



The contribution of social media addiction to adolescent LIFE: Social appearance anxiety

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Abstract

The use of social media by adolescents, who spend about 3 hours a day on social media, is dominated by visual communication. Nowadays, appearance ideals are presented through social media platforms. Exposure to these popular ideals of appearance could cause appearance-based anxiety and adolescents to develop binge-eating behavior. This cross-sectional study was conducted to determine social appearance anxiety, social media addictions, and emotional eating behaviors of adolescents. 1363 adolescents, living in the Central Anatolian Region of Turkey, were included in the study. Data were collected with a Questionnaire form, the Social Appearance Anxiety Scale (SAAS), Social Media Addiction Scale (SMAS), and Emotional Eating Scale (EES-C). 24.4% of adolescents are social media addicts. No relationship was found between adolescents' social appearance anxiety, social media addictions, and emotional eating behaviors. However, social appearance anxiety and social media addictions of girls, those who perceive their family income as low and who think that they are influenced by social media influencers have higher anxiety. The value of this study is that it shows that gender, low income perception, time spent on social media, being influenced by influencers, following influencers who share diet and nutrition content, and social media addiction are associated with social appearance anxiety. As a result, it is thought that social media addiction and being affected by social media influencers increase social appearance anxiety in adolescents and pose a risk in terms of adolescents' mental health.

Keywords Adolescent · Eating behavior · Social appearance anxiety · Social media

Introduction

Adolescence is a period in which biological, social, and psychological changes happen and identity discovery, self-expression, friendships, and peer acceptance are of great importance for adolescents (Dahl et al., 2018). Adolescents are especially eager to explore peer relationships and social media offers adolescents the opportunity to interact with peers anywhere and anytime (Spies Shapiro & Margolin, 2014). On the other hand, although social acceptance levels in real world for adolescents are open to comment, the number of “friends”, “likes”, and “views” they reach through social media platforms clearly measure their social

acceptance levels (Firth et al., 2019). Social media platforms are very important for adolescents, as they determine the level of acceptance by their peers (Gerwin et al., 2018). Moreover, since social media creates a relatively free space from parental monitoring, adolescents can satisfy their psychosocial needs as they wish (Dahl et al., 2018). Studies have reported that 93–97% of adolescents aged 13–17 use at least one social media platform and are active on social media platforms for approximately 3 hours a day (Nesi & Prinstein, 2015; Barry et al., 2017; Pew Research Center, 2018; Vannucci et al., 2020).

As the usage of social media constantly causes adolescents to compare themselves socially with their peers, it causes adolescents to be psychologically affected negatively. Social media posts reflecting certain ideals encourage adolescents to make comparisons with their peers in terms of body image, life experiences, and abilities. This situation increases social pressure in adolescents and inconsistencies between ideals imposed on the public and their egos could cause psychological distress (Oswald et al., 2020; Rodgers

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& Melioli, 2016). Recent research has determined a relationship between the time spent on social media by adolescents and depression, decreased academic achievement, dissatisfaction with body image, risky behaviors, and disordered eating behaviors (Nesi & Prinstein, 2015; Oswald et al., 2020; Twenge et al., 2018). A systematic review examining the effect of social media on dissatisfaction with body image and eating disorders stated that there was a significant relationship between social media use and eating disorders in adolescents and young adults (Holland & Tiggemann, 2016). For this reason, it is important to investigate the effect of social media use on adolescents' emotional eating behaviors and social appearance anxiety. However, in the literature review, there are studies examining the effect of social media on body image in adolescents; no study has been found examining the effect of social media on social appearance anxiety and emotional eating behavior. It is considered that this study will fill this gap in the literature.

Therefore, this research was conducted to determine social appearance anxiety, social media addictions, and emotional eating behaviors of adolescents. The following questions will be answered in this research:

1. What is the level of social media addiction of adolescents?
2. What is the level of social appearance anxiety of adolescents?
3. What is the level of emotional eating behaviors of adolescents?
4. Is there a relationship between social appearance anxiety of adolescents and social media addictions and emotional eating behaviors?

Methods

This is a descriptive and correlational study. In the current study, the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist for reporting cohort, case-control, and cross-sectional studies, was used.

Populations

The study population consisted of high school adolescents, in a city in Turkey's Central Anatolia region ($N=8430$). In the study, 1363 adolescents participated. Based on the sample size ($n=1363$), the power of the study was calculated as 99% at the 0.3 effect size and 0.95 confidence level in the computer environment.

