (Mean \pm Standard Deviation)		22.9 \pm 4.1	

3.3. Evaluation of the Measurement Model

This study includes 4 latent variables and a total of 34 items. The results of the construct reliability and validity of the model obtained as a result of the PLS-SEM analysis are given in Table 3. The AVEs of each construct vary between 0.356 and 1.00 in the model. It was observed that the Cronbach' alpha (CA) value of each factor was 0.811 and above, and the composite reliability (CR) values were 0.783 and above.

Table 3.

Construct Reliability and Validity

	Cronbach's Alpha (CA)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Self-Esteem	0.864	0.863	0.397
Social Appearance Anxiety	0.939	0.939	0.494
Social Media Addiction	0.811	0.783	0.356
Body Mass Index	-	-	1.000

Table 4.

Discriminant Validity

Fornell-Larcker Criterion	Self-Esteem	Social Appearance Anxiety	Social Media Addiction	Body Mass Index
Self-Esteem	0.630			
Social Appearance Anxiety	-0.556	0.703		
Social Media Addiction	-0.229	0.230	0.597	
Body Mass Index	-0.101	0.182	0.051	1.00
Heterotrait–monotrait ratio (HTMT)				
Self-Esteem	.			
Social Appearance Anxiety	0.602	.		
Social Media Addiction	0.249	0.245	.	
Body Mass Index	0.113	0.184	0.076	.

The Fornell-Larcker criterion and heterotrait–monotrait ratio (HTMT) of the model were calculated for discriminant validity and are given in Table 4. The Fornell-Larcker values on the diagonal range from 0.597 to 1.00, which are greater than the AVE values of each construct. The HTMT values range from 0.076 to 0.602. All of these values are less than 0.85.

3.4. Evaluation of Structural Model

VIF values were calculated to examine the multicollinearity between latent variables in PLS-SEM structural model. These values calculated from regression of SAA, SMA, BMI with SE were obtained as 1.089, 1.056 and 1.034, respectively. They are below 5. GoF value was calculated as 0.26 for PLS-SEM model ($0.25 < \text{GoF} < 0.36$).

R^2 values for each construct in the model were obtained as 0.32 for SE, 0.053 for SMA and 0.033 for SAA. Effect size (f^2) of each latent variable on SE was 0.481 for SAA ($f^2 > 0.34$), 0.023 for SMA ($f^2 < 0.14$), effect size of BMI on SAA was 0.037 ($f^2 < 0.14$) and effect size of SAA on SMA was 0.072 ($f^2 < 0.14$).

3.5. Factor Loadings of The PLS Structural Equation Model and Testing of Hypotheses

PLS-SEM model is given in Figure 2. The factor loadings between the items of each latent variable in this model vary between 0.325 and 0.928. Except for a few factor loadings, all factor loadings were greater than 0.5. All factor loadings have significant and positive effects. The results and decisions for each hypothesis testing are given in Table 5. The H1 hypothesis established as “social appearance anxiety negatively affects self-esteem” was accepted. A one-point increase in social appearance anxiety causes a 0.581 decrease in self-esteem score. “Social media addiction negatively affects self-esteem” hypothesis H2 was accepted. A one-point increase in social media addiction score causes a 0.118 decrease in self-esteem score. “BMI negatively affects self-esteem” hypothesis H3 was rejected and BMI has no significant effect on self-esteem. “Social appearance anxiety positively affects social media addiction” hypothesis H4 was accepted. When the social appearance anxiety score increases by one point, the social media addiction score increases by 0.260 points. “BMI positively affects social appearance anxiety” hypothesis H5 was accepted. An increase of one point in BMI results in a 0.188-point rise in social appearance anxiety score.

Table 5.

