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Research Article

The relationship between social media use, eating attitudes, and body mass index in young adult women: a cross-sectional study

Şemsi Gül Yılmaz Kocaman[1], Murat Altan[2], Hasan Yıldırım[3]

[1]Department of Nutrition and Dietetics, Faculty of Health Sciences, Karamanoğlu Mehmetbey University, Karaman, Türkiye
[2]Department of Nutrition and Dietetics, Faculty of Health Sciences, Fırat University, Elazığ, Türkiye
[3]Department of Data Science and Analytics, Kamil Özdağ Faculty of Science, Karamanoğlu Mehmetbey University, Karaman, Türkiye

ABSTRACT

Objective: Social media use has become increasingly widespread among young adults and may influence eating-related behaviors and body weight outcomes. However, evidence regarding platform-specific social media use, body mass index (BMI), and eating attitudes among young adult women remains limited. Therefore, this study examined associations between social media platform use, BMI categories, and eating attitudes among women aged 19-32 years.

Methods: This cross-sectional study was conducted between February and March 2025 among voluntarily recruited women aged 19-32 years through face-to-face interviews conducted in university and community settings in Elazığ, Türkiye. A total of 456 participants completed questionnaires covering sociodemographic characteristics, anthropometric measurements, social media use patterns, and the Eating Attitudes Test-26 (EAT-26). Statistical analyses were performed using R (version 4.4.1), IBM SPSS Statistics (version 26), and MedCalc Statistical Software (version 21).

Results: Participants' mean age was 22.67 ± 3.50 years and mean BMI was 22.58 ± 3.73 kg/m²; 66.2% were normal weight and 76.1% had an associate degree level of education. BMI categories differed significantly by use of Facebook, X (Twitter), and TikTok, and by weekly social media visit frequency ($p < 0.05$). EAT-26 scores increased significantly across higher BMI categories ($p < 0.001$). Women in the pre-obese and obese groups had significantly higher EAT-26 scores than those in the underweight and normal-weight groups ($p < 0.001$). Platform-specific differences were also observed: X (Twitter) use was associated with mean BMI ($p = 0.014$), while YouTube ($p = 0.035$) and Snapchat use ($p = 0.013$) were associated with mean EAT-26 scores. Correlation analyses indicated generally weak associations between social media use measures and both BMI and EAT-26 scores ($r = 0.03–0.31$).

Conclusion: Social media use patterns differed across BMI categories, and higher BMI levels were associated with more impaired eating attitudes among young adult women. These findings highlight the importance of considering social media-related factors in strategies aimed at promoting healthy eating behaviors and reducing disordered eating risk in this population.

Keywords: young adult women, social media, body mass index, eating attitudes

✉ Şemsi Gül Yılmaz Kocaman ▪ semsigulyilmaz@kmu.edu.tr
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Introduction

Social media is a form of digital communication that enables online interaction and has become increasingly widespread worldwide.[1] According to DataReportal's Digital 2025 reports, there were 5.24 billion active social media user identities worldwide, representing a 4.1% increase compared with the previous year. In Türkiye, 58.5 million social media user identities, corresponding to 66.7% of the population, were reported in January 2025.[2] Platforms such as Instagram, Facebook, X (Twitter), and YouTube are among the most commonly used social media networks, facilitating communication through photos, videos, and shared content.[3]

The widespread use of social media has affected societies in many ways, and both its positive and negative effects have been examined in numerous studies.[4] One important area of interest is its potential influence on eating behaviors.[5] Increasing engagement with social media-based healthy eating communities has raised awareness regarding diet and nutrition.[6,7] However, users are also frequently exposed to diet and health-related information lacking scientific validity.[8,9] In addition, exposure to food-related content, advertisements for unhealthy foods, and idealized body images may contribute to unhealthy dietary behaviors and obesity-related risks.[10,11]

Given the potential influence of social media on eating behavior, its possible relationship with body weight has also attracted attention. Obesity has been shown to cluster within social networks, suggesting that social environments may shape weight-related outcomes.[12] Nevertheless, findings regarding the relationship between social media use and body mass index (BMI) remain inconsistent, with some studies reporting positive associations and others reporting no significant relationship.[12-14]

Previous studies have mainly focused on adolescents and have generally examined social media use in relation to eating behaviors, body image, and weight-related concerns.[15-19] In Türkiye, studies investigating the combined relationship between platform-specific social media use, BMI categories, and eating attitudes among young adult women remain limited.[20-22]

Differences between studies may partly reflect variations in how social media exposure is assessed, including duration, frequency of use, and the platforms evaluated. Social media platforms differ in content structure, interaction patterns, and the type of information shared. Therefore, evaluating social media as a single construct may obscure potential platform-specific associations.