The study was carried out from May 01, 2021 to June 31, 2021 in state high schools in a city of Turkey's Central Anatolia region. The study was approved by the provincial directorate of national education and the ethics committee.

The researchers visited the school management, explained the aim of the study, and asked help to reach adolescents and their parents. Collaboration was done with all the administrators of these schools and the data were collected online. The adolescents and their parents used the Google forms application to reach the informed consent forms and data collection tools. The consent form, which was prepared according to the Helsinki Declaration, included the study aim and an overview of the study. The consent form also provided the telephone number of the principal author (author 1), stating that parents and children could call at any time to ask questions about the study. The data of the adolescents, who marked the options "I agree to participate in this study" by adolescents in the data collection tool, were included in the study. Adolescents who agreed to participate in the study and who had similar sociodemographic characteristics were included in the study.

Data collection tools

The data were collected with a questionnaire form, Social Appearance Anxiety Scale (SAAS), Social Media Addiction Scale (SMAS), and Emotional Eating Scale-Child and Adolescent Form (EES-C).

The questionnaire form This form comprised of 18 questions concerning demographic characteristics of adolescents (age, gender, and social media usage characteristics, etc.).

The social appearance anxiety scale (SAAS) The Social Appearance Anxiety Scale was developed to assess people's social appearance anxiety by Hart et al. (2008). The scale includes mental, affective, and behavioral expressions related to social appearance concerns of individuals. The scale consists of 16 items and in a 5-point Likert type. The Turkish adaptation and the adolescent adaptation study were done by Doğan. The Cronbach's alpha value of the SAAS was found to be 0.91 (Doğan, 2011) and in this study it was 0.95.

The social media addiction scale (SMAS) The Social Media Addiction Scale was developed in 2016 by Van den Eijnden et al., 2016 (Cronbach $\alpha=0.82$). The Turkish adaptation of the scale was conducted in 2007 by Taş (Cronbach's $\alpha=0.76$). A score between 0 and 9 is taken from the scale, with a cut-off point of 5. Items are scored as "No = 0" and "Yes = 1". Adolescents with 5 or above points assess as a social media addict. The Cronbach's alpha value of the SMAS was found to be 0.76 (Taş, 2017) and in this study it was 0.76.

The emotional eating scale-child and adolescent form (EES-C) The EES-C was developed to assess emotional eating by Tanofsky-Kraff et al. (2007). The Turkish adaptation of the scale was conducted by Bektaş et al. (2016). The five-point Likert-type scale consists of 26 items describing emotional

state-related eating behaviors. The scale consists of three sub-dimensions: anxiety, anger and frustration (EES-C-AAF), depressive symptoms (EES-C-DEP), and feeling unsettled (EES-C-UNS). A score between 25 and 125 is taken from the scale, where the item of happiness is not included in the scoring. As the score obtained from the scale increases, it is interpreted as an increase in eating behavior in response to a negative mood (Bektaş et al., 2016). While the Cronbach's alpha values for the three subscales of the original scale were 0.83–0.95, respectively, they were 0.72–0.86 in the Turkish version, and in this study, they were 0.78–0.93.

Data collection

The data collection tools were transferred to the electronic environment via the Google forms application. Due to the coronavirus pandemic measures, the form was collected online via the WhatsApp application. Students were told that participation in the study was voluntary. Voluntary consent was stated at the beginning of the questionnaire and the students, who accepted to participate in the study, started to answer the questions after they confirmed that they volunteered electronically. It took approximately 15–20 minutes to fill out the form. Electronic data collection was preferred because it allows participants to make an unbiased assessment because they are not influenced by others; it sets the time to answer questions, and gives answers that are more accurate because identities are not revealed. After the data collection forms were shared with the adolescents, 1415 adolescents filled out the questionnaires. In order to identify duplication in the data, students were asked to write an anonymous number (the first two letters of their names, the first two letters of their surnames and the last 2 digits of their student number) in the data collection forms. When the data set was analyzed, 52 duplications were defined according to the anonymous number and these duplications were excluded from the data set. A total of 1363 adolescents participated in the study.

