

The Relationship Between Social Appearance Anxiety, Automatic Thoughts and Depression-Anxiety-Stress in Emerging Adulthood

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Abstract

The aim of study is to examine the relationship between social appearance anxiety, automatic thoughts and depression, anxiety, and stress in university students. The research was carried out on a total of 381 participants, 214 of whom were women and 167 were men. The ages of the participants were between 18 and 35 and the mean age was 22. Data were collected via Social Appearance Anxiety Scale, Automatic Thoughts Scale and Depression, Anxiety and Stress Scale and Personal Information Form. Pearson Correlation was used to examine whether there is a relationship between social appearance anxiety, automatic thoughts, and depression, anxiety, and stress. Independent sample t-test was conducted to examine whether the automatic thoughts levels differed in terms of having an emotional relationship. Analysis of variance was used to reveal whether social appearance anxiety differentiated at the level of weight and height satisfaction. Hierarchical regression analysis was conducted to examine whether automatic thoughts and social appearance anxiety predicted depression, anxiety, and stress symptoms. It was concluded that there are positive and significant relationships between social appearance anxiety, automatic thoughts, depression, anxiety, and stress. The automatic thought averages of who had an emotional relationship were found to be significantly lower than the averages of who did not have. It was determined that there is a difference in social appearance anxiety levels according to height satisfaction. It is thought that studies to reduce automatic thoughts may be effective in reducing psychological symptoms.

Keywords: Social Appearance Anxiety, Automatic Thoughts, Depression, Anxiety, Stress

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INTRODUCTION

Our social needs, such as loving, being loved, affirmed, belonging, being with other people, are considered as essential and valuable as our physical needs. Meeting our mentioned social needs brings our desire to interact and communicate with other people and create an effective impression on people. (Kılıç, 2015), stated that external appearance plays a vital role in making an effective impression on another person and that external appearance is generally evaluated before starting communication. According to (Çınar & Keskin, 2015), the person to be contacted is first tried to be influenced by images, speech, and behaviors. The idea that people who are defined as physically attractive are popular, happy, successful, exciting, and generally loved, respected, and admired people is considered to be the most exposed social message in recent years (Papadopoulos & Walker, 2003).

Social comparison theory suggests that individuals need to make accurate evaluations about their own opinions and abilities and that they can do this by comparing themselves with other individuals (Festinger, 1954). In the mentioned comparison, it is stated that individuals can make a downward comparison with those who are considered inferior to themselves and upward with those who are considered superior to them. While downward comparisons can increase self-esteem (Gibbons, 1986), upward comparisons can have the opposite effect (Tesser, 1988). When men and women compare their appearance (body size, shape, and weight) with other men and women portrayed as cultural ideals in media images, an upward social comparison takes place, which in some cases leads to dissatisfaction with body image and binge eating behaviors (Cooley & Toray, 2001; Kaye, Strober, & Rhodes, 2002) and appearance-based anxiety and depression symptoms may occur (Myers, Ridolfi, Crowther, & Ciesla, 2012).

Negative evaluation anxiety was first defined by (Watson & Friend, 1969) as anxiety about others' appraisal, worrying about negative appraisals, and expecting to be negatively evaluated by others. Negative evaluation anxiety can also indicate the individual's social anxiety in the evaluation environment (Sevimli, 2009). In the following years, Hart, Leary, & Rejeski (1989) named the anxiety caused by negative thoughts about an individual's appearance and discomfort during physical evaluation as social physical anxiety. Social physical anxiety refers to an individual's personal concerns about body shape and composition (e.g., body fat, muscle tone and overall body proportion). Social physical anxiety showed a positive correlation with fear of negative evaluation and social interaction anxiety in the non-clinical sample, and it was conceptualized as a subset of social anxiety. Although social physical anxiety expresses concern about the negative evaluation of one's appearance, it is not seen as a comprehensive variable because it focuses more on physique (height, weight, and muscle tone) rather than appearance concerns. In this context, the concept of social appearance anxiety emerges in relation to a more comprehensive assessment. Hart, Palyo, Fresco, Holle, & Heimberg (2008) named the negative evaluation anxiety one experiences due to the general appearance (face shape, skin color, distance of the eyes, nose structure, etc.) including the body shape, height, weight, and muscular structure of the person as social appearance anxiety. It is seen in the relevant literature that the relationships between social appearance anxiety and many psychological variables are examined. In this context, it is seen that relationships between variables like social appearance anxiety and self-esteem (Çelik & Şenay Güzel, 2018; Dođru, 2018), social anxiety (Levinson et al., 2013; Ben, 2017; Ülkü, 2017), body image (Turel et al., 2018; Yorulmaz & Kurutçu, 2019), internet addiction (Ayar, Özalp Gerçekler, Özdemir, & Bektaş, 2018; Dikmen, 2019), depression and anxiety (Özcan et al., 2013; Turel et al., 2018), automatic thoughts (Dođru, 2018), repetitive negative thoughts (Reilly et al., 2018) and early maladjustment schemes (Makas & Çelik, 2018) are investigated. When the mentioned studies are examined, it is noteworthy that studies on social appearance anxiety have increased in recent years.

Body image is a mental image of a person's body and expresses how individuals perceive their bodies (Garner & Garfinkel, 1981). Social appearance anxiety is defined as the reaction people feel against the evaluation of their physical structures by others (Çınar & Keskin, 2015). In other words, while the person's thoughts about her/his body are at the forefront in the body image when it comes to social appearance anxiety, other people's thoughts and evaluations about the person's body and

appearance are more important. In addition, since social anxiety is also a form of anxiety experienced depending on a specific situation, it has been suggested that social appearance anxiety may be a subset of social anxiety; it has been evaluated as a result of the negative body image related to the individual's body and appearance (Hart, Palyo, Fresco, Holle, & Heimberg, 2008; Doğan, 2010). In a study by Claes et al. (2012), social appearance anxiety was found to be positively correlated with social anxiety criteria and negative body image. In another study by Levinson & Rodebaugh (2014), the participants with negative evaluation anxiety showed more food consumption and their social appearance anxiety was high. It has also been found that people with high social appearance anxiety experience high levels of body dissatisfaction. It was concluded that negative evaluation anxiety and social appearance anxiety are risk factors for social anxiety.

