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Article

An analysis of the relationship between self-consciousness and eating attitudes among 8th grade students

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Abstract: This research investigates the relationship between eating attitudes and self-consciousness among 8th-grade students studying in the Kağıthane district of Istanbul during the 2023–2024 academic year. The study included a total of 568 students (300 males and 268 females). Participants were administered the Sociodemographic Form, Eating Attitudes Test (EAT-40), and the Self-Consciousness Scale. Data were analyzed using SPSS 27.0 software. Pearson correlation and multiple regression analysis were conducted to examine the predictive role of self-consciousness on eating attitudes. A positive relationship was found between "self-consciousness" and "eating attitude." Independent sample *t*-tests and one-way ANOVA were used to compare groups based on sociodemographic variables. The eating attitudes score was significantly higher among female students compared to male students ($t = -6.26$; $p < 0.001$). Students with a family history of dieting had significantly higher eating attitude scores compared to those without ($t = 4$; $p < 0.001$). No significant differences were found based on screen usage during meals, meal procurement methods, meal companions, time spent at school, frequency of packaged food consumption, or parental restrictions on packaged foods. Self-consciousness scores were compared based on gender, diet history, household composition, number of siblings, meal companions, birth order, and parental restrictions on packaged foods. Female students had significantly higher scores in private self-consciousness ($t = -3.96$; $p < 0.001$), general self-consciousness ($t = -9.37$; $p < 0.001$), and social anxiety ($t = -7.51$; $p < 0.001$) compared to male students. Students with a die*t* history had significantly higher general self-consciousness scores ($t = 2.39$; $p < 0.05$) compared to those without. No significan*t* differences were found in self-consciousness levels based on household composition, number of siblings, meal companions, birth order, or parental restrictions on packaged foods. For future scientific studies, the findings were discussed, and suggestions were provided.

Keywords: self-consciousness; eating attitude; adolescence

1. Introduction

Nutritional habits are a significant factor that profoundly affects individuals' health. Eating attitude is related to how a person eats and their preferences. It is also the tendency that forms an individual's feelings, thoughts, and behaviors related to nutrition (Aytın, 2014). The relationship between eating disorders and eating attitudes is an important topic that highlights the complexity of nutritional habits and body image. Eating disorders are among the psychological disorders with a high likelihood of resulting in death (Millar et al., 2005). According to DSM-5 diagnostic criteria, 5.5% to 17.9% of young women and 0.6% to 2.4% of young men have experienced an eating disorder in early adulthood (Silén and Keski-Rahkonen, 2022). Under the category of Feeding and Eating Disorders in DSM-5, the disorders include Anorexia

Nervosa (with two subtypes: Restrictive Type and Binge-Eating/Purging Type), Bulimia Nervosa, Binge Eating Disorder, Pica, Rumination Disorder, Avoidant/Restrictive Food Intake Disorder, Other Specified Feeding or Eating Disorder, and Unspecified Eating Disorder (American Psychiatric Association, 2013). With the acceleration of etiology and prevalence research, diagnostic criteria in manuals have evolved, and individuals' access to early treatment has improved (Cossrow et al., 2016).

Although the etiology of eating disorders is not precisely known, considering genetic and environmental factors together forms the basis of etiology research. Familial factors, interpersonal experiences, and sociocultural influences can be considered risk factors. Additionally, fundamental risk factors such as temperament and self-concept are among genetic, biological, individual, and psychological factors (Striegel-Moore, 1993). The groups at the highest risk of occurrence are adolescents and young adult girls (Öyekçin, 2011).

"Adolescence," as defined by the World Health Organization, is the period between ages 10–19, a phase of life between childhood and adulthood. Adolescents constitute 16% of the world's population (World Health Organization, 2020). Adolescence is a critical time when young people undergo significant physical, cognitive, and emotional changes. During this period, they are in the process of self-discovery, forming their identities, and understanding their social roles (Christie and Viner, 2005). Awareness of their bodies plays a significant role in this process. Notable changes such as increases in body fat and alterations in appearance, emotional fluctuations, and sexual maturation are among the distinct changes that adolescents experience. In girls, the noticeable increase in breast and hip fat can impact their body image (Arıca, 2011) and may contribute to the development of body image and increase the risk of eating disorders. Therefore, support systems and conscious approaches that help adolescents develop a healthy body image and self-acceptance are crucial.