Considering the widespread use of social media among young adults and its possible influence on eating-related behaviors and body weight, examining platform-specific patterns may contribute to a better understanding of these relationships. Therefore, this study aimed to examine whether platform-specific social media use differs across BMI categories and is associated with eating attitudes among young adult women aged 19-32 years.

Materials and Methods

Participants

The study was conducted in Elazığ, Türkiye, between February and March 2025. Participants were recruited using a convenience sampling approach from university campuses and surrounding community settings, including university students and university personnel other young adult women who volunteered to participate in the study. All questionnaires were administered through face-to-face interviews by the researchers, and no online data collection was

performed. Initially, 478 voluntary women aged 19-32 years were recruited for the study. The required minimum sample size was calculated using G*Power software based on a medium effect size, 95% confidence level, and 80% statistical power. Inclusion criteria were being female, aged between 19 and 32 years, and voluntary participation in the study. Participants with incomplete questionnaires, missing anthropometric data, pregnancy, diagnosed eating disorders, or chronic diseases that could affect eating behavior or body weight were excluded from the final analysis. Consequently, 456 participants were included in the final analysis.

As this was an observational cross-sectional study, randomization was not applied. To minimize selection bias, participants were enrolled consecutively during the data collection period, and standardized inclusion and exclusion criteria were applied. However, because the sample was not randomly selected and a large proportion of participants had an associate degree, the sample should not be considered representative of all young adult women in Türkiye.

The questionnaire form consisted of sections on participants' socio-demographic characteristics (e.g., age, educational status), anthropometric measurements, nutritional information, Social media use and Eating Attitudes Test (EAT-26). Participants with psychiatric disorders (e.g., psychotic disorders, bipolar disorder or diagnosed eating disorders), recent pregnancy-related conditions, history of bariatric surgery in the last 6 months, chronic illnesses were excluded from the study. Due to incomplete data and reported chronic disorders history, 22 participants were excluded. As a result, the study was completed with 456 participants.

Demographic and personal characteristics

Participants were asked to report their age, educational status, presence of any illnesses. Anthropometric measurements were performed by trained researchers using standardized procedures. Body weight was measured using a calibrated digital scale with participants wearing light clothing and no shoes. Height was measured using a stadiometer, with participants standing upright, barefoot, and with their head positioned in the Frankfort horizontal plane. All measurements were conducted by the same trained research team using the same equipment under similar conditions to ensure consistency and minimize measurement error. Body Mass Index (BMI) was calculated by dividing weight in kilograms by the square of height in meters (kg/m²). BMI classification was conducted in accordance with the World Health Organization (WHO) criteria: <18.50 was considered underweight, 18.50-24.99 normal weight, 25.00-29.99 pre-obese, 30.00-34.99 obese class I, and ≥35.00 as obese class II and morbid obesity.[23]

Data collection

Eating attitudes test-26 (EAT-26)

The scale was first developed in 1979 with 40 items and revised in 1982 by Garner et al., resulting in the 26-item version. The EAT-26 has demonstrated high internal consistency in the original development study (Cronbach's α ≈ 0.90).[24] The Turkish validity and reliability study was conducted by Ergüney Okumuş et al., who reported good internal consistency (Cronbach's α = 0.84) and acceptable test–retest reliability (r = 0.78).[25]

The EAT-26 consists of 26 items scored on a six-point Likert scale ("always," "usually," "often," "sometimes," "rarely," "never"). Items 1–25 are scored as: always = 3, usually = 2, often = 1, and the remaining options = 0. Item 26 is reverse-scored (never = 3, rarely = 2, sometimes = 1, others = 0). Total scores range from 0 to 78, with ≥20 indicating risk for disordered eating; higher scores reflect more problematic eating attitudes.

Social media use

Participants were asked to self-report the social media platforms they actively used and their average daily duration of use during face-to-face interviews. Self-reported average daily time spent on social media (minutes/day) was categorized as 0-30, 31-60, 61-120, 121-240, 241-360, and >360 minutes. The categorization of daily social media usage was based on commonly used approaches in previous research examining screen time and social media exposure and was intended to reflect meaningful differences in usage patterns rather than equal numerical ranges.[26,27]

Ethical approval

Ethical approval for the study was obtained from the Fırat University Non-Interventional Research Ethics Committee on 30 January 2025 (Decision No: 2025/02-60). Written informed consent was obtained from all participants prior to participation, and the study was conducted in accordance with the principles of the Declaration of Helsinki.