Individuals with social appearance anxiety think that they will be evaluated negatively by others, worrying about exclusion and humiliation. These worries can also damage the communication and interaction with the people around them and cause psychological symptoms. Especially in university environments where social relations are more intense and important, social appearance anxiety can limit students' living opportunities as well as learning opportunities (Argon, 2014). The meanings and values given to appearance vary according to the time and culture (Kılıç, 2015). Recently, beauty attributed to appearance and body; especially with the influence of social media, news, magazines, fashion programs or the social environment, may be viewed as superior to the talents, intelligence, and skills of individuals (Ozansoy, 2012; Var, Karabulut & Atasoy, 2018). Tales, movies, and beauty magazines also convey the message that beauty is malleable. In a study by Burkley et al. (2014), it is found that the belief that "beauty is malleable"; can be associated with some risks in women such as relating self-esteem to physical attraction, having appearance anxiety, and increased interest in aesthetic surgery. In another study by Turel et al. (2018); It was concluded that social appearance anxiety and depression are important determinants of the risk of eating disorders in women. Today, the importance given to being beautiful, attractive, and handsome creates the desire to be nice and admirable in almost everyone (Kılıç, 2015). When it comes to social communication, physically attractive people tend to be more self-confident and more loved. In addition, physically attractive people can be perceived as more interesting, social, skillful, and successful by other people (Eagly et al., 1991; Langlois et al., 2000). Therefore, individuals often want to communicate with attractive people and have a positive impression on other people. It is claimed that those who think they cannot leave a positive impression on other individuals in interpersonal relationships have increased anxiety and stress levels (Leary & Kowalski, 1995). According to Trekels & Eggermont (2017), encountering ideal attractiveness criteria causes people to worry that they will not comply with these criteria and will be negatively judged because of their appearance. In the study conducted by Park (2015), it was concluded that concerns about perceived attraction might also reflect anxieties about belonging and self-esteem. The idea that not being able to meet the society's criteria, may cause feelings of inadequacy and worthlessness in people. Moreover, it may lead to psychological symptoms such as depression, anxiety, and stress. In addition, it is stated that individuals who are worried about what others will think of them are more preoccupied with their body image and appearance (Smith, 2007). Fear of one that they he/she be judged negatively because of his/her appearance; appears to be one of the essential factors in understanding bulimia nervosa, anorexia nervosa and body dysmorphic disorder (Hart, Palyo, Fresco, Holle, & Heimberg, 2008).

Cognitions can play an effective role in the emergence of social appearance anxiety. The cognitive therapy model; conceptualizes an individual's cognitive structure as basic beliefs, intermediate beliefs, and automatic thoughts. According to the cognitive model, the underlying element of all disorders is distorted or dysfunctional thoughts that affect the individual's emotions and behaviors. Bringing these dysfunctional thoughts to a functional dimension and reshaping them realistically can cause changes in emotions and behaviors (Beck, 2001). Thoughts that flow rapidly through the mind, that are not noticed at the moment, but that cause emotional (anger, joy, sadness, anger), behavioral and physiological (tension in the body, breathing speed, sweating) reactions are called automatic thoughts. Automatic thoughts, which are real words or images that pass through the person's mind, are specific to the situation and are accepted as the most superficial level of cognition (Beck, 2011). Although automatic thoughts are meaningless to other individuals, they are quite logical

and persuasive to the individual who passes these thoughts through his mind. According to Freeman, Pretzer, Fleming, & Simon (2004), dysfunctional automatic thoughts have an essential role in psychopathology development. It has been suggested by Beck, Freeman, & Davis (2004) that automatic thoughts are the leading cause of negative emotions such as anxiety, hopelessness, and anger. It has been demonstrated that biases in information processing play an important role in the etiology and maintenance of emotional disorders such as generalized anxiety disorder and major depressive disorder (Mathews & MacLeod, 1994).

When the related literature is examined, it is seen that there are many studies supporting the relationship between automatic thoughts and depressive symptoms (Buschmann et al., 2017; Garber, Weiss & Shanley, 1993; Lamberton & Oei, 2008; Yolaç Yarpuz et al., 2008). When examining the studies in which social appearance anxiety is studied together with cognitions, it was observed that there were significant positive correlations between social appearance anxiety and recurrent negative thoughts (Reilly et al., 2018), dysfunctional attitudes, cognitive distortions (Gül, 2016), and irrational beliefs (Yücesoy, 2019). In a study conducted by Dođru (2018) with university students, it was concluded that social appearance anxiety and automatic thoughts had a positive and significant relationship. The person can have various automatic thoughts towards himself, towards others and the world. Appearance concerns can be related to the person's automatic thoughts, both towards himself and towards others. In this context, it is thought that in the background of social appearance anxiety, automatic thoughts, which include worthlessness, failure, and hopelessness, may play a role.