Hypothesis Testing Results-Direct Effects

Hypotheses	Path coefficients (Direct effects)	t-value	P-value	Result
H1: SAA→SE	-0.581*	-12.291	p<0.05	Supported
H2: SMA→SE	-0.118*	-2.261	p<0.05	Supported
H3: BMI→SE	0.008	0.167	NS	Not Supported
H4: SAA→SMA	0.260*	4.964	p<0.05	Supported
H5: BMI→SAA	0.188*	3.278	p<0.05	Supported

*p<0.05; NS: Not significant

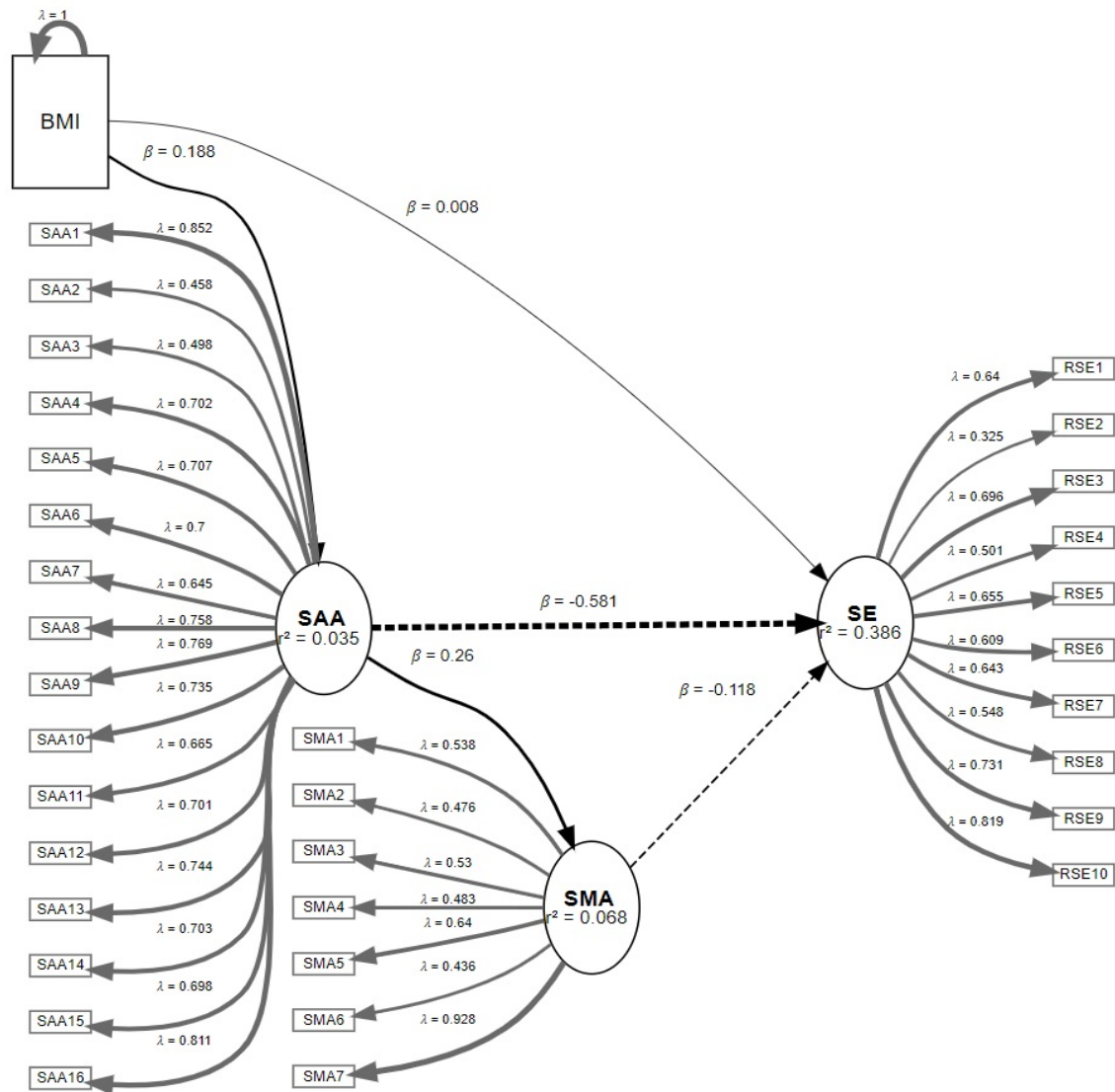


Figure 2. PLS structural equation model

Besides the direct effects in the PLS-SEM model, indirect and total effects were also calculated. These effects are given in Table 6. Except for the total effect of BMI on SE, all other total effects in the model were found to be significant ($p < 0.05$). The total effect of SAA on SE in the model was found to be -0.612, and the indirect effect was found to be -0.031. BMI had significant indirect effects on both SE (-0.109) and SMA (0.049) through SAA. However, the indirect effect of BMI on SE (-0.006) through SAA and SMA was not significant.