Statistical analysis

Descriptive statistics were presented as frequency (N) and percentage (%) for categorical variables, and as mean, standard deviation (SD), median, and interquartile range (IQR) for continuous variables. The normality of continuous variables was assessed using the Shapiro–Wilk test, skewness and kurtosis coefficients, and visual inspection of histograms and Q–Q plots. The Chi-square (χ^2) test of independence was used to examine associations between categorical variables, and Fisher's exact test was applied when expected cell counts were below five. For comparisons across BMI categories, one-way analysis of variance (ANOVA) was used when parametric assumptions were satisfied, and the Kruskal–Wallis test was applied otherwise. When significant differences were detected, post hoc analyses were conducted using the Games–Howell test. Pearson (point-biserial) correlation coefficients were used to assess associations between social media platform use (yes/no) and continuous variables (BMI and EAT-26 scores).

All statistical analyses were performed using R (version 4.4.1), IBM SPSS Statistics (v. 26), and MedCalc Statistical Software (v. 21). A significance level of $p < 0.05$ was adopted.

Results

The demographic and anthropometric characteristics of the participants are presented in Table 1. The sample consisted of young adult women with a mean age in the early twenties and a BMI distribution predominantly within the normal range.

Table 1. Demographic and anthropometric characteristics of participants

		n	%
Education	Literate	4	.88
	Primary School	2	.44
	Middle School	14	3.07
	High School	71	15.57
	Associate Degree	347	76.10
	Bachelor's Degree	18	3.95
	Total	456	100
BMI (Classification)	UW (Underweight)	53	11.62
	NW (Normal)	302	66.23
	PW (Pre-obese)	79	17.32
	OB (Obese)	22	4.82
	Total	456	100
	Mean±SD		
Age (years)	22.67±3.50		
BMI (kg/m^2)	22.58±3.73		

Table 2. Comparison of social media usage habits according to BMI classification

		BMI classification												p
		UW			NW			PW			OB			
		n	%[a]	%[b]	n	%[a]	%[b]	n	%[a]	%[b]	n	%[a]	%[b]	
Instagram	Yes	49	11.5	92.5	285	67.1	94.4	70	16.5	88.6	21	4.9	95.5	0.320[θ]
	No	4	12.9	7.5	17	54.8	5.6	9	29.0	11.4	1	3.2	4.5	
Facebook	Yes	2	3.5	3.8	40	70.2	13.2	9	15.8	11.4	6	10.5	27.3	0.040[θ]
	No	51	12.8	96.2	262	65.7	86.8	70	17.5	88.6	16	4.0	72.7	
YouTube	Yes	41	11.3	77.4	250	69.1	82.8	56	15.5	70.9	15	4.1	68.2	0.059[θ]
	No	12	12.8	22.6	52	55.3	17.2	23	24.5	29.1	7	7.4	31.8	
X (Twitter)	Yes	30	16.8	56.6	125	69.8	41.4	18	10.1	22.8	6	3.4	27.3	<0.001[θ]
	No	23	8.3	43.4	177	63.9	58.6	61	22.0	77.2	16	5.8	72.7	
TikTok	Yes	9	7.0	17.0	98	76.0	32.5	15	11.6	19.0	7	5.4	31.8	0.024[θ]
	No	44	13.5	83.0	204	62.4	67.5	64	19.6	81.0	15	4.6	68.2	
Whatsapp	Yes	49	11.9	92.5	273	66.1	90.4	71	17.2	89.9	20	4.8	90.9	0.964[θ]
	No	4	9.3	7.5	29	67.4	9.6	8	18.6	10.1	2	4.7	9.1	
Snapchat	Yes	27	12.4	50.9	152	69.7	50.3	30	13.8	38.0	9	4.1	40.9	0.216[θ]
	No	26	10.9	49.1	150	63.0	49.7	49	20.6	62.0	13	5.5	59.1	
Pinterest	Yes	21	12.7	39.6	110	66.3	36.4	30	18.1	38.0	5	3.0	22.7	0.552[θ]
	No	32	11.0	60.4	192	66.2	63.6	49	16.9	62.0	17	5.9	77.3	
Self-reported average daily time spent on social media (minutes/day)	0-30	0	.0	.0	6	60.0	2.0	4	40.0	5.1	0	.0	.0	0.317[θ]
	31-60	4	14.3	7.5	13	46.4	4.3	9	32.1	11.4	2	7.1	9.1	
	61-120	14	14.3	26.4	64	65.3	21.2	16	16.3	20.3	4	4.1	18.2	
	121-240	31	12.0	58.5	176	68.0	58.3	40	15.4	50.6	12	4.6	54.5	
	>360	4	6.6	7.5	43	70.5	14.2	10	16.4	12.7	4	6.6	18.2	
Self-reported frequency of social media use (times/ week)	0-8	2	6.9	3.8	14	48.3	4.6	12	41.4	15.2	1	3.4	4.5	0.012[θ]
	9-30	26	17.3	49.1	98	65.3	32.5	19	12.7	24.1	7	4.7	31.8	
	31-57	16	11.3	30.2	94	66.7	31.1	24	17.0	30.4	7	5.0	31.8	
	>58	9	6.6	17.0	96	70.6	31.8	24	17.6	30.4	7	5.1	31.8	