In the Diagnostic and Statistical Manual of Mental Disorders (APA, 2013); Depressive mood is discussed together with symptoms such as decreased interest, feelings of guilt and worthlessness, changes in psycho-motor activities, inability to enjoy previous activities, changes in sleep and appetite, disturbances in attention and concentration, feeling sorrow and sadness, helplessness, and suicidal thoughts. It is suggested by Seligman, Walker, & Rosenhan (2001) that anxiety is a mood that occurs without a specific stimulus. On the other hand, stress is defined as the physiological, psychological, and behavioral reactions that arise regarding the relationship between the demands from the environment and the beliefs that the person will meet or change these demands (Folkman & Lazarus, 1984). University years are a period that brings many changes in the lives of individuals. During this period, most young individuals enter new environments that they are not used to, meet new people, and establish new social interactions. Individuals need acceptance, appreciation and approval by people they have just met. The interactions they will establish to achieve these goals can first be experienced through appearance. In this context, the university period is critical in the individual's life, and stressful events experienced during this period can affect a person's relationships, academic success, self-esteem, and professional career. In this period, an individual's social appearance anxiety is also a very stressful life event. Therefore, individuals' social appearance anxiety can cause psychological symptoms such as depression, anxiety, and stress by affecting them both psychologically and physiologically. A depressed person may develop thoughts that reflect social appearance anxiety such as "other people will leave me because of my appearance", "people will not find me attractive", "People will not like me because of my appearance" through beliefs of worthlessness, not being loved, and failure. In this way, social appearance anxiety can further strengthen individuals' worthlessness and thoughts that they are not being loved, causing them to withdraw from other people and be excluded. When the relevant literature is examined, it is seen that there is no study examining social appearance anxiety and psychological variables of depression, anxiety, and stress in university students. For this reason, it is thought that the current study, which aims to examine the relationships between social appearance anxiety, automatic thoughts and depression, anxiety, and stress in university students, will contribute to the literature. In line with this purpose of the research, answers to the following questions will be sought: Is there a relationship between social appearance anxiety, automatic thoughts and depression, anxiety, stress?

1. Does the level of automatic thinking differ according to the emotional relationship of university students?

2. Does social appearance anxiety differ according to the weight satisfaction level of university students?
3. Does social appearance anxiety differ according to the height satisfaction level of university students?
4. Do social appearance anxiety and automatic thoughts predict depression level?
5. Do social appearance anxiety and automatic thoughts predict the level of anxiety?
6. Do social appearance anxiety and automatic thoughts predict stress level?

METHOD

Research Design

The research is a relational screening model that examines the relationships between social appearance anxiety, automatic thoughts, depression, anxiety and stress among university students. Relational model is a research model that aims to determine the existence and degree of change between two or more variables (Karasar, 2018).

Participants

The universe of the research university students in Turkey, while the working group in the 2018-2019 academic year studying at Dicle University, 381 students who are chosen by convenience sampling method. Appropriate sampling refers to the collection of data by selecting volunteer participants who are suitable and easily accessible for the study (Büyüköztürk, Çakmak, Akgün, Karadeniz & Demirel, 2013: 92). The research was carried out with a total of 381 participants, 214 (56.2%) female and 167 (43.8%) male. Participants' ages vary between 18-35 (\bar{x} = 22.00). Distribution of the participants as follows; 96 (25.2%) of the participants 1st year, 129 (33.9%) 2nd year, 39 (10.2%) 3rd year, 110 (28.9%) 4th year, 7 (1.8%) were 5th year students. 59 of the participants (15.5%) were not satisfied with their weight at all, 103 (27.0%) were not satisfied with their weight, 60 (15.7%) were indecisive about their weight satisfaction, 122 (32.0%) were satisfied with their weight, 37 (9.7%) stated that they were very satisfied with their weight. 29 of the participants (7.6%) were not satisfied with their height at all, 60 (15.7%) were not satisfied with their height, 43 (11.3%) were indecisive about their height, 194 (50.9%) were satisfied with their height, 55 (14.4%) stated that they were very satisfied with their height. 207 of the participants (54.3%) stated that they were in an emotional relationship, and 172 (45.1%) stated that they were not in an emotional relationship.

Data Collection Tools

Demographic Information Form: In the form created by the researchers to obtain information about the socio-demographic characteristics of the participants; There are questions such as gender, age, faculty, department, class, place of residence, number of people living together, marital status, place of life, how satisfied you are with your current weight and height, whether you have a girlfriend or boyfriend.

Social Appearance Anxiety Scale (SAAS): Through Hart, Palyo, Fresco, Holle, & Heimberg (2008) it is possible to measure responses that are generally considered negative by others, including body shape with code. The scale consists of 16 items and items are evaluated on a five-point Likert-type scale (1 = not at all appropriate, 5 = completely appropriate). Item 1 of the scale is reverse coded. High scores from the scale indicate high social appearance anxiety. The validity and reliability study of the Turkish form of the scale was conducted by Doğan (2010). In the study, the internal consistency coefficient was found to be .93, the test-retest reliability coefficient as .85, and the

reliability coefficient calculated by the test halving method as .88. In the present study, the Cronbach alpha value was found to be .93.

Automatic Thoughts Scale (ATS): It was developed by Hollon & Kendall (1980) to measure the frequency of automatic negative thoughts associated with depression. The scale consists of 30 items. Items are evaluated on a five-point Likert-type scale (1 = never, 5 = always). Scores that can be obtained range from 30 to 150. High scores indicate that the person uses automatic negative thoughts about himself more often. The validity and reliability study of the Turkish form was done by Şahin & Şahin (1992). According to the factor analysis conducted in this study, five factors were determined: "negative thoughts about self, confusion and thoughts about avoid, negative thoughts about personal disharmony, negative thoughts about loneliness, and negative thoughts about hopelessness." These factors were found in parallel with the factors in the study of Hollon and Kendall. In the Turkish validity and reliability study conducted by Şahin & Şahin (1992), it was observed that item-total correlations ranged between .36 and .69. The internal consistency coefficient of the scale was found .93. In the present study, the Cronbach alpha value was found to be .96.