Data analysis

The data were analyzed using SPSS 22 (IBM Corp., Armonk, New York, USA). Descriptive statistics (number, percentage, mean, and standard deviation), Mann-Whitney U test, Kruskal-Wallis H test, Spearman's Correlation Analysis, and Hierarchical Regression Analysis were used for data evaluation. Hierarchical regression analysis was conducted to detect the determinants of social appearance anxiety in the study. Model 1 incorporated independent variables relating to personal demographics (gender and perceived income). Model 2 added the variables of social media addiction and social media usage features (Daily time online, being influenced by influencers, the environments where influencers share). A standardized coefficient beta (β) was used to compare the relative effect of the predictors on social appearance

anxiety, where a higher standardized β is indicative of a greater relative effect (Field, 2018). Statistical significance level was accepted as $p < 0.05$ at a 95% confidence interval.

Ethical approval

Ethics Committee (23/02/2021–87) and institutional permission (27/04/2021–55,213) were obtained to conduct the research. Before the study, all the adolescents participating in the study were explained the purpose of study. Consent was obtained from the adolescents and one of their parents to participate in the study.

Results

The descriptive characteristics of adolescents

The mean age of the adolescents was 15.93 ± 1.22 years and 63.8% of them were girls. 83.1% of the adolescents have a nuclear family structure and 63.4% consider their family's income level to be normal. The mean scores of SAAS and Social Media Addiction Scale were 36.47 ± 15.49 and 2.9 ± 2.37 , respectively. Since adolescents with a total score of >5 on the social media addiction scale were considered addicted, 24.4% of the adolescents in this study were social media addicts. The mean scores of the EES-C-UNS, EES-C-DEP, EES-C-AAF, and EES-C total scale adolescents were 12.77 ± 5.28 , 18.06 ± 5.49 , 26.3 ± 11.32 , and 53.53 ± 19.6 , respectively (Table 1).

The social media usage characteristics of adolescents

According to social media usage characteristics, 25.7% of the adolescents participating in the study have spent a mean of 4 hours a day on social media. The majority of adolescents actively use 1 and 2 social media platforms (33.5%, 33.2%, respectively) and 10.8% have a YouTube channel. Instagram is the most used social media platform among the adolescents (71.6%). The adolescents mostly share their own photos and other people's posts on their social media accounts (40.4%; 35.7%, respectively). While 51.7% of adolescents follow social media influencers, 27.1% follow 4 or more influencers. Of the adolescents, 44.2% follow influencers, who share about entertainment and 21.8% about make-up and personal care. In addition, 67.7% of the adolescents participating in the study accept that they are influenced by social media influencers (Table 2).

The SAAS, social media addiction, and EES-C characteristics of adolescents

The SAAS and Social Media Addiction scale mean scores of girls, adolescents who perceive their family income as low,

Table 1 Descriptive characteristics of adolescents

Descriptive characteristics	<i>n</i> /mean	%/SD
Gender		
Girl	870	63.8
Boy	493	36.2
Age	15.93	1.22
Perceived income		
Low	290	21.3
Normal	864	63.4
High	209	15.3
Family structure		
Nuclear family	1133	83.1
Broken family	54	4.0
Extended family	176	12.9
Social Appearance Anxiety Total Score	36.47	15.49
Social Media Addiction Total Score	2.9	2.37
Not Social Media Addict	1030	75.6
Social Media Addict	333	24.4
EES-C Total Score	53.53	19.6
EES-C-UNS	12.77	5.28
EES-C-AAF	26.3	11.32
EES-C-DEP	18.06	5.49
Total	1363	100.0

adolescents, who actively follow influencers and who think that they are influenced by influencers, are higher ($p < 0.001$). Adolescents, who mostly share others' posts on social media, have higher SAAS scale mean scores than those who share their own photos ($p < 0.001$). The SAAS mean scores of adolescents, who use Tik-Tok the most, have higher mean scores than adolescents, who use Snapchat and Facebook. In addition, the SAAS and Social Media Addiction scale mean scores of adolescents, who use Tik-Tok, were higher than adolescents using Snapchat, Instagram, and Facebook ($p < 0.001$). The SAAS and Social Media Addiction scale mean scores of adolescents, who follow influencers, who share makeup/personal care and nutrition/diet content, were higher than adolescents, who follow influencers, who share exercise and digital game content ($p < 0.001$). In addition, the EES-C mean scores of adolescents, who follow influencers, who share nutrition/diet content have higher mean scores than adolescents, who follow influencers, who share exercise and entertainment content ($p < 0.05$) (Table 3).