[θ]: Chi-square test of independence. [a]: Percentage in corresponding row. [b]: Percentage in corresponding column UW:Underweight; NW:Normal; PW: Pre-obese; OB: Obese.

Table 2 presents the results of analyses comparing social media platform preferences, time spent on social media, and frequency of social media visits according to BMI categories. Statistically significant differences were observed among BMI groups in terms of Facebook (p = 0.040), X (Twitter) (p < 0.001), and TikTok use (p = 0.024), as well as weekly social media visit frequency (p = 0.012). Interpretation of these findings should take into account that the obese group included a relatively small number of participants (n = 22), resulting in some expected cell counts below five; therefore, percentage differences across BMI categories should be interpreted with caution. Lower proportions of X (Twitter) use were observed in the higher BMI categories compared with the underweight and normal-weight groups, although the pattern was not strictly monotonic across BMI categories. Facebook use also differed significantly across BMI groups, but the distribution did not indicate a linear increase with BMI. Similarly, TikTok use differed across BMI categories, with higher usage proportions observed in the obese group than in the underweight group.

Regarding weekly social media visit frequency, the proportion of participants reporting ≥58 visits per week was lower in the underweight group than in the normal-weight, pre-obese, and obese groups. No statistically significant differences were found among BMI groups in terms of the use of other social media platforms (Instagram, YouTube, WhatsApp, Snapchat, and Pinterest) or self-reported average daily time spent on social media ($p > 0.05$).

Table 3 presents the comparison of Eating Attitudes Test (EAT-26) scores across BMI categories. A highly statistically significant difference was observed in mean EAT-26 scores among BMI groups ($p < 0.001$). Mean EAT-26 scores were found to increase progressively with higher BMI levels (underweight [UW]: 11.34; normal weight [NW]: 11.69; pre-obese [PW]: 14.63; obese [OB]: 16.27). The Games–Howell post hoc analysis revealed that participants in the PW and OB groups had significantly higher EAT-26 scores compared with those in the UW and NW groups.

Overall, 75 participants (16.4%) had EAT-26 scores ≥20, which is considered the conventional cutoff for disordered eating risk. The prevalence of EAT-26 risk increased across BMI categories: 13.2% (7/53) in the underweight group, 13.9% (42/302) in the normal-weight group, 24.1% (19/79) in the overweight group, and 30.4% (7/23) in the obese group. BMI category was significantly associated with EAT-26 risk status ($\chi^2(3) = 8.44$, $p = 0.03$).

Table 4 summarizes the results of analyses comparing mean BMI and EAT-26 scores according to social media platform use, duration of use, and frequency of use, along with the correlation coefficients between these variables. With respect to mean BMI, a statistically significant difference was observed only for X (Twitter) use ($p = 0.014$); the mean BMI of non-users (22.90) was significantly higher than that of users (22.10). Regarding mean EAT-26 scores, significant differences were identified for YouTube ($p = 0.035$) and Snapchat ($p = 0.013$) use. Participants who did not use these platforms had significantly higher mean EAT-26 scores (YouTube non-users: 13.71; Snapchat non-users: 13.20) compared with users (YouTube users: 12.07; Snapchat users: 11.54). No statistically significant associations were found between other social media platforms, duration of use, or frequency of use and mean BMI or EAT-26 scores ($p > 0.05$). The final column of Table 4 presents Pearson (point-biserial) correlation coefficients between social media platform use (yes/no, coded as 0/1) and continuous variables (BMI and EAT-26 scores). Overall, the observed correlation coefficients were weak in magnitude.