Depression Anxiety Stress Scales (DASS): Developed by Lovibond & Lovibond (1995), this scale consists of 42 items, 14 of which are depression, 14 anxiety, and 14 stress dimensions. Items are evaluated on a four-point Likert type scale from "not at all suitable" to "completely suitable". The high scores from each of the dimensions of depression, anxiety and stress reveal that the individual has the relevant problem. Total scores of the scale range from 0 to 42 for each sub-dimension. In the Turkish validity and reliability study conducted by Akın & Çetin (2007), the Cronbach alpha internal consistency coefficient was .89 for the whole scale, and .90, .92 and .92 for depression, anxiety, and stress, respectively. In the present study, the Cronbach alpha value was found as .96 for the total scale, .92, .89 and .90 for depression, anxiety, and stress, respectively.

Data Collection

After obtaining the necessary ethical permission from the Dicle University Social and Human Sciences Ethics Committee, the students who volunteered to participate in the study at Dicle University were given information about the study; Informed Consent Form, Demographic Information Form, Social Appearance Anxiety Scale, Automatic Thoughts Scale and Depression Anxiety Stress Scale were distributed. In order to control the habituation and fatigue effect, balancing was made during the administration of the scales. The scales were applied to the participants in a classroom environment. It took approximately 15-20 minutes for the participants to fill out the forms and scales.

Data Analysis

Before analyzing the research data, the arithmetic means, standard deviation, skewness and kurtosis values of the variables were examined. The data obtained are presented in Table 1. Since the data on social appearance anxiety, automatic thoughts and depression-anxiety-stress given in Table 1 are between -1.5 and +1.5, it can be said that the data show a normal distribution (Tabachnick & Fidell, 2013). As the data show normal distribution; Pearson Correlation Coefficient Method was used to examine whether there is a relationship between demographic variables and main variables, social appearance anxiety, automatic thoughts, depression, anxiety and stress. Independent sample t-test analysis was conducted to examine whether the automatic thought levels of the participants differed in terms of having a boyfriend / girlfriend. Analysis of variance (ANOVA) was used to reveal whether social appearance anxiety differentiated at the level of weight and height satisfaction. In the study, VIF (Variance Increase Factors) values were examined to determine whether there was a multiple linear connection problem between the independent variables, which is one of the basic assumptions of multiple regression analysis. VIF values for independent variables were found to be between 1.00 and 1.34. Since VIF values were seen to be below 10, it was determined that there was no multi-linear connection problem and the data met the multiple regression assumptions (Padem, Göksu, & Konaklı, 2012). In the study, the Durbin-Watson coefficient was calculated to determine whether there is

autocorrelation between variables and it was found as $d = 1.989$. The Durbin-Watson coefficient, which takes a value between 1.5-2.5, shows that there is no autocorrelation problem between the variables (Kalaycı, 2010). Therefore, the Durbin-Watson value calculated in the present study shows that there is no autocorrelation between the variables. Since it was seen that the data of the study met the parametric test and multiple regression assumptions, regression analysis was used. Hierarchical regression analysis was conducted to examine whether social appearance anxiety and automatic thoughts predicted depression-anxiety-stress. SPSS 21 package program was used to analyze the data.

Table 1. Average, Standard Deviation, Skewness and Kurtosis Values of the Variables

	n	\bar{x}	Ss	Skewness	Kurtosis
Social Anxiety Appearance	381	1.94	.79	1.12	1.03
Negative Automatic Thoughts	381	2.07	.89	.95	.52
Negative Thoughts on Loneliness	381	2.17	.97	.78	.11
Negative Thoughts about Self	381	1.84	.87	1.33	1.51
Negative Thoughts on Hopelessness	381	1.95	1.01	1.15	.63
Negative Thoughts on Personal Disharmony	381	2.51	1.10	.37	-.72
Negative Automatic Thoughts about Confusion and Avoidance	381	2.23	1.02	.67	-.21
Stress	380	1.05	.66	.50	-.26
Anxiety	380	.82	.61	.91	.38
Depression	380	.80	.67	.86	.06

FINDINGS

Findings Concerning the Relationships Between Social Appearance Anxiety, Automatic Thoughts, Depression, Anxiety and Stress

Pearson Correlation Coefficient Method was used to examine the relationships between variables in the study. Findings showing the relationships between variables are included in Table 2.

Table 2. Pearson Correlation Coefficient Analysis Results on the Relationship between Appearance Anxiety, Automatic Thoughts, Depression, Anxiety, Stress

Variables	1	2	3	4	5	6	7	8	9	10	11	12
Social Appearance Anxiety (1)	1	.50**	.54**	.41**	.46**	.33**	.44**	.53**	.56**	.49**	-.13**	-.18**
Automatic Thoughts (2)		1	.93**	.90**	.91**	.85**	.94**	.78**	.69**	.69**	-.18**	-.21**
Automatic Thoughts about Self (3)			1	.78**	.82**	.70**	.81**	.73**	.65**	.63**	-.14**	-.21**
Automatic Thoughts about Loneliness (4)				1	.77**	.78**	.84**	.72**	.65**	.67**	-.18**	-.18**
Automatic Thoughts about Hopelessness (5)					1	.75**	.83**	.74**	.64**	.60**	-.22**	-.22**
Automatic Thoughts about Personal disharmony (6)						1	.81**	.73**	.56**	.61**	-.12*	-.13**
Automatic Thoughts about Confusion and Avoidance (7)							1	.73**	.65**	.67**	-.18**	-.18**
Depression (8)								1	.80**	.79**	-.15**	-.17**
Anxiety (9)									1	.85**	-.18**	-.16**
Stress (10)										1	-.14**	-.11*
Weight satisfaction (11)											1	.34**
Height Satisfaction (12)												1

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

As seen in Table 2, positively significant relationships were found between the level of social appearance anxiety and the level of automatic thoughts ($r = .50$, $p < .01$), depression ($r = .78$, $p < .01$), anxiety ($r = .69$, $p < .01$) and stress ($r = .69$, $p < .01$). Accordingly, as the level of automatic thoughts increases, so does the level of social appearance anxiety. A positively significant relationship was

found between the level of social appearance anxiety and the level of depression ($r=.53, p < .01$), anxiety level ($r=.56, p < .01$), stress level ($r=.49, p < .01$), and healthy eating level ($r=.20, p < .01$). A significant negative relationship was found between the level of social appearance anxiety and the level of weight satisfaction ($r=-.13, p < .01$) and height satisfaction ($r=-.18, p < .01$). A positive relationship was found between negative thoughts on self ($r=.54, p < .01$), which are the lower dimensions of social appearance anxiety and automatic thoughts, and ($r=.41, p < .01$), negative thoughts about hopelessness ($r=.46, p < .01$), negative thoughts about personal disharmony ($r=.33, p < .01$), and negative thoughts about confusion and avoidance ($r=.44, p < .01$).