Adolescence is a period of heightened concern about appearance and increased self-awareness. Although it is generally considered a tumultuous time of change, evidence also shows significant stability in personality traits during this period. One of the key concepts in maintaining stability is self-consciousness, which can be summarized as an individual's inward focus of attention (Stein, 1986). It is a concept related to the individual seeing themselves as an object by focusing on their internal thoughts and motivations. It consists of three sub-dimensions: Private Self-Consciousness, Public Self-Consciousness, and Social Anxiety. Private Self-Consciousness is defined as thinking about oneself and one's own self. Public Self-Consciousness is related to perceiving oneself as a social object and general appearance. The last sub-dimension, Social Anxiety, can be expressed as the fear of negative evaluation (Fenigstein et al., 1975).

While the increase in self-awareness is generally considered a positive development, the literature emphasizes that this increased awareness can also bring about some problems. Ingram's meta-analysis study reveals a positive relationship between psychopathological disorders and self-consciousness (Ingram, 1990). There are studies examining the relationship between self-consciousness and psychopathological diagnostic groups such as eating disorders. According to the

general results of these studies, there is an observed relationship between the dimensions of self-consciousness, particularly the sub-dimensions of Public Self-Consciousness and social anxiety, and eating disorders (Hamilton et al., 1992; Striegel-Moore, 1993; Sawaoka et al., 2012).

The review of the literature generally shows that the sample group is selected from university students or women. This situation creates a significant gap in terms of identifying and treating eating disorders, especially during adolescence. Adolescence is a period when self-awareness increases and stabilizes, but it is also among the highest-risk groups for eating disorders. Therefore, early diagnosis and treatment of eating disorders during this period are crucial. In this context, the focus of this study is to understand the relationship between self-consciousness and eating attitudes among 8th-grade students and to examine the evaluations of eating attitudes and self-consciousness according to adolescents' sociodemographic characteristics. The results of this study could significantly contribute to clinical practices in understanding and intervening in eating disorders during adolescence.

2. Methods

This study used the correlation method to examine the relationship between participants' eating attitudes and self-consciousness levels. The study involved 8th-grade students from middle schools in the Kağıthane district of Istanbul. The participants were selected to form a representative sample from these schools. During the data collection process, a standard scale was used to evaluate participants' eating attitudes. Additionally, scales were employed to determine their self-consciousness levels. The collected data were assessed through statistical analyses, and the relationship between participants' sociodemographic characteristics and their eating attitudes and self-consciousness levels was examined.

2.1. Study group

The sample included 8th-grade students from Zuhal Middle School, Tülin Manço Middle School, Hasdal Middle School, and Hacı Ethem Üktem Middle School in the Kağıthane district of Istanbul. Permission was obtained from the Istanbul Provincial Directorate of National Education for the 2023–2024 academic year. The following were administered face-to-face: Informed Consent Form, Sociodemographic Form Self-Consciousness Scale, and Eating Attitudes Test. The convenience sampling method was used, comprising 300 male and 268 female students. Convenience sampling involves collecting data from a sample that the researcher can easily reach. The reason for using the convenience sampling technique is to minimize the loss of time, money, and labor (Büyüköztürk, 2021).

2.2. Data collection tools

The study used a Sociodemographic Form, Self-Consciousness Scale, and Eating Attitudes Test (EAT-40).

2.2.1. Sociodemographic form

This form includes questions designed to predict participants' eating behaviors within the school and family environment, covering their gender, birth dates, family

structure, number of siblings, birth order, and eating attitudes.