Table 6.
Total and Indirect Effects in PLS-SEM Model

Relationships	Total effects	Relationships	Indirect effects
SAA→SE	-0.612*	SAA→SMA→SE	-0.031*
SMA→SE	-0.118*	BMI→SAA→SE	-0.109*
BMI→SE	-0.107	BMI→SAA→SMA→SE	-0.006
BMI→SMA	0.049*	BMI→SAA→SMA	0.049*
SAA→SMA	0.260*		-
BMI→SAA	0.188*		-

* $p < 0.05$

4. DISCUSSION AND CONCLUSION

The effects of social appearance anxiety, body mass index, and social media addiction on self-esteem of university students were simultaneously examined with the PLS-SEM model in this study. It was determined that the convergent validity of the PLS-SEM model ($CR > 0.60$ and $AVE < 0.50$ acceptable) was at an acceptable level, discriminant validity (Fornell-Larcker criterion $> AVE$, HTMT < 0.85) was provided, and construct reliability (Cronbach' alpha values > 0.70 , CR values > 0.70) was at a good level. In addition, according to the goodness-of-fit index of the structural model, the fit was at a good level ($0.25 < GoF = 0.26 < 0.30$), the effect size values were high and weak (0.023 to 0.481), and the R^2 values were generally weak (0.023 to 0.32). Some values may have been obtained low due to the inclusion of a single-item factor in the model and the establishment of many complex relationships between latent variables.

In the study, it was obtained that as university students' social appearance anxiety increased, their self-esteem decreased significantly, and this relationship had the greatest effect in the model. This result is similar to that of the studies by Hawi & Samaha (2017), Liao et al. (2023), Lau & Idang (2022), Topuz et al. (2019), Behera & Pandey (2025). In addition, Colak et al. (2023) and Aydoğan et al (2024) found that students with positive body image perception had high self-esteem. In a study performed by Göbel et al. (2023) on female participants, they found that social appearance anxiety had a negative significant direct effect on self-esteem. However, in Khan's (2024) study, in which 60 Indian female and 60 Indian male between the ages of 18-25 were selected using a non-probability sampling method (snowball sampling), found no significant relationship between self-esteem and social appearance anxiety. In our study, we determined our study group, which had a higher number of participants ($n=415$), with a similar age range, and 60% female participants, using a probability sampling method. According to our study findings, it can be said that the reason why Khan's (2024) study result is different is due to the presence of participants from different cultures in the study, the different numbers of participants and female participants, as well as the different representativeness of the sampling methods.

This study was determined that as university students' social media addiction levels increased, their self-esteem decreased. This result was found to be consistent with that of the most comprehensive study with 23,532 Norwegian participants (Adreassen et al., 2017) as well as with the results of studies conducted in different cultures and in Turkey in the literature (Aydoğan et al., 2024; Colak et al., 2023; Baykal, 2022; Acar et al., 2022; Hou et al., 2019;

Baturay & Toker, 2017; Hawi & Samaha, 2017; Vogel et al., 2014). However, although the gender ratios and age ranges of the participants in the studies were similar, we observed that this result was not consistent with the results of Buran Köse & Doğan (2018) and Akın et al. (2024). In addition, there are also results in the literature that people with low self-esteem are more addicted to the Internet (Armstrong et al., 2000) or that when Internet use increases, depression increases and self-esteem decreases (Jeon, 2005).