Findings on Comparing Participants' Automatic Thoughts Based on Emotional Relationship Status

Independent samples t-test analysis was conducted to examine if the participants' automatic thought levels differ in terms of having an emotional relationship. The results are shown in Table 3.

Table 3. Independent Samples T-Test Analysis Results Regarding the Comparison of Sub-Dimensions of Automatic Thoughts Scale According to the Participants' Having an Emotional Relationship

Variables	Yes (N=207)		No (N=172)		$t_{(377)}$	p
	\bar{x}	Ss	\bar{x}	Ss		
Sum of Automatic thoughts	1.98	.85	2.17	.92	-2.121	.03*
About Loneliness	2.05	.92	2.31	1.01	-2.565	.01*
About Self	1.77	.83	1.92	.92	-1.602	.11
About Hopelessness	1.87	.98	2.06	1.04	-1.778	.07
About Personal Disharmony	2.39	1.08	2.66	1.11	-2.420	.01*
About Confusion and Avoidance	2.51	.99	2.34	1.06	-1.792	.07

* $p < .05$

When the values given in Table 3 were examined, it is seen that the level of automatic thoughts differ in terms of having an emotional relationship. Accordingly, the automatic thoughts score averages of those who have an emotional relationship ($\bar{x} = 1.98, sd = .85$) are significantly lower than the automatic thought mean scores ($\bar{x} = 2.17, sd = .92$) of those who do not have an emotional relationship ($p < .05$). Analysis results show that the level of automatic thought about loneliness, which is the sub-dimension of automatic thoughts, differs in terms of having an emotional relationship. Accordingly, the automatic thoughts mean scores of those who have emotional relationships ($\bar{x} = 2.05, sd = .92$) are significantly lower than the automatic thoughts mean scores ($\bar{x} = 2.31, sd = 1.01$) of those who do not have an emotional relationship ($p < .05$). It is observed that the level of automatic thought on personal disharmony, the sub-dimension of automatic thoughts, differs in terms of having an emotional relationship. Accordingly, the automatic thoughts mean scores ($\bar{x} = 2.39, sd = 1.08$) of those who have an emotional relationship are significantly lower than the automatic thoughts mean scores ($\bar{x} = 2.66, sd = 1.11$) of those who do not have an emotional relationship ($p < .05$).

Findings Regarding the Comparison of Social Appearance Anxiety Levels According to Weight and Height Satisfaction Levels

One-way variance analysis (ANOVA) was performed to determine whether there was any difference in terms of social appearance anxiety between groups with different weight and height satisfaction levels. Social appearance anxiety score averages according to weight and height satisfaction status are shown in Table 4 and Table 5.

Table 4. Variance Analysis Results on Comparison of Social Appearance Anxiety Score Averages by Weight Satisfaction Status

	Weight satisfaction status	N	\bar{x}	Ss	F	p	Difference	η^2
Social Appearance Anxiety	Not at all satisfied (A)	59	2.16	.89	2.079	.661	None	.02
	Not satisfied (B)	103	1.96	.77				
	Neutral (C)	60	2.00	.82				
	Satisfied (D)	122	1.84	.73				
	Completely satisfied (E)	37	.78	.78				

As seen in Table 4, it is determined that there is no difference in participants' social appearance anxiety levels according to weight satisfaction level ($F(4,376)= 2,079, p>.05, \Omega^2=.02$).

Table 5. Variance Analysis Results on Comparison of Social Appearance Anxiety Score Averages by Height Satisfaction Status

	Height satisfaction status	N	\bar{x}	Ss	F	p	Difference	η^2
Social appearance anxiety	Not at all satisfied (A)	29	2.58	1.05	5.977*	.042	A-B	.05
	Not satisfied (B)	60	1.90	.74			A-D	
	Neutral (C)	43	2.04	.73				
	Satisfied (D)	194	1.88	.74			A-E	
	Completely satisfied (E)	55	1.78	.77				

* $p<.05$

Looking at Table 5, it is determined that the participants' social appearance anxiety score averages differ according to height satisfaction level ($F(4,376)= 5,977, p<.05, \Omega^2= .05$). According to the results of the Scheffe multiple comparison test that aims to find out which levels of satisfaction this difference is between; there is a difference between social appearance anxiety score averages ($\bar{x}=1.58, ss=1.05$) and social appearance anxiety averages of participants who are very satisfied with height ($\bar{x}=.78, ss=.77$), satisfied ($\bar{x}=.88, ss=.74$) and dissatisfied ($\bar{x}=.90, ss=.74$). When the groups are compared, those who are not satisfied with the height length are found to have the highest social appearance score average.

Hierarchical Regression Analysis Findings on the Procedure of Depression Symptoms of Automatic Thoughts and Social Appearance Anxiety Variables

Automatic thoughts sub-dimensions were included in the first step of the hierarchical regression analysis, which consists of two stages and examines the variables that predict the depression symptom level. In the second step, social appearance anxiety was included in the equation in addition to automatic thoughts sub-dimensions. Information on the results of the two-step hierarchical regression analysis performed for depression symptoms is given in Table 6.