Table 3. Comparison of EAT-26 total scores and disordered-eating risk status by BMI classification

		EAT-26 score	p	EAT-26 score ≥20 (at-risk)	p
		Mean±SD		n (%)	
BMI Classification	UW	11.34[a] ±6.65	<0.001[κ]	7 (13.2)	0.03[β]
	NW	11.69[a] ±6.74		42 (13.9)	
	PW	14.63[b] ±6.70		19 (24.1)	
	OB	16.27[b] ±7.13		7 (30.4)	
	Total	12.93±6.87		75 (16.4)	

[κ]: One-way analysis of variance test with Games-Howell post hoc comparison.

[β] : Pearson chi-square test of independence.

UW:Underweight; NW:Normal; PW: Pre-obese; OB: Obese.

[a, b] Different superscript letters indicate statistically significant differences between BMI groups based on Games-Howell post hoc comparisons.

Table 4. Examining the relationship between social media use, BMI and EAT-26 score

		BMI	p	EAT-26 score	p	r$^{\omega}$
		Mean±SD		Mean±SD		
Instagram	Yes	22.6±3.77	0.666$^{\psi}$	12.4±6.91	0.741$^{\psi}$	0.191
	No	22.8±3.87		12.8±6.72		-0.027
Facebook	Yes	23.4±4.21	0.058$^{\psi}$	13.3±7.17	0.310$^{\psi}$	0.238
	No	22.5±3.70		12.3±6.85		0.162
YouTube	Yes	22.5±3.73	0.133$^{\psi}$	12.1±6.76	0.035$^{\psi}$	0.206
	No	23.1±3.95		13.7±7.28		0.053
X (Twitter)	Yes	22.1±3.76	0.014$^{\psi}$	12.4±6.70	0.957$^{\psi}$	0.220
	No	22.9±3.76		12.4±7.03		0.152
TikTok	Yes	22.8±3.56	0.754$^{\psi}$	12.4±7.23	0.881$^{\psi}$	0.263
	No	22.5±3.87		12.4±6.77		0.145
Whatsapp	Yes	22.6±3.80	0.935$^{\psi}$	12.3±6.80	0.171$^{\psi}$	0.174
	No	22.5±3.64		13.7±7.67		0.201
Snapchat	Yes	22.3±3.62	0.180$^{\psi}$	11.5±6.62	0.013$^{\psi}$	0.227
	No	22.8±3.91		13.2±7.05		0.124
Pinterest	Yes	22.5±3.62	0.623$^{\psi}$	12.2±6.83	0.745$^{\psi}$	0.205
	No	22.7±3.87		12.5±6.94		0.161
Self-reported average daily time spent on social media (minutes/day)	0-30	22.9±3.64	0.284$^{\delta}$	13.4±7.41	0.619$^{\delta}$	0.138
	31-60	4.1±1.74		12.3±7.28		0.311
	61-120	22.3±3.55		11.5±7.08		0.116
	121-240	22.4±3.68		12.6±6.74		0.187
	>360	23.1±3.95		13.1±7.07		0.163
Self-reported frequency of social media use (times/week)	0-8	23.5±3.81	0.072$^{\delta}$	12.9±7.04	0.963$^{\delta}$	0.041
	9-30	22.1±3.56		12.3±6.99		0.131
	31-57	22.4±3.75		12.2±6.76		0.175
	>58	23.2±3.96		12.6±6.96		0.249

$^{\psi}$: Independent samples t-test, $^{\delta}$: One way analysis of variance test, $^{\omega}$: Pearson correlation coefficient between social media platform use (coded as 0 = no, 1 = yes) and continuous variables (BMI and EAT-26 scores).

Discussion

This study evaluated platform-specific social media use in relation to BMI categories and eating attitudes among young adult women in Türkiye. The findings indicate that BMI-related differences were present for some platforms, particularly Facebook, X (Twitter), and TikTok, whereas no clear differences were observed for several other widely used platforms. Eating attitudes also varied by BMI category, with higher EAT-26 scores and a higher proportion of disordered-eating risk among women in the pre-obese and obese groups. The observed differences across platforms suggest that social media use may not have a uniform relationship with BMI and eating attitudes. In addition, studies from Türkiye that have examined these variables together remain limited.

