

Factors associated with positive body image among Palestinian university female students, cross-sectional study

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ABSTRACT

Background: Studies suggested that body image is influenced by biological, psychological, historical, individual, cultural, and social factors. This study aimed to investigate the relationship between body image, lifestyle, social pressure, and social media in Palestinian female university students.

Method: A sample of 905 female undergraduate students (mean age: 20 ± 1.55 years old) from Palestinian universities were included in this cross-sectional study. In this study, the Body Appreciation Scale (BAS-2) was used for measuring body appreciation. Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 28. One-way ANOVA, independent t-test, Cohen's d and Partial Eta Square, Pearson's correlation, and simple linear regression tests were performed. In addition, a mixed regression model was used to identify the predictors of Body Appreciation.

Results: It was found that higher BMI, following models and celebrities on social media, following models/celebrities' nutritional advice, self-perceived family and friends pressure, previous dieting, and longer daily phone time were associated with lower body appreciation among female university students. While physical activity was associated with higher body appreciation.

Conclusion: Body appreciation was significantly associated to lifestyle, social pressure, and social media use in the study sample. A higher BMI, following models and celebrities on social media, family and friend pressure, dieting, and daily phone use time decreased body appreciation. While being more physically active was linked to a higher body appreciation.

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Introduction

The term “Body Image” was introduced about a century ago as the mental picture