The relationship between adolescents' SAAS, social media addictions, and ESS-C

There is a moderate positive relationship between the time adolescents spend on social media and SAAS, Social Media Addiction Scale, and a weak positive relationship between the EES-C scale mean scores ($r = 0.334$, $p < 0.001$, $r = 0.487$, $p < 0.001$; $r = 0.058$, respectively). There is a weak positive

Table 2 Social media usage characteristics of adolescents

Social Media Usage Characteristics	<i>n</i>	%
Daily time online		
0–1 hour	95	6.9
1 hour	148	10.9
2 hour	304	22.3
3 hour	342	25.1
4 hour	350	25.7
>5 hour	124	9.1
The number of social media platforms were using		
1	456	33.5
2	453	33.2
3	269	19.7
4	141	10.4
5	44	3.2
Most used social media platforms		
Facebook	33	2.4
Instagram	976	71.6
Twitter	105	7.7
Snapchat	130	9.6
Tik-Tok	119	8.7
Shares made		
Selfie	206	15.1
Video	120	8.8
Own photo	551	40.4
Posts of others	486	35.7
Having Youtube channel		
Yes	147	10.8
No	1216	89.2
Actively following social media influencers		
Yes	705	51.7
No	658	48.3
Number of social media influencers followed as actively		
None	419	30.8
1	172	12.6
2	239	17.5
3	164	12.0
>4	369	27.1
Social media influencer Posts/Interests		
Makeup, personal care	297	21.8
Exercise	106	7.8
Nutrition and diet	86	6.3
Funny posts	603	44.2
Digital game	271	19.9
Accepting that they are influenced by social media influencers		
Yes	440	32.3
No	923	67.7
Total	1363	100.0

correlation between the number of social medias actively used by adolescents and the SAAS and the Social Media Addiction Scale ($r=0.083$ $p<0.001$; $r=0.232$, $p<0.001$, respectively). There is a weak positive correlation between the number of influencers actively followed by adolescents and SAAS and Social Media Addiction Scale ($r=0.144$, $p<0.001$; $r=0.214$, $p<0.001$, respectively). There is a moderately positive correlation between the SAAS and social media addiction scale mean scores of adolescents ($r=0.581$, $p<0.001$) (Table 4).

In the study, hierarchical regression analysis was performed to detect the determinants of adolescents' social appearance anxiety. The determinants of social appearance anxiety are best described in model 2. Gender, perceived low income, time spent on social media, being influenced by influencers, following influencers sharing digital games, diet and nutrition content, and social media addiction were found to be associated with social appearance anxiety ($R^2=0.31$; $p<0.001$). In this model, the best

Table 3 The distribution of the adolescents' emotional eating, social appearance anxiety and social media addiction scores, and their descriptive characteristics