Table 6. Hierarchical Regression Analysis Results Examining the Prediction of Depression by Automatic Thoughts and Social Appearance Anxiety Variables

Model	Variables	B	SH	β	t	p	R	R ²	ΔR^2	F
1	(constant)	-.41	.05		-7.40	.00**	.79	.62	.62	125.15
	Automatic thoughts about loneliness	.14	.04	.20	3.20	.00**				
	Automatic thoughts about self	.18	.04	.23	3.72	.00**				
	Automatic thoughts about hopelessness	.16	.04	.25	3.75	.00**				
	Automatic thoughts about personal disharmony	.02	.03	.03	.63	.52				
	Automatic thoughts about confusion& avoidance	.08	.05	.12	1.592	.11				
	(constant)	-.59	.06		-9.29	.00**	.80	.65	.64	116.40

2	Automatic thoughts about loneliness	.14	.04	.20	3.32	.00**
	Automatic thoughts about self	.10	.05	.13	2.08	.03*
	Automatic thoughts about hopelessness	.15	.04	.23	3.60	.00**
	Automatic thoughts about personal disharmony	.04	.03	.06	1.20	.23
	Automatic thoughts about confusion& avoidance	.07	.04	.11	1.49	.13
	Social appearance anxiety	.16	.03	.19	5.27	.00**

*p<.05 **p<.01

As seen in Table 6, automatic thoughts about loneliness ($\beta = .20$, $p < .01$), automatic thoughts about self ($\beta = .23$, $p < .01$) and automatic thoughts about hopelessness ($\beta = .25$, $p < .01$), the predictor role on depression symptoms was found to be statistically significant ($R^2 = .62$, $F(5, 374) = 125.15$, $p < .01$). The model explains 62% of the variance of depression symptoms. In the second stage, with the addition of the social appearance anxiety variable to the model, it is seen that the explained variance increased to 65% ($R^2 = .65$, $F(1, 373) = 116.40$, $p < .01$). In the second model, automatic thoughts about loneliness ($\beta = .20$, $p < .01$), automatic thoughts about self ($\beta = .13$, $p < .05$), automatic thoughts about hopelessness ($\beta = .23$, $p < .01$) and social appearance, the role of anxiety ($\beta = .19$, $p < .01$) on depression symptoms were found to be statistically significant.

Hierarchical Regression Analysis Findings Related to the Prediction of Automatic Thoughts and Social Appearance Anxiety Variables on Anxiety Symptoms

Automatic thoughts sub-dimensions were included in the first step of the hierarchical regression analysis, which consists of two stages and examines the variables that predict anxiety level. In the second step, social appearance anxiety was included in the equation in addition to automatic thoughts sub-dimensions. Information on the results of the two-step hierarchical regression analysis performed for anxiety symptoms is given in Table 7.

Table 7. Hierarchical Regression Analysis Results Examining the Prediction of Anxiety Symptoms by Automatic Thoughts and Social Appearance Anxiety Variables

Model	Variables	B	SH	β	t	p	R	R ²	ΔR^2	F
1	(constant)	-.14	.05		-2.51	.01*	.70	.49	.48	73.20
	Automatic thoughts about loneliness	.17	.04	.27	3.65	.00**				
	Automatic thoughts about self	.17	.05	.24	3.35	.00**				
	Automatic thoughts about hopelessness	.10	.04	.17	2.19	.02*				
	Automatic thoughts about personal disharmony	-.01	.03	-.03	-.44	.65				
	Automatic thoughts about confusion& avoidance	.05	.05	.09	1.04	.29				
2	(constant)	-.40	.06		-6.23	.00**	.74	.55	.55	78.87
	Automatic thoughts about loneliness	.17	.04	.27	3.87	.00**				
	Automatic thoughts about self	.06	.05	.08	1.18	.23				
	Automatic thoughts about hopelessness	.08	.04	.14	1.95	.05				
	Automatic thoughts about personal disharmony	.01	.03	.01	.28	.77				
	Automatic thoughts about confusion& avoidance	.04	.05	.07	.89	.37				
	Social appearance anxiety	.23	.03	.30	7.39	.00**				

*p<.05 **p<.01

As seen in Table 7, automatic thoughts about loneliness ($\beta = .27$, $p < .01$), automatic thoughts about self ($\beta = .24$, $p < .01$) and automatic thoughts about hopelessness ($\beta = .17$, $p < .01$), the predictor role on anxiety symptoms was found to be statistically significant ($R^2 = .49$, $F(5, 374) = 73.20$, $p < .01$). The model explains 49% of the variance of anxiety symptoms. In the second stage, with the addition of the social appearance anxiety variable to the model, it is seen that the explained variance increased to 55% ($R^2 = .55$, $F(1, 373) = 78.87$, $p < .01$). In the second model, the role of automatic

thoughts about loneliness ($\beta = .27, p < .01$) and social appearance anxiety ($\beta = .30, p < .01$) on anxiety symptoms was found to be statistically significant.

Hierarchical Regression Analysis Results Related to the Prediction of Automatic Thoughts and Social Appearance Anxiety Variables on Stress Symptoms

Automatic thoughts sub-dimensions were included in the first step of the hierarchical regression analysis, which consists of two stages and examines the variables that predict the stress symptom level. In the second step, in addition to automatic thoughts sub-dimensions, the social appearance anxiety variable was included in the equation. Information on the results of the two-step hierarchical regression analysis for stress is given in Table 8.