Although the direct effect of BMI on self-esteem of university students was not obtained to be significant, the indirect effect of BMI on self-esteem through social appearance anxiety was significant. It was found that increasing body mass index decreased self-esteem through social appearance anxiety. However, in the study carried out by ALAhmari et al. (2019) on female participants, they found that BMI had a negative significant effect on self-esteem, while Göbel et al. (2023) found that it had a positive significant effect. In addition, Göbel et al. (2023) found the indirect effect of social appearance anxiety on self-esteem through BMI to be significant and positive. In addition, this research was obtained that as the social appearance anxiety levels of university students increased, their social media addiction levels also increased significantly. Our study result was similar to the results of Özer & Güzel (2023), Sezgin & Uzun (2023), İnik et al. (2024), Baltacı et al. (2021) and Kaya (2024). Additionally, this study found that social appearance anxiety had a negative effect on self-esteem through social media addiction.

This model was obtained that as university students' BMI values increased, their social appearance anxiety levels also increased significantly. Ahadzadeh et al. (2018) and ALAhmari et al. (2019) found a significant relationship between high body mass index and low body image in their studies.

It is clear that self-esteem, social media addiction, social appearance anxiety, and BMI are in complex relationships with each other and that this study has contributed to revealing the causal relationships between them. We thought that the results of this study may be important especially for researchers providing guidance and counseling services to university students.

REFERENCES

- Acar, I. H., Avcılar, G., Yazıcı, G., & Bostancı, S. (2022). The roles of adolescents' emotional problems and social media addiction on their self-esteem. *Current Psychology*, 41(10), 6838-6847. <https://doi.org/10.1007/s12144-020-01174-5>
- Ahadzadeh, A. S., Rafik-Galea, S., Alavi, M., & Amini, M. (2018). Relationship between body mass index, body image, and fear of negative evaluation: Moderating role of self-esteem. *Health Psychology Open*, 5(1). <https://doi.org/10.1177/2055102918774251>