2.2.2 Self-consciousness scale

The original form of the scale, conceptualizing the definition of self-consciousness, was created by Feningstein in 1975. The scale consists of 23 items and features a 4-point Likert type. The response options are "completely true = 4," "somewhat true = 3," "somewhat false = 2," and "completely false = 1." The scale comprises three sub-dimensions: Private Self-Consciousness (focusing on one's inner thoughts, feelings, and reactions), Public Self-Consciousness (generally related to one's appearance and how they are perceived by others), and Social Anxiety (reflecting concerns about how one presents themselves to others and social anxiety). The Private Self-Consciousness subscale consists of 10 items (1, 3, 5, 7, 9, 13, 15, 18, 20, 22), the Public Self-Consciousness subscale consists of 7 items (2, 6, 11, 14, 17, 19, 21), and the Social Anxiety subscale consists of 6 items (4, 8, 10, 12, 16, 23). The reverse-scored items are 3, 9, and 12. The Turkish adaptation of the scale has undergone validity and reliability studies. The Turkish validity and reliability study of the Self-Consciousness Scale was conducted with 424 participants (250 females and 174 males) aged between 14 and 18 years (mean age = 16.20, SD = 0.89). The factor structure of the Turkish version of the Self-Consciousness Scale was evaluated using Exploratory Factor Analysis after assessing its construct validity. The Bartlett test result was 1815.71 ($p < 0.001$), and the KMO measure was 0.83, indicating the adequacy of the data for factor analysis. The internal consistency of the scale was found to be 0.77. The internal consistencies of the subscales—Private Self-Consciousness, Public Self-Consciousness, and Social Anxiety—were found to be 0.57, 0.56, and 0.76, respectively (Mülazım, 2012).

2.2.3. Eating attitudes test

The original form of this test was developed by Garner and Garfinkel in 1979 to objectively measure and evaluate the symptoms of anorexia nervosa. The reliability and validity of the Turkish adaptation were conducted by Savaşır and Erol in 1989. The scale consists of 40 questions and is presented in a 6-point Likert type. The response options are "always = 6," "very often = 5," "often = 4," "sometimes = 3," "rarely = 2," and "never = 1." For pathology, items 1, 18, 19, 23, 27, and 39 are reverse-scored. For these items, "sometimes" = 1 point, "rarely" = 2 points, "never" = 3 points, and other options = 0 points. For the other items, "always" = 3 points, "very often" = 2 points, and "often" = 1 point. Scores above 30 are considered significant. The test reliability was found to be 0.65 for Pearson's correlation and 0.70 for Cronbach's Alpha internal consistency coefficient (Savaşır, 1989).

2.3. Data analysis

This study examined the relationship between students' self-consciousness and eating attitudes. The differences in self-consciousness and eating attitudes scores were analyzed concerning participants' sociodemographic variables. Pearson correlation was applied to examine the relationship between participants' eating attitudes and the sub-dimensions of self-consciousness. Multiple regression analysis was conducted to investigate the predictive power of self-consciousness on eating attitudes. The analyses were performed using SPSS 27.0 software. Parametric measurements were

preferred for comparing participants' eating attitudes and self-consciousness scores due to the sample size. An independent sample *t*-test and one-way ANOVA were applied for comparing binary groups. A normality test was conducted to ensure the appropriateness of the sociodemographic comparison and correlation tests. The skewness and kurtosis values of the scale score averages were examined for the normality test. The significance level in the study was set at 0.05.

3. Results

3.1 Examination of the relationship between participants' age, eating attitudes, and self-consciousness scores using pearson correlation

Pearson correlation was applied to examine the relationship between participants' eating attitudes and the sub-dimensions of self-consciousness. Multiple regression analysis was performed with the variables where a correlation was detected to investigate the predictive power of self-consciousness on eating attitudes.

Table 1. Correlation analysis results between age, eating attitudes and self-awareness scores.

			1	2	3	4	5
Age	14.01	0.462	1				
Eating attitude	90.91	18.931	−0.007	1			
Private self-consciousness	26.24	4.177	0.005	0.046	1		
Public self-consciousness	19.18	4.187	−0.003	0.307**	0.297**	1	
Social anxiety	16.03	4.412	−0.002	0.271**	0.064	0.523**	1

According to the correlation findings in **Table 1**, no significant correlation was found between age and eating attitude or self-consciousness ($p > 0.05$). A positive and significant relationship was identified between the total Eating Attitude Test (EAT) score and general self-consciousness ($r = 0.31$; $p < 0.05$) and social anxiety ($r = 0.27$; $p < 0.01$) subdimensions.