Table 8. Hierarchical Regression Analysis Results Examining the Exhaustion of Stress by Variables of Automatic Thoughts and Social Appearance Anxiety

Model	Variables	B	SH	β	t	p	R	R ²	ΔR^2	F
1	(constant)	-.05	.06		-.79	.42	.70	.50	.49	75.56
	Automatic thoughts about loneliness	.31	.05	.31	4.23	.00**				
	Automatic thoughts about self	.19	.05	.19	2.63	.00**				
	Automatic thoughts about hopelessness	-.03	.05	-.03	-.50	.61				
	Automatic thoughts about personal disharmony	.09	.04	.09	1.35	.17				
	Automatic thoughts about confusion & avoidance	.19	.05	.19	2.22	.02*				
2	(constant)	-.25	.07		-3.54	.00**	.73	.53	.53	72.24
	Automatic thoughts about loneliness	.21	.04	.31	4.38	.00**				
	Automatic thoughts about self	.05	.05	.07	.99	.32				
	Automatic thoughts about hopelessness	-.03	.04	-.06	-.80	.42				
	Automatic thoughts about personal disharmony	.07	.04	.12	1.94	.05				
	Automatic thoughts about confusion & avoidance	.11	.05	.18	2.14	.03*				
	Social appearance anxiety	.18	.03	.22	5.30	.00**				

*p<.05 **p<.01

As seen in Table 8, the predicating roles of automatic thoughts about loneliness ($\beta = .31, p < .01$), automatic thoughts about self ($\beta = .19, p < .05$) automatic thoughts about confusion and avoidance ($\beta = .19, p < .05$), on stress symptoms were found to be statistically significant ($R^2 = .50, F(5, 374) = 75.56, p < .01$). The model explains 50% of the variance of stress symptoms. In the second stage, with the addition of the social appearance anxiety variable to the model, it is seen that the explained variance increased to 53% ($R^2 = .53, F(1, 373) = 72.24, p < .01$). In the second model, the role of automatic thoughts about loneliness ($\beta = .31, p < .01$), automatic thoughts about confusion and avoidance ($\beta = .18, p < .05$), and stress symptoms of social appearance anxiety ($\beta = .22, p < .01$) on stress symptoms were found to be significant.

DISCUSSION, CONCLUSION AND SUGGESTIONS

In the present study, the relationships between social appearance anxiety and automatic thoughts and depression, anxiety, and stress level in university students were examined. According to the results obtained from the research; It was concluded that there is a relationship between social appearance anxiety, automatic thoughts and depression, anxiety and stress variables. In addition, it was determined that automatic thoughts and social appearance anxiety variables significantly predicts depression, anxiety and stress variables.

The first finding in the research; All sub-dimensions of the automatic thoughts variable (negative thoughts about self, negative thoughts about loneliness, negative thoughts about hopelessness, negative thoughts about personal disharmony, and confusion and thoughts about avoid)

and social appearance anxiety have a positive and significant relationship. Accordingly, as the level of having automatic thoughts increases, the level of social appearance anxiety also increases. This result of the research is consistent with other studies in the literature. In a study conducted by Dođru (2018) with high school students, it was concluded that there is a positive relationship between social appearance anxiety and automatic thoughts. As a result of the research by Reilly et al. (2018) using an experimental manipulation, they evaluated repetitive negative thinking in the maintenance of social appearance anxiety; It has been revealed that there is a positive relationship between recurrent negative thoughts and social appearance anxiety. In a study conducted on high school students, it was concluded that there is a positive relationship between dysfunctional attitudes and cognitive distortions and social appearance anxiety (Gül, 2016). In a different study conducted on university students, it was determined that there is a positive relationship between irrational beliefs and social appearance anxiety (Yücesoy, 2019). Considering that the negative cognitions and automatic thoughts of the person lead to many psychological problems, it is thought that the negative thoughts of the person “about himself, about loneliness, hopelessness, personal disharmony, confusion and avoidance” influence the anxiety he/she experiences regarding how others are evaluation him/her. According to another result of the research, a significant positive correlation was found between social appearance anxiety and depression, anxiety, stress levels. Accordingly, as social appearance anxiety increases, depression, anxiety and stress levels also increase. Again, according to another result of the study, it was concluded that social appearance anxiety predicted depression, anxiety, and stress symptoms. The results obtained are consistent with other studies in the literature. In a study by Claes et al. (2012); social appearance anxiety was found to be positively correlated with social anxiety measures. In another study by Levinson & Rodebaugh (2014); It was concluded that social appearance anxiety is a risk factor for social anxiety. In a study conducted on university students; It was found that the depression, anxiety and stress scores of the participants who were worried about their appearance were higher than the other participants (Öncü et al., 2013). As a result of the study conducted by Dođru (2018) on high school students, it was found that there is a positive relationship between social appearance anxiety and anxiety. The dissatisfaction of the person with his/her appearance as a whole and his/her thoughts that he/she will be evaluated negatively by other people because of his/her appearance can cause avoidant behaviors in most of his life. With the concern that being evaluated negatively because of one’s appearance, especially at a time like university period when he/she meets many new people and opens up new interests and curiosities in his life; people can withdraw themselves from friends, do not want to go to school, and may be in a great deal with themselves and their body. As a result of all these, areas of life satisfaction decrease, and deterioration may occur in academic performance and interpersonal relationships (Akyol, Yıldırım & Sertel, 2018; Seki, 2014; Şanlıer et al., 2017; Tekeli, 2017). Therefore, symptoms of depression, anxiety and stress may occur after the mentioned negative experiences.