Descriptive Characteristics	SAAS		SMAS		EES-C	
	Mean ± sd	Test/p	Mean ± sd	Test/p	Mean ± sd	Test/p
Gender						
Girl	38.23 ± 15.94	Z = -5.612	3.23 ± 2.45	Z = -6.702	52.95 ± 19.66	Z = -1.816
Boy	33.37 ± 14.13	$P < 0.001$	2.31 ± 2.12	$P < 0.001$	54.56 ± 19.48	$P = 0.069$
Perceived income						
Low	40.55 ± 16.44 ^a	KW = 25.791 $p < 0.001$	3.36 ± 2.57 ^a	KW = 12.554 $p = 0.002$	53.42 ± 21.2	KW = 1.887 $p = 0.389$
Normal	35.59 ± 15.02 ^b		2.82 ± 2.32 ^b		53.88 ± 19.22	
High	34.48 ± 15.13 ^b		2.58 ± 2.23 ^b		52.28 ± 18.87	
Shares made						
Selfie	35.48 ± 15.85 ^{ab}	KW = 19.477 $p < 0.001$	2.82 ± 2.48	KW = 2.916 $P = 0.405$	52.40 ± 18.46	KW = 3.860 $p = 0.277$
Video	38.1 ± 14.91 ^{ab}		2.85 ± 2.29		50.93 ± 19.72	
Own photo	34.72 ± 14.79 ^a		2.81 ± 2.3		53.88 ± 19.27	
Posts of others	38.48 ± 16.01 ^b		3.04 ± 2.43		54.26 ± 20.38	
Most used social media platforms						
Facebook	27.96 ± 11.42 ^a	KW = 26.612 $p < 0.001$	1.81 ± 1.75 ^a	KW = 27.548 $p < 0.001$	57.54 ± 17.36	KW = 6.245 $p = 0.182$
Instagram	36.76 ± 15.73 ^{bc}		2.9 ± 2.34 ^a		53.5 ± 19.6	
Twitter	36.15 ± 15.31 ^{bc}		3.03 ± 2.67 ^{ab}		55.65 ± 20.7	
Snapchat	33.35 ± 13.59 ^{ac}		2.3 ± 2.14 ^a		50.71 ± 18.07	
Tik-Tok	40.21 ± 15.28 ^b		3.71 ± 2.54 ^b		53.94 ± 20.6	
Actively following Influencers						
Yes	38.54 ± 16.49	Z = -4.504	3.34 ± 2.41	Z = -7.401	53.7 ± 20.06	Z = -0.208
No	34.25 ± 14.01	$p < 0.001$	2.42 ± 2.24	$p < 0.001$	53.36 ± 19.1	$p = 0.836$
Number of influencers followed						
None	33.92 ± 14.36 ^a	KW = 28.774 $p < 0.001$	2.3 ± 2.29 ^a	KW = 65.041 $p < 0.001$	53.52 ± 19.64	KW = 1.439 $p = 0.837$
1	35.29 ± 15.44 ^{ab}		2.58 ± 2.3 ^{ab}		52.82 ± 18.89	
2	36.1 ± 15.5 ^{abc}		3.1 ± 2.3 ^{bc}		51.69 ± 17.04	
3	37.41 ± 14.45 ^{bc}		3.06 ± 2.2 ^{bc}		53.7 ± 17.95	
>4	39.75 ± 16.6 ^c		3.51 ± 2.43 ^c		55.0 ± 21.98	
Influencer posts/Interests						
Makeup, personal care	39.0 ± 16.11 ^a	KW = 23.688 $p < 0.001$	3.7 ± 2.5 ^a	KW = 52.429 $p < 0.001$	52.09 ± 19.18 ^a	KW = 10.656 $p = 0.031$
Exercise	32.56 ± 13.84 ^b		2.21 ± 2.37 ^b		54.45 ± 21.61 ^{ab}	
Nutrition and diet	40.7 ± 17.96 ^a		2.9 ± 2.23 ^{ab}		61.86 ± 25.21 ^b	
Funny posts	36.0 ± 14.67 ^{ab}		2.73 ± 2.31 ^b		52.67 ± 18.49 ^a	
Digital game	34.94 ± 15.74 ^b		2.61 ± 2.2 ^b		54.04 ± 19.08 ^{ab}	
Accepting that they are influenced by socia media influencers						
Yes	42.54 ± 16.84	Z = -9.559	3.91 ± 2.36	Z = -1.125	54.42 ± 20.74	Z = -0.482
No	33.58 ± 13.9	$p < 0.001$	2.41 ± 2.22	$p < 0.001$	53.11 ± 19.03	$p = 0.630$

KW = Kruskal Wallis H Test value, Z = Mann Whitney U Test value

predictor for social appearance anxiety is social media addiction ($\beta = 14.952$, $p < 0.001$) (Table 5).

Discussion

The rapid development of internet technologies in recent years has made social media platforms an activity that can be accessed from anywhere (Griffiths & Kuss, 2017; Vannucci et al., 2020). Thus, social media platforms have become an integral part of adolescents' daily lives (Griffiths & Kuss, 2017). Social media platforms, especially support the basic needs of belonging and self-presentation of adolescents by

helping users have fun and improve their cognitive skills and social interactions (Boursier & Manna, 2018; Griffiths & Kuss, 2017). However, excessive use of social media, which is considered as a "way of being" by adolescents (Griffiths & Kuss, 2017), can cause addiction and health problems (Frost & Rickwood, 2017; Munno et al., 2017; Webster et al., 2021; Vannucci et al., 2020). In this study, in which the effect of social media addiction on adolescents' social appearance anxiety and emotional eating behaviors was discussed, the SAAS and SMA scale mean scores of girls were higher ($p < 0.001$). Recent research has demonstrated that girls experience more social appearance anxiety and social media addiction than boys.