3.2. Examination of the findings of multiple regression analysis on the prediction of participants' eating attitude scores by self-consciousness subdimensions

Table 2. Multiple regression analysis on the prediction of participants' eating attitude scores by self-consciousness subdimensions.

Model	***B***	***SH***	***β***	***t***	***p***	***F***	R^2
(constant)	60.747	3.686		16.482	0.000		
Public self-consciousness	1.029	0.210	0.228	4.890	0.000***	35.23**	0.11
Social anxiety	0.650	0.200	0.152	3.256	0.001**		
a. Dependent variable: total EAT							

In **Table 2**, a multiple regression analysis was conducted to predict the total eating attitude score by self-consciousness subdimensions. The model was found to

be statistically significant [F (2.565) = 30.16; $p < 0.001$]. According to the results, the general self-consciousness sub dimension score ($\beta = 0.23$; $p < 0.001$) and the social anxiety sub dimension score ($\beta = 0.15$; $p < 0.001$) significantly and positively predicted the total eating attitude scores. The increase in general self-consciousness scores explains 11% of the increase in total eating attitude scores ($R^2 = 0.11$).

3.3. Examination of participants' eating attitude comparisons in terms of sociodemographic variables

3.3.1 Findings of independent sample *t*-test on the differentiation of eat total scores by gender

Table 3. Independent sample *t*-test on the differentiation of eat total scores by gender.

Constant	Gender	*N*	$\bar{x}$	*ss*	*t*	*p*
EAT	Male student	300	87.96	17.573	−6.26	<0.001***
	Female student	268	94.22	19.862		

EAT = eating attitude test, ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

According to the findings of the independent sample *t*-test conducted to examine the differentiation of total eating attitude scores by gender in **Table 3**, the total eating disorder score was found to be significantly higher in female students compared to male students ($t = -6.26$; $p < 0.001$).

3.3.2. Findings of independent sample *t*-test on the differentiation of eat total scores by family diet history

Table 4. Independent sample *t*-test on the differentiation of eat total scores by family diet history.

Constant	Family diet history	*N*	$\bar{x}$	*ss*	*t*	*p*
EAT	Students with a family diet history	272	94.30	19.266	4.151	<0.001***
	Student without a family diet history	296	87.79	18.097		

EAT = eating attitude test, ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

According to the findings of the independent sample *t*-test conducted to examine the differentiation of total eating attitude scores by family diet history in **Table 4**, students with a family diet history had significantly higher eating attitude scores compared to those without a family diet history ($t = 4.15$; $p < 0.001$). According to the one-way ANOVA findings conducted to examine the differentiation of total eating attitude scores by meal procurement within the school, the total eating disorder score does not significantly differ based on how meals are procured at school (F (3/564) = 0.539; $p > 0.05$). The general averages are as follows: home preparation $\bar{x} = 91.17$, school canteen $\bar{x} = 90.85$, those who do not eat at school $\bar{x} = 87.86$, and other options $\bar{x} = 93.16$.

According to the one-way ANOVA findings conducted to examine the differentiation of total eating attitude scores by whom students spend their meals with, eating attitude scores do not significantly differ based on whom students spend their meals with (F (5/565) = 2.44; $p > 0.05$). The averages for the variables are "Family" $\bar{x} = 90.08$, "With Friends" $\bar{x} = 91.39$, and "Alone" $\bar{x} = 95.01$.

According to the findings of the independent sample *t*-test conducted to examine the differentiation of eating attitude scores by parental restriction of packaged food consumption, it was found that the eating attitude scores were at similar levels and did not show a statistically significant difference between participants whose parents restricted packaged food consumption and those whose parents did not ($t = 1.47$; $p > 0.05$). The average of the groups was $\bar{x} = 96.82$ for the group with parental packaged food restriction and $\bar{x} = 94.49$ for the group without parental packaged food restriction.

According to the findings of the independent sample *t*-test conducted to examine the differentiation of total eating attitude scores by screen usage during meals, the total eating disorder score does not significantly differ based on the habit of screen usage during meals ($t = -0.635$; $p > 0.05$). The general average of participants using screens during meals was $\bar{x} = 90.50$, while the average for those not using screens was $\bar{x} = 91.53$.