As another finding of the research is that significant positive correlations were found between automatic thoughts and depression, anxiety, stress symptoms. Accordingly, as the level of automatic thinking increases, the levels of depression, anxiety and stress also increase. These results are consistent with other studies in the literature (Buschmann et al., 2017; Dođru, 2018; Katırcı, 2018; Parim, 2019; Yapan, 2018). Negative thoughts of individuals themselves, their environment and the world can cause various psychological symptoms. According to the cognitive model, automatic thoughts have been suggested as the main cause of negative emotions such as anxiety, hopelessness, and anger (Beck et al., 2004). In the related literature, there are studies that reveal the relationship between automatic thoughts and depression, anxiety (Sinanođlu, 2016; Katırcı, 2018; Turel et al., 2018; Parim, 2019). In this context, emerging automatic thoughts affect the psychological well-being levels of individuals. According to the other results of the research, automatic thoughts about loneliness, automatic thoughts about self and automatic thoughts about hopelessness, and social appearance anxiety, which are sub-dimensions of automatic thoughts, were found to predict depression and anxiety symptoms. In addition, it was concluded that automatic thoughts about loneliness, automatic thoughts about self, confusion, and automatic thoughts towards avoid, and social appearance anxiety predicted the stress level. According to APA (2013), among the symptoms of depression; There are symptoms such as hopelessness, despair, and pessimism about the person's situation, and perceiving himself/herself as inadequate and worthless. It is thought that the lack of

expectations about the future and focusing on negative situations constantly may increase the feelings of pessimism and helplessness and reveal the state of depression. Loneliness is considered to be a clinically significant cognitive state that has negative effects on physical and mental health (Van Beljouw et al., 2014). In a study conducted by Campagne (2019), it was concluded that loneliness leads to various health problems caused by the stress hormone. Therefore, the person's automatic thoughts about loneliness and being away from social support sources can cause the person to show stress symptoms and experience various health problems.

According to the results of a study conducted on university students by Hiçdurmaz, İnci, & Karahan (2017); It has been observed that automatic thoughts have a significant predictive effect on mental health symptoms. As a result of a study conducted on university students, it was observed that automatic thoughts were the strongest and most significant predictors of depression and anxiety (Yapan, 2018). As a result of a study conducted by Buschmann et al. (2017) on university students, it was found that high levels of automatic thoughts were associated with high levels of depression and automatic thoughts were one of the predictors of depression. As a result of another research conducted on university students; It was concluded that depression and anxiety are explained by negative cognitions rather than positive cognitions (Alsaleh et al., 2016). Accordingly, the decrease in depression and anxiety levels was found to be associated with a decrease in negative cognition rather than an increase in positive cognition. According to the cognitive model, the person's thoughts and perceptions about the situation or event affect the reactions and behaviors shown, not the event or situation itself. The person's automatic thoughts are shaped as a result of his genetic predispositions, early schemas and relationships with other people. According to Beck & Haigh (2014), schemas are also strengthened especially by negative, stressful and powerful life events. Thus, powered schemes can easily become effective and gain control over the information processing system. Therefore, with the introduction of dysfunctional or maladjustment schemes, the possibility of psychological symptoms in the individual may increase. In addition, the person's social appearance anxiety can cause depression, anxiety and stress symptoms because it leads to thoughts that other people will evaluate him/her negatively due to his/her appearance. As a matter of fact, the result of the present study shows that social appearance anxiety and automatic thoughts together predict depression, anxiety, and stress symptoms.

Another result obtained from the present study is that there is a significant negative relationship between social appearance anxiety and weight and height satisfaction. Accordingly, as the level of social appearance anxiety increases, weight and height satisfaction decrease. As a result of the study conducted by Çetinkaya, Gülaçtı, & Çiftçi (2019) on high school students, it was concluded that students who do not like their physical appearance have high social appearance anxiety. In another study conducted by Özkan (2017), the social appearance anxiety of the participants who were not satisfied with their physical appearance was found to be high. The dissatisfaction of the person with his height, weight and physical appearance is also related to the body perception of the person. There are studies in the literature that reveal that body perception is related to social appearance anxiety (Ben, 2017; Turel et al., 2018). In a study by Özteke Kozan & Hamarta (2017), it was concluded that as social appearance anxiety increased, the individual's appearance correction scores also increased. As the negative feelings, perceptions, and attitudes of the person about his/her body, height, weight, himself/herself in the mirror and his/her appearance as a whole increase; It is expected that the person will think that other people around him/her will consider him/her negatively because of his/her appearance and therefore social appearance anxiety increases.

According to another finding of the study, the automatic thought score averages of the participants who have an emotional relationship were found to be significantly lower than the automatic thought score average of those who do not have an emotional relationship. The automatic thoughts score averages of those who have emotional relationships, about loneliness and personal disharmony, are significantly lower than the automatic thought scores of those who do not have an emotional relationship. The beliefs of worthlessness, inadequacy, and not being loved are the basis of automatic thoughts (Beck, 1987). Therefore, people who have an emotional relationship, feel loved by

another person, feel appreciated and feel not alone; this can contribute to the person having fewer automatic thoughts by creating a protective effect.

University years emerge as an important transition period for individuals to take firm steps into adulthood as an independent individual. For this reason, it is thought that it is important to investigate the variables that may be experienced during this period and related psychological problems to produce solutions to contribute to the mental health of the community. As a matter of fact, in the present study, it was concluded that automatic thoughts and social appearance anxiety variables were related. University period is a period when the individual starts to socialize, enter new environments, and establish new friendships, and the social appearance anxiety of a person during this period causes various psychological symptoms such as depression, anxiety, and stress. A person's showing these psychological symptoms can affect the quality of life and especially friendship relations. In our study, it is seen that social appearance anxiety is negatively correlated with height and weight satisfaction level. Therefore, it is thought that conducting studies to increase body affirmation and self-esteem with young individuals may be help to in reduce social appearance anxiety.

According to another result of the study, it is seen that automatic thoughts are associated with the variables of depression, anxiety and stress symptoms and social appearance anxiety. In this context, it is thought that studies to reduce automatic thoughts may be effective in reducing people's social appearance anxiety and psychological symptoms. In addition, it is seen that participants who have an emotional relationship have lower automatic thoughts than those who do not have an emotional relationship. This result shows that having emotional support and being in intimate relationships are a protective factor towards reducing automatic thoughts. Therefore, it is thought that it will be beneficial to encourage students to have close relationships and to socialize. These suggestions of the research are more oriented towards practice. For future studies, it is thought that addressing social appearance anxiety with different groups such as adolescents and adults and various psychopathologies such as eating disorders, anxiety disorders and obsessive-compulsive disorder may contribute to the relevant literature.

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