- ALAhmari, T., Alomar, A. Z., ALBeeybe, J., Asiri, N., ALAjaji, R., ALMasoud, R., & Al-Hazzaa, H. M. (2019). Associations of self-esteem with body mass index and body image among Saudi college-age females. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 24, 1199-1207. <https://doi.org/10.1007/s40519-017-0471-0>
- Akın G., Söyler, H. Ç., & Müezzın, E. (2024). Üniversite öğrencilerinde sosyal medya bağımlılığı benlik saygısı ve psikolojik dayanıklılık arasındaki ilişkinin incelenmesi. *The Journal of Social Sciences*, 71(71), 305-320. <http://dx.doi.org/10.29228/SOBIDER.76983>
- Amil, O., & Bozgeyikli, H. (2015). Investigating the relationship between social appearance anxiety and loneliness of Turkish University youth. *Journal of Studies in Social Sciences*, 11(1), 68–96.
- Andreassen, C. S., Pallesen, S., & Griffiths, M. D. (2017). The relationship between addictive use of social media, narcissism, and self-esteem: Findings from a large national survey. *Addictive Behaviors*, 64, 287–293. <https://doi.org/10.1016/j.addbeh.2016.03.006>
- Armstrong, L., Phillips, J. G., & Saling, L. L. (2000). Potential determinants of heavier Internet usage. *International Journal of Human-Computer Studies*, 53, 537–550. doi:10.1006/ijhc.2000.0400
- Aydoğan, D. (2024). Sosyal medya bağımlılığı, benlik saygısı ilişkisinde beden memnuniyetinin aracılık rolü analizi. *Erciyes İletişim Dergisi*, 11(1), 135-153. <https://doi.org/10.17680/erciyesiletisim.1343524>
- Baltacı, U. B., Yılmaz, M., & Traş, Z. (2021). The relationships between internet addiction, social appearance anxiety and coping with stress. *International Education Studies*, 14(5), 135-144. <https://doi.org/10.5539/ies.v14n5p135>
- Baturay, M. H., & Toker, S. (2017). Self-esteem shapes the impact of GPA and general health on Facebook addiction: A mediation analysis. *Social Science Computer Review*, 35(5), 555–575. doi:10.1177/0894439316656606
- Baykal, S. (2022). Üniversite öğrencilerinin sosyal medya bağımlılığı ile benlik saygısı arasındaki ilişkinin incelenmesi (Master's thesis, İstanbul Gelişim Üniversitesi Lisansüstü Eğitim Enstitüsü).
- Behera, N., & Pandey, K. (2025). The Mediation effect of resilience and self-esteem in the relationship between social appearance anxiety and psychological adjustment. *Journal of The Indian Academy of Applied Psychology*, 1(1), 215. <https://doi.org/10.5281/zenodo.14678961>
- Boursier, V., Gioia, F., Musetti, A., & Schimmenti, A. (2020). Facing loneliness and anxiety during the COVID-19 isolation: the role of excessive social media use in a sample of Italian adults. *Frontiers in psychiatry*, 11, 586222. <https://doi.org/10.3389/fpsy.2020.586222>
- Buran Köse, Ö., & Doğan, A. (2018). The relationship between social media addiction and self-esteem among Turkish university students. *Addicta: The Turkish Journal on Addictions*, 6, 175–190. <http://dx.doi.org/10.15805/addicta.2019.6.1.0036>
- Colak, M., Bingol, O. S., & Dayi, A. (2023). Self-esteem and social media addiction level in adolescents: The mediating role of body image. *Indian journal of psychiatry*, 65(5), 595-600. https://doi.org/10.4103/indianjpsychiatry.indianjpsychiatry_306_22
- Çömlekçi, M. F., & Başol, O. (2019). Gençlerin sosyal medya kullanım amaçları ile sosyal medya bağımlılığı ilişkisinin incelenmesi. *Manisa Celal Bayar Üniversitesi Sosyal Bilimler Dergisi*, 17(4), 173-188. <https://doi.org/10.18026/cbayarsos.525652>
- Çuhadaroğlu, F. (1986). Adölesanlarda benlik saygısı [Self-esteem in adolescents] (Master's thesis, Hacettepe University Faculty of Medicine, Ankara, Turkey). Retrieved from <https://tez.yok.gov.tr/UlusalTezMerkezi/>
- Dijital 2024: Küresel Görünüm Raporu. Türkiye İşveren Sendikaları Konfederasyonu. <https://www.tisk.org.tr/dokuman/dijital-2024-kuresel-gorunum-raporu.pdf>
- Doğan, T. (2010). Sosyal Görünüş Kaygısı Ölçeği'nin (SGKÖ) Türkçe Uyarlaması: Geçerlik ve Güvenirlik Çalışması. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 39(39), 151-159.
- Doğan, U., & Çolak, T. S. (2016). Self-concealment, social network sites usage, social appearance anxiety, loneliness of high school students: a model testing. *Journal of Education and Training Studies*, 4(6), 176-183. <http://dx.doi.org/10.11114/jets.v4i6.1420>
- Fornell, C., & Lacker, D. F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol.18: 39-50. doi:10.1177/002224378101800104