Facebook use differed significantly across BMI categories in the present study. Although the cross-sectional nature of the data does not allow conclusions about the direction of this relationship, the finding suggests that patterns of Facebook engagement may vary according to weight status. Facebook remains a platform where users

commonly interact through groups, communities, and shared interests, which may contribute to differences in participation across demographic and behavioral profiles. Similar observations have been reported in some previous studies,[28] whereas others have not identified a significant relationship between social media platform use and BMI.[29] Differences between studies may stem from variations in participant characteristics, cultural settings, and the approaches used to measure social media use.

The clearest difference across BMI categories was observed for X (Twitter) use. Participants in the pre-obese and obese groups reported lower use of this platform compared with those in the underweight and normal-weight groups. A similar pattern has been described previously[28], although not all studies have reached the same conclusion.[29] The present data do not allow an explanation for this pattern. Nevertheless, differences in user profiles and platform preferences may have contributed to the observed distribution. A significant association was also identified for TikTok use. The highest proportion of TikTok users was observed in the obese group, whereas the lowest proportion was found among underweight participants. TikTok differs from many other platforms because of its highly visual content structure and personalized recommendation system. Nevertheless, previous research has reported mixed findings regarding the relationship between TikTok use and weight-related outcomes.[29,30] Further studies are needed to clarify whether these differences reflect platform-specific behaviors or characteristics of the populations being studied.

No significant differences in BMI were observed for Instagram, WhatsApp, or YouTube use. One possible explanation is the widespread popularity of these platforms within the study population, which may have reduced the likelihood of detecting meaningful differences between BMI categories.[31] Similarly, self-reported daily time spent on social media was not associated with BMI. Previous studies examining this relationship have produced inconsistent findings, suggesting that the association between social media exposure and body weight may depend on population characteristics, usage patterns, and other contextual factors.[29] In contrast, social media visit frequency differed across BMI groups. Participants in the higher BMI categories tended to report more frequent platform access than those in the underweight group. Although the magnitude of this difference was modest, it may indicate variations in engagement behavior rather than differences in total time spent on social media. Similar inconsistencies have been reported in the literature, and the mechanisms underlying these associations remain uncertain.[29]

As shown in Table 3, EAT-26 scores differed significantly across BMI categories. Participants in the pre-obese and obese groups had higher mean scores than those in the underweight and normal-weight groups, indicating less favorable eating attitudes among women with higher BMI values. A similar pattern was observed when participants were classified according to the conventional EAT-26 risk threshold (≥20). The proportion of individuals screening positive for disordered-eating risk increased progressively from the underweight group to the obese group (Table 3; $\chi^2(3) = 8.44$, $p = 0.038$).

Women in the higher BMI categories were more likely to report attitudes and behaviors associated with disordered eating. Comparable findings have been reported both internationally and in studies conducted in Türkiye, where elevated EAT-26 scores were observed more frequently among individuals with overweight or obesity.[32,33] This relationship is likely influenced by multiple factors rather than body weight alone. Individuals with higher BMI may experience greater concerns regarding body shape and appearance, and previous research has linked weight-related

stigma to maladaptive eating-related thoughts and behaviors.[34] At the same time, EAT-26 is intended as a screening instrument rather than a diagnostic measure. Therefore, differences in scores across BMI categories should be interpreted with some caution, particularly because individual items may function differently across weight groups.[35]

In the present study, social media use showed only limited associations with BMI. Among the platforms examined, a statistically significant difference was observed only for X (Twitter) use. Previous studies investigating the relationship between social media use and BMI have reported inconsistent results, with some identifying significant associations and others finding little or no relationship.[12-14] These discrepancies may partly reflect differences in study populations, social media habits, and the methods used to measure exposure. Although social media platforms can influence users' perceptions, attitudes, and behaviors, such effects may not always be reflected in BMI, which is determined by a complex combination of biological, behavioral, social, and environmental factors. The relatively weak associations observed in the current study support the view that social media use alone is unlikely to account for substantial differences in body weight.