According to the findings of the independent sample *t*-test conducted to examine the differentiation of eating attitude scores by the duration of being at school, it was found that eating attitude scores were at similar levels and did not show a statistically significant difference between participants who were at school full-time and those who were at school part-time ($t = -0.99$; $p > 0.05$). The average for full-time students was 95.04, while the average for part-time students was 96.75.

According to the one-way ANOVA findings conducted to examine the differentiation of eating attitude scores by the frequency of packaged food consumption, it was found that eating attitude scores were at similar levels and did not show a statistically significant difference among participants with different frequencies of packaged food consumption (F (3.564) = 2.30; $p > 0.05$). The general averages were $\bar{x} = 98.83$ for "Every Day," $\bar{x} = 95.34$ for "1–2 times a week," $\bar{x} = 93.77$ for "Rarely," and $\bar{x} = 102.71$ for "Never."

3.4. Examination of participants' self-consciousness comparisons in terms of sociodemographic variables

3.4.1. Findings of independent sample *t*-test on the differentiation of self-consciousness subdimension scores by gender

Table 5. Independent sample *t*-test on the differentiation of self-consciousness subdimension scores by gender.

Self-consciousness subdimension	Gender	*N*	$\bar{x}$	*ss*	*t*	*p*
Private self-consciousness	Male student	300	25.59	4.459	−3.960	<0.001***
	Female student	268	26.96	3.714		
Public self-consciousness	Male student	300	17.73	4.167	−9.374	<0.001***
	Female student	268	20.80	3.576		
Social anxiety	Male student	300	14.78	4.269	−7.515	<0.001***
	Female student	268	17.44	4.145		

According to the findings of the independent sample *t*-test conducted to examine the differentiation of self-consciousness subdimension scores by gender in **Table 5**, the private self-consciousness subdimension score was found to be significantly higher in female students compared to male students ($t = -3.96$; $p < 0.001$). The general self-

consciousness subdimension score was found to be significantly higher in female students compared to male students ($t = -9.37$; $p < 0.001$). The social anxiety subdimension score was found to be significantly higher in female students compared to male students ($t = -7.51$; $p < 0.001$).

3.4.2. Findings of independent sample t-test on the differentiation of self-consciousness subdimension scores by diet history

Table 6. Independent sample *t*-test on the differentiation of self-consciousness subdimension scores by diet history.

Self-consciousness subdimension	Diet history	*N*	$\bar{x}$	*ss*	*t*	*p*
Private self-consciousness	Students with a diet history	88	26.56	3.841	0.779	0.436
	Students without a diet history	480	26.18	4.237		
Public self-consciousness	Students with a diet history	88	20.16	3.962	2.397	0.017*
	Students without a diet history	480	19.00	4.207		
Social anxiety	Students with a diet history	88	16.59	4.758	1.294	0.196
	Students without a diet history	480	15.93	4.343		

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$.

According to the findings of the independent sample *t*-test conducted to examine the differentiation of self-consciousness subdimension scores by diet history in **Table 6**, the general self-consciousness subdimension score was found to be significantly higher in students with a diet history compared to those without a diet history ($t = 2.39$; $p < 0.05$).

3.4.3. Findings of one-way ANOVA on the differentiation of self-consciousness subdimension scores by whom meals are spent with

Table 7. One-way ANOVA on the differentiation of self-consciousness subdimension scores by whom meals are spent with.

Self-consciousness subdimension	Whom meals are spent with	*N*	$\bar{x}$	*ss*	*F*	*sd*	*p*	Post hoc
Private self-consciousness	With family	442	26.33	4.076				
	With friends	41	25.15	4.762	1.515	2/565	.221	
	Lonely	85	26.28	4.374				
	Total	568	26.24	4.177				
Public self-consciousness	With family	442	19.06	4.233				
	With friends	41	19.44	3.515	.875	2/565	0.418	
	Lonely	85	19.68	4.246				
	Total	568	19.18	4.187				
Social anxiety	With family	442	15.85	4.439				
	With friends	41	16.76	3.780	1.734	2/565	0.178	
	Lonely	85	16.64	4.511				
	Total	568	16.03	4.412				

According to the one-way ANOVA findings in **Table 7**, examining the differentiation of self-consciousness subdimension scores based on whom students spend their meals with, the self-consciousness subdimension scores do not show a

significant difference based on the variable of whom meals are spent with ($p > 0.05$).