- Göbel, P., Şanlıer, N., Yılmaz, S., & Kocabaş, Ş. (2023). Social appearance anxiety and self-esteem in women: could body mass index have a mediating role?. *Behavioral Psychology= Psicología Conductual*, 31(1), 25-37. <https://doi.org/10.51668/bp.8323102n>
- Günüç, S. (2009). İnternet Bağımlılık Ölçeği'nin geliştirilmesi ve bazı demografik değişkenler ile İnternet bağımlılığı arasındaki ilişkilerin incelenmesi (Yüksek lisans tezi, Yüzüncü Yıl Üniversitesi, Sosyal Bilimler Enstitüsü, Van)
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial least squares structural equation modeling (PLS-SEM) using R: A workbook (p. 197). Springer Nature.
- Hart, T.A., Flora, D.B., Palyo, S.A., Fresco, D.M., Holle, C., & Heimberg, R.G. (2008). Development and Examination of the Social Appearance Anxiety Scale. *Assessment*, 15, 48 - 59. DOI:10.1177/1073191107306673
- 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/10.1177/0894439316660340>
- Hou, Y., Xiong, D., Jiang, T., Song, L., & Wang, Q. (2019). Social media addiction: Its impact, mediation, and intervention. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 13(1), Article 4. <https://doi.org/10.5817/CP2019-1-4>
- İnik, H., Akçakesea, A., & Demirel, D. H. (2024). Exploring Gender differences, perceptions, and behaviors: the interplay between social media addiction and social appearance anxiety among young adults. *Studies in Psychological Science*, 2(3), 35-55. doi:10.56397/SPS.2024.09.05
- Jeon, J. H. (2005). The effect of the extent of internet use and social supports for adolescent depression and self-esteem (Master's thesis, The Graduate School of Yonsei University, Seoul).
- Kaya, B. (2024). Internet addiction and social appearance anxiety: a meta-analysis. *Educational Academic Research*, (54), 144-153. DOI: 10.33418/education.1556808
- Khan, A. (2024). Impact of social media usage and social appearance anxiety on social relationship and self-esteem among young adults. *International Journal of Interdisciplinary Approaches in Psychology*, 2(5), 1446-1461.
- Lau, G. S. J., Idang, J. (2022). The relationship between selfie-editing, self-esteem, and social appearance anxiety among university students. *International Journal of Advanced Research in Future Ready Learning and Education*, 26(1), 1-8. DOI: <https://doi.org/10.37934/frle.26.1.18>
- Liao, J., Xia, T., Xu, X., & Pan, L. (2023). The effect of appearance anxiety on social anxiety among college students: sequential mediating effects of self-efficacy and self-esteem. *Behavioral Sciences*, 13(8):692. <https://doi.org/10.3390/bs13080692>
- Mann, M., Hosman, C.M., Schaalma, H., & de Vries, N.K. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health education research*, 19 4, 357-72 . <https://doi.org/10.1093/her/cyg041>
- Özer, P., & Güzel, Ş. (2023). Sosyal görünüş kaygısı ve sosyal medya bağımlılığının estetik işlem yaptırma algısı ile ilişkisi. *Süleyman Demirel Üniversitesi Vizyoner Dergisi*, 14(40), 1412-1432. <https://doi.org/10.21076/vizyoner.1258228>
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of internet use. *Journal of Broadcasting & Electronic Media*, 44(2), 175–196. https://doi.org/10.1207/s15506878jobem4402_2
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Sezgin, M. & Uzun, B.N. (2023). Mediating role of social approval need in the relationship between social media addiction and social appearance anxiety, *International Journal of Education Technology and Scientific Researches*, 8(24), 2546-2558.
- Tenenhaus, M., Vinzi, V. E., Chatelin, Y. M., & Lauro, C. (2005). PLS path modeling. *Computational statistics & data analysis*, 48(1), 159-205. DOI:10.1016/j.csda.2004.03.005
- Topuz, R., Bahadır, Z., & Erdogan, Ç. H. (2019). Examining the social appearance anxiety and self-esteem levels of students of the sport management department. *Asian Journal of Education and Training*, 5(1), 74-79. DOI: 10.20448/journal.522.2019.51.74.79

- Vogel, E. A., Rose, J. P., Roberts, L. R., & Eckles, K. (2014). Social comparison, social media, and self-esteem. *Psychology of Popular Media Culture*, 3, 206–222. <https://doi.org/10.1037/ppm0000047>
- Yılmaz V., Surmelioglu Y. (2024). Measuring automobile service quality with the European customer satisfaction index model (ECSI): the moderating effect of trust. *The TQM Journal*, 1754-2731. DOI: 10.1108/tqm-10-2023-0315
-

Fisun Kaşır Kesin

Orcid: 0000-0002-6524-2997

CONTACT DETAILS

E-mail:
kaskir.fisun@gmail.com
Address: Vocational School of
Social Sciences, Division of
Property Protection and
Security, Düzce University,
Düzce, Türkiye

BIOGRAPHY

Dr. Fisun Kaşır Kesin completed her Ph.D. in Biostatistics at Bursa Uludağ University, Institute of Health Sciences, with a dissertation on the comparison of bias assessment methods in meta-analysis. She holds a master's degree in Statistics from Eskişehir Osmangazi University, where her thesis focused on the joint use of log-linear models and goodness-of-fit analysis applied to smoking habits among high school students. Additionally, she earned a bachelor's degree in Political Science and Public Administration from Anadolu University. She is currently affiliated with the Vocational School of Social Sciences at Düzce University, where she contributes to academic and applied research in statistics and biostatistics, particularly within the fields of health and social sciences.