Table 4 The correlations between the adolescents' mean scale scores and social media usage characteristics

	1	2	3	4	5
1. Daily time online					
2. The number of social media platforms were using	0.307**				
3. Number of influencers followed	0.274**	0.214**			
4. SAAS	0.334**	0.083**	0.144**		
5. SMAS	0.487**	0.232**	0.214**	0.581**	
6. EES-C	0.058*	0.026	0.01	0.027	0.05

* $p < 0.05$, ** $p < 0.001$, Spearman Correlation Analysis

Table 5 The relationship between social appearance anxiety and social media usage

Determinants	Social Appearance Anxiety							
	β	SE	β	p	95% CI	R ²	R ² change	Model p
Model 1								
Gender	4.470	0.862	0.139	<0.001	2.77–6.16	0.03		<0.001
Perceived income								
Low	4.558	1.035	0.120	<0.001	2.52–6.58			
High	−0.79	1.174	−0.18	0.501	−3.09–1.51			
Normal (reference)								
Model 2								
Gender	2.283	0.897	0.07	0.011	0.524–4.043	0.31*	0.28	<0.001
Perceived income								
Low	3.102	0.876	0.082	<0.001	1.384–4.821			
High	−0.622	0.99	−0.014	0.530	−2.563–1.319			
Daily time online	1.699	0.278	0.150	<0.001	1.154–2.244			
Accepting that influenced by influencers	4.408	0.789	0.133	<0.001	2.861–5.956			
Influencer posts/Interests								
Digital game	3.313	1.548	0.085	0.033	0.276–6.350			
Nutrition and diet	5.227	1.879	0.082	0.005	1.541–9.913			
Makeup, personal care	1.06	1.487	0.28	0.476	−1.857–3.977			
Funny posts	2.334	1.358	0.075	0.086	−0.329–4.998			
Exercise (reference)								
SMA	14.952	0.885	0.414	<0.001	13.18–16.66			

* adjusted R²

(Gender coded as boy = 0, girl = 1; SMA coded as non addict = 0, addict = 1)

In this study, there was a relationship between social appearance anxiety and low perception of family income, being addicted to social media, following influencers who share nutrition and diet content, and being influenced by social media influencers. The social comparison theory is a framework used to explain body image, well-being, jealousy, and appearance anxiety in adolescents and young adults, along with social media use. Festinger's (1954) social comparison theory assumes that individuals want to improve themselves and are motivated to measure how they perform in an area, and it is stated that this behavior peaks during adolescence (Myers & Crowther, 2009). Individuals use others as a comparison target to evaluate how they are doing. There are upward comparisons (i.e., comparisons with someone perceived as superior) and down comparisons (i.e., comparisons with someone perceived as inferior) (Festinger, 1954). Comparisons related to poor body image or eating are upward comparisons (Hogue & Mills, 2019; Moreno-Domínguez et al., 2019; Saunders & Eaton, 2018). Many studies in the social media and body image literature operate under the social comparison theory. According to the sociocultural theory, it is thought that the relationship between social media use and body satisfaction is mediated by the internalization of appearance ideals and social comparisons (Rodgers & Melioli, 2016). It has been found that using appearance-focused social media networks increases internalization (Marengo et al., 2018) and comparisons (Jarman et al., 2021).

Considering that social media offers a lot of information, students stated in an interview that they often compare themselves to others on social media (Fox & Moreland, 2015). It has been found that women are more likely than men to use social media to compare themselves with others (Haferkamp et al., 2012). In a study, it was determined that women have feelings of jealousy towards social media influencers and that social comparisons are the basis of this feeling of jealousy (Chae, 2018). Yang et al. found that excessive use of social media leads to unhealthy body esteem through intense cognitive internalization, which increases appearance comparisons and anxiety about negative appearance evaluation (Yang et al., 2020). When an individual is exposed to social media content that often depicts idealized views and lives, they are likely to compare themselves to these ideals (thus leading to negative self-evaluations) (Jarman et al., 2021; Wang et al., 2017). Based on social comparison theory and previous research, it could be concluded that individuals are more likely to experience jealousy and the feeling that they are worse than others after seeing attractive posts and pictures of influencers on social media (Panjrath & Tiwari, 2021).