3.4.4. Findings of independent sample *t*-test on the differentiation of self-consciousness subdimension scores by number of siblings

Table 8. Independent sample *t*-test on the differentiation of self-consciousness subdimension scores by number of siblings.

Self-consciousness subdimension	Kardeş sayısı	*N*	$\bar{x}$	*ss*	*F*	*sd*	*p*	Post hoc
Private self-consciousness	2	192	26.48	4.340	1.04	4/563	0.384	-
	3	173	26.23	4.193				
	4	86	26.60	3.592				
	5 and more	63	25.51	4.115				
	Singleton	54	25.69	4.459				
	Total	568	26.24	4.177				
Public self-consciousness	2	192	19.43	4.284	0.813	4/563	0.517	-
	3	173	18.91	4.097				
	4	86	19.23	3.867				
	5 and more	63	19.60	3.982				
	Singleton	54	18.56	4.832				
	Total	568	19.18	4.187				
Social anxiety	2	192	16.21	4.324	0.654	4/563	0.625	-
	3	173	16.11	4.579				
	4	86	15.37	3.878				
	5 and more	63	16.32	4.369				
	Singleton	54	15.87	5.040				
	Total	568	16.03	4.412				

According to the independent sample *t*-test findings in **Table 8**, which examined the differentiation of self-consciousness subdimension scores in terms of the number of siblings, the self-consciousness subdimension scores do not significantly differ by the number of siblings ($p > 0.05$).

3.4.5. Findings of independent sample *t*-test on the differentiation of self-consciousness subdimension scores by type of family in which the student was raised

Table 9. Independent sample *t*-test on the differentiation of self-consciousness subdimension scores by type of family in which the student was raised.

Self-consciousness subdimension	Type of family in which the student was raised	*N*	$\bar{x}$	*ss*	*t*	*p*
Private self-consciousness	Nuclear family	510	26.28	4.156	0.689	0.49
	Extended family	58	25.88	4.381		
Public self-consciousness	Nuclear family	510	19.08	4.170	−1.710	0.09
	Extended family	58	20.07	4.267		
Social anxiety	Nuclear family	510	16.04	4.387	0.183	0.85
	Extended family	58	15.93	4.667		

According to the independent sample *t*-test findings in **Table 9**, which examined the differentiation of self-consciousness subdimension scores by the type of family in which the student was raised, the self-consciousness subdimension scores do not significantly differ by the type of family ($p > 0.05$).

3.4.6. Findings of independent sample *t*-test on the differentiation of self-consciousness subdimension scores by birth order

Table 10. Independent sample *t*-test on the differentiation of self-consciousness subdimension scores by birth order.

Self-consciousness subdimension	Birth order	*N*	$\bar{x}$	*ss*	*F*	*sd*	*p*	Post hoc
Private self-consciousness	First-born	209	26.25	4.517				
	Middle kid	156	25.75	4.017	1.87	2/565	0.160	-
	Last child	203	26.60	3.909				
	Total	568	26.24	4.177				
Public self-consciousness	First-born	209	19.15	4.541				
	Middle kid	156	19.06	4.222	0.154	2/565	0.857	-
	Last child	203	19.30	3.779				
	Total	568	19.18	4.187				
Social anxiety	First-born	209	16.15	4.779				
	Middle kid	156	15.76	4.118	0.419	2/565	0.658	-
	Last child	203	16.12	4.246				
	Total	568	16.03	4.412				

According to the independent sample *t*-test findings in **Table 10**, which examined the differentiation of self-consciousness subdimension scores by birth order, the self-consciousness subdimension scores do not significantly differ by birth order ($p > 0.05$).

3.4.7. Findings of Independent sample *t*-test on the differentiation of self-consciousness subdimension scores by parental restriction of packaged foods

Table 11. Independent sample *t*-test on the differentiation of self-consciousness subdimension scores by parental restriction of packaged foods.