Significant differences in EAT-26 scores were identified according to YouTube and Snapchat use. Participants who did not use these platforms reported higher EAT-26 scores than users. This finding differs from the common assumption that greater exposure to social media is necessarily associated with more problematic eating attitudes. The association may differ according to what users view on these platforms, why they use them, and their individual characteristics.[20,36-38] Simply classifying participants as users or non-users may not fully reflect the types of social media experiences that are related to eating attitudes. Previous studies have also suggested that patterns of engagement and psychosocial characteristics may differ between users and non-users of specific platforms.[21] Consequently, the observed associations should be interpreted with caution, and future research should consider incorporating content-specific and behavior-specific measures in addition to simple indicators of platform use.

No significant associations were observed between either the duration or frequency of social media use and EAT-26 scores in the present study. This finding differs from several previous reports that have linked greater social media exposure with less favorable eating attitudes and eating-related concerns.[22,39] Differences in study design, participant characteristics, and methods used to assess social media exposure may partly explain these contrasting results. Another consideration is the reliance on self-reported measures of social media use. Participants may have had difficulty accurately estimating the amount of time they spent on social media, which could have reduced the ability to detect associations with eating attitudes. Consequently, the absence of significant relationships in the current study should not be interpreted as evidence that social media exposure has no influence on eating-related behaviors.

Although EAT-26 risk status varied across BMI categories, the association between continuous BMI values and EAT-26 total scores was relatively weak. This suggests that body weight alone accounts for only a limited proportion of the variability in eating attitudes. Similar findings have been reported in previous studies, where the strength of the relationship between BMI and disordered-eating indicators differed considerably across populations and settings.[33,40,41] Such variation is not surprising given the multifactorial nature of eating behaviors. Factors including body dissatisfaction, weight-related experiences, emotional well-being, and social influences may all contribute to eating attitudes independently of BMI.[34,42] Therefore, while higher BMI categories

were associated with greater disordered-eating risk in the present sample, BMI should not be viewed as the sole determinant of eating-related attitudes and behaviors.

Several strengths and limitations should be considered when interpreting the findings of this study. An important strength is the platform-specific assessment of social media use rather than treating social media as a single exposure. In addition, the study included a relatively large sample of young adult women, anthropometric measurements were obtained directly by trained researchers, and eating attitudes were evaluated using the validated EAT-26 instrument.

Despite these strengths, several aspects of the study design should be taken into account when interpreting the findings. Because the study employed a cross-sectional design, the observed associations cannot be interpreted as causal relationships. The sample was restricted to women aged 19-32 years from a single region of Türkiye, and the high proportion of participants with an associate degree may limit the generalizability of the findings to other populations. Although body weight and height were measured directly, information regarding social media use and eating attitudes was based on self-report and may therefore be affected by reporting inaccuracies. In addition, several factors that may influence both BMI and eating attitudes, including physical activity, dietary habits, socioeconomic conditions, and psychological characteristics, were not assessed directly. As a result, some of the observed associations may have been influenced by factors that were not measured directly.

The way social media exposure was assessed also warrants consideration. Participants were classified according to platform use, duration, and frequency; however, no information was collected regarding the specific content viewed, motivations for platform use, or patterns of interaction with social media content. Given the highly individualized nature of social media environments, exposure to nutrition-related information, appearance-focused content, and food-related material may have differed substantially among participants. In addition, a large number of statistical comparisons were performed, which increases the possibility that some significant findings occurred by chance. Replication in longitudinal studies that include more detailed assessments of social media exposure would help clarify these findings.

Conclusion

This study showed that patterns of social media use differed across BMI categories and that higher BMI levels were associated with less favorable eating attitudes among young adult women. The observed relationships were not consistent across all platforms, suggesting that different social media environments may be linked to eating attitudes and body weight in different ways.

The findings support the value of examining individual social media platforms separately rather than treating social media use as a single behavior. As social media continues to play an important role in the daily lives of young adults, a better understanding of platform-specific usage patterns may help inform future research and public health initiatives related to eating behaviors and weight-related outcomes. Further longitudinal studies are needed to clarify the direction and underlying mechanisms of these associations.

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Ethical approval

This study has been approved by the Fırat University Non-Interventional Research Ethics Committee (approval date 30.01.2025, number 2025/02-60). Written informed consent was obtained from the participants.

Author contribution

The authors declare contribution to the paper as follows: Study conception and design: ŞGYK, MA, HY; data collection: ŞGYK, MA, HY; analysis and interpretation of results: HY; draft manuscript preparation: ŞGYK, MA, HY. All authors reviewed the results and approved the final version of the article.

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Conflict of interest

The authors declare that there is no conflict of interest to disclose.

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