Considering the idealized presentation and content of influencers in social media, being addicted to social media, following and being influenced by influencers may have negatively affected adolescents' perceptions of social

appearance. According to the Social Comparison Theory, it is thought that adolescents make a comparison between themselves and influencers internalize their ideals of appearance with the increase of time spent on social media, and therefore, their social appearance anxiety increases. Due to the fact that the study was conducted during the Covid 19 pandemic period, in addition to all these risk factors, a curfew for those under the age of 18 in Turkey, distance education without going to school (Ministry of National Education, 2021), and the use of only the internet as a tool of socialization may have caused an increase in the use of social media. In addition, according to social comparison theory, adolescents may have less opportunity to compare with people they think are lower than themselves because they are isolated from their offline social life. However, following the shares of social media influencers, with whom they will compare upwards in their online social activities, may have increased their social appearance anxiety. In addition, according to the social comparison theory, comparison with people they think are lower than themselves may have decreased their opportunities (they are isolated from their social environment), and following the posts of people with whom they would make more upward comparisons may have increased their social appearance anxiety. Supporting the findings of the study, Boursier et al. (2020) reported that the problematic use of social media could be a catalyst for adolescents' social appearance anxiety. It is mentioned that the increased interest in visual self-presentation in social media may increase body image concerns and trigger problematic use of social media, especially among adolescents (Boursier et al., 2020). Consequently, the possible bidirectional nature of the relationship between social appearance anxiety and social media addiction should be considered.

In the current study, emotional eating behaviors of adolescents, who follow influencers who share diet and nutrition, are higher. In the regression analysis, there is a relationship between following the influencers, who share about diet and nutrition and social appearance anxiety. One study found that adolescents compared their daily food intake, weight loss progress, and exercise with other users, who shared their achievements on social media. It is mentioned that these social comparison processes could sustain the symptomatology of eating disorders (Rodgers et al., 2015) and strengthen the behaviors of users, who already have eating disorders (Gale et al., 2016). Body dissatisfaction is a determining factor for eating disorders in boys and girls (Turel et al., 2018). It is known that when sociocultural ideals about attractiveness are internalized, body dissatisfaction causes eating disorders (Diedrichs, 2017).

In the study, no relationship was found between social appearance anxiety and social media addiction and emotional eating behavior. However, it is thought that following influencers who share long-term nutrition and diet content

will increase adolescents' social appearance anxiety and this may pose a risk in terms of developing eating disorders. In further studies, it is recommended to examine the relationship between influencer following, social appearance anxiety, and eating disorders according to the social comparison theory.

Limitations

Relying on cross-sectional data means that causality cannot be inferred. This study was conducted with a sample of Turkish adolescents based on self-report; therefore, the generalizability of these results to other cultures or age groups (e.g. adults) is not clear. Because the study was conducted in the covid 19 pandemic, it is thought that the curfews of adolescents in Turkey affected their social relations and social media use.

Conclusion

About a quarter of adolescents are social media addicts. Adolescents, who are social media addicts, girls, perceiving low family income, following influencers, who share diet and nutrition content, and expressing that they are affected by influencers have higher social appearance anxiety and these variables are associated with social appearance anxiety. For this reason, training should be given to adolescents on the conscious use of social media and activities should be organized.

Relevance for clinical practice

Although social media platforms are a popular communication tool, the unconscious and excessive use of social media by adolescents can negatively affect their lives in many ways. This negativity may lead the way for adolescents to experience mental, physical, and social problems in the future. More studies are needed to determine the possible effects of social media and influencers, which adolescents are interested in, on adolescent health, and to minimize their negative effects. The results of this study contribute to the literature on the relationship between adolescents' social media usage characteristics and social appearance anxiety. Such research will provide healthcare professionals information related to individual differences in social appearance anxieties and social media usage characteristics and thus enrich their professional acknowledgments when communicating with adolescents. Therefore, the investigation of adolescents' social media addiction is crucial to prevent negative health consequences related to social media addiction. Important risk factors

underlying the psychological mechanisms that increase adolescents' social appearance anxiety, like following social media influencers and accepting to be influenced by them, is highlighted in this study.

It must be admitted that the Internet and social media play an important role in people's lives and it is practically impossible to prohibit it. Therefore, interventions should focus on factors that support adolescents' ability to self-regulation. Finally, it is thought that studies that will examine the effect of social media addiction on adolescents' social appearance anxiety and eating behaviors can guide practices that can be done for the protection of adolescent mental health.

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