Değişkenler	Parental restriction of packaged foods	*N*	$\bar{x}$	*ss*	*t*	*p*
Private self-consciousness	Yes	511	26.23	4.121	−0.149	0.88
	No	57	26.32	4.695		
Public self-consciousness	Yes	511	19.18	4.088	0.041	0.96
	No	57	19.16	5.035		
Social anxiety	Yes	511	16.15	4.405	1.897	0.06
	No	57	14.98	4.373		

According to the independent sample *t*-test findings in **Table 11**, which examined the differentiation of self-consciousness subdimension scores by parental restriction of packaged foods, the self-consciousness subdimension scores do not significantly differ by parental restriction of packaged foods ($p > 0.05$).

4. Discussion

4.1. Examination of the relationship between eating attitudes and self-consciousness

In this study, the relationship between eating attitudes and self-consciousness was examined using Pearson correlation and multiple regression analysis to predict eating attitude scores by self-consciousness subdimensions. The analyses showed that the general self-consciousness and social anxiety subdimensions positively and significantly predicted the total eating attitude scores. Previous studies indicate varying relationships between self-consciousness and eating attitudes in different subdimensions. Striegel-Moore (1993) found a connection only with the general self-consciousness subdimension in individuals diagnosed with bulimia nervosa (BN), while reporting a relationship with both social anxiety and general self-consciousness in non-clinical samples. Another study found that high levels of general self-consciousness were associated with traits and behaviors indicative of eating disorders (Scheer, 2003). Sawaoka et al. (2012) noted a relationship with both general and private self-consciousness. The current findings align with studies predicting the relationship between eating attitudes, social anxiety, and general self-consciousness.

4.2. Evaluation of eating attitude scale scores by sociodemographic variables

The evaluation of EAT results by sociodemographic variables involved *t*-tests and ANOVA. EAT total scores showed significant differences by gender and family diet history. No significant differences were found for screen use during meals, meal procurement at school, meal companions, parental restriction of packaged foods, time spent at school, and frequency of packaged food consumption. Micali et al. (2014) found that 63.2% of female adolescents feared gaining weight compared to 11.5% of males. Studies since 1990 have shown a higher lifetime prevalence of eating disorders in females compared to males (Qian, 2021), consistent with current findings where female students showed significant differences in eating attitudes. Physiological changes during adolescence and psychosocial factors, media, and cultural norms contribute to these differences (Keel and Forney, 2013). Balantekin (2019) indicated that female adolescents are more likely to adopt unhealthy eating behaviors from their parents compared to males. The presence of a family member who has dieted raises awareness among adolescents, explaining the observed differences in EAT scores by family diet history.

In recent years, research on screen use during meals has increased. In a 2023 study, it was determined that Chinese participants between the ages of 19–60 had a high rate of screen use while eating, which reduced intuitive eating behavior and increased irregular eating habits (He et al., 2023). In a 2022 cohort study on adolescents and children, a relationship was found between television viewing time and calories of food eaten in childhood, while no significant difference was observed during adolescence. However, it was determined that nutritional content changed. It was emphasized that screen use during eating behavior was a distracting element and negatively affected nutritional memory. This situation can prevent the brain from

correctly perceiving the amount of food swallowed, reducing the feeling of fullness (Jensen et al., 2022). Future studies should examine age differences and intergenerational screen use relationships in more depth. In particular, today's adolescents' screen use may differ from previous generations. Therefore, more generational studies are needed on the subject.

In studies conducted on nutritional content, the effect of family meals on the nutritional quality of adolescents has been emphasized. The research results show that the nutritional quality of adolescents who eat with their families increases. It was observed that adolescents who have breakfast with their families every day in particular consume 0.37 more fruits than those who eat breakfast once a week. This situation reveals that having breakfast with the family has a significant effect on the nutritional order of adolescents (Larson et al., 2013). Early school start times cause breakfast meals to coincide with school hours, which increases the possibility of children skipping breakfast. It is thought that breakfast is skipped more frequently, especially during the transition from childhood to adolescence. In addition, it is stated that parents are positive role models in terms of healthy eating in the breakfasts they have with their children (Pearson et al., 2009). These findings show that family meals have a significant effect on the nutritional habits and general health status of adolescents.

No significant relationship was found between the EAT total score and factors such as screen use during meals, meal procurement at school, meal companions, parental restriction of packaged foods, time spent at school, and frequency of packaged food consumption. Considering these findings and existing literature, it is suggested that factors influencing eating disorders should be evaluated holistically rather than in isolation.

4.3. Evaluation of self-consciousness scale scores by sociodemographic variables

The comparison of self-consciousness scale scores by sociodemographic variables used *t*-tests and ANOVA, examining private self-consciousness, general self-consciousness, and social anxiety subdimensions. Significant differences in self-consciousness levels were found by gender, with female students scoring higher in all subdimensions. This aligns with previous studies finding higher self-consciousness levels in females (Allgood-Merten et al., 1990; Gray and Hudson, 1984; Elkind and Bowen, 1979). Females' focus on relational aspects of self may be a determining factor (Jarvinen and Nicholls, 1996).

Significant differences were found in the general self-consciousness subdimension between participants who had dieted and those who had not, with no significant differences in private self-consciousness and social anxiety subdimensions. Previous studies show varying results, with some indicating relationships in general self-consciousness and social anxiety subdimensions, while others found private self-consciousness significant (Blanchard, 1983; Hamilton et al., 1992; Sawaoka et al., 2012). Sample representation and temporal effects may influence these outcomes. Evaluations in non-clinical samples are similar to the current findings (Striegel-Moore, 1993).

The differences in participants' self-consciousness levels were tested according to who they spent their meals with, but no significant result was obtained. In a meta-analysis study examining the relationship between social anxiety and loneliness in adolescents from 1981 to 2016, it was observed that loneliness and social anxiety were related in adolescents (Maes, et al., 2019). In addition, loneliness was also found to be related to eating disorders. The relationship between loneliness and eating disorders covers the entire weight spectrum from AN to overeating and obesity. In many eating disorders, individuals experience eating attacks when they are alone. They are anxious about being evaluated and criticized by others (Levine, 2013). In addition, studies on loneliness and self-consciousness have shown that there is a significant relationship between specific self-consciousness and general self-consciousness for women, while there is a significant relationship only with social anxiety in men (Garris, 2018). For this reason, when the sub-dimensions of the self-consciousness scale are considered, it is thought that the situations of participants being alone or with others during their meals may differ.

In a study conducted on children around the age of 2, the effect of having a sibling on self-awareness was emphasized. It was stated that having an older sibling has an important effect on children's understanding of socialization and self-awareness (Taumoepeau and Reese, 2013). It is thought that having a sibling, which increases social interaction and provides self-awareness in childhood, decreases in importance as the focus turns inward in adolescence.

No significant differences were found in self-consciousness levels by parental restriction of packaged foods, family structure, birth order, number of siblings, and meal companions. This study focused on self-consciousness in relation to family and sibling variables, but expected differences in general self-consciousness and social anxiety were not observed. The results suggest that adolescents focus more on internal factors during this period, with family variables having relatively less impact, supporting Rosenberg's theory on adolescence (Rosenberg et al., 1989).

5. Conclusion

The general evaluation of the study results indicates a positive relationship between eating attitudes and self-consciousness. Higher self-consciousness levels in participants with diet history and significant differences in EAT scores by family diet history suggest increased awareness among individuals. Adolescents observing and experiencing dieting processes can be guided to control their awareness. Public health initiatives should inform that dieting is not solely about restriction but includes factors like healthy eating and regular exercise.

This study was conducted on a non-clinical sample. In future studies, it may be useful to select a clinical sample group and compare the data more comprehensively. In addition, similar studies conducted specifically for eating disorder diagnosis groups may contribute to a better understanding of the relationship between eating disorders and self-consciousness.

In addition, as a suggestion for clinicians, it is important to create psychoeducation groups for individuals with high self-consciousness and diagnosed with eating disorders. Through these groups, individuals can increase their awareness

of their own conditions and this awareness can be reinforced with effective guidance training. In this way, it will be possible to develop more effective psychoeducation programs on eating disorders.

Finally, longitudinal studies may be appropriate in order to monitor and evaluate the temporal effects of the research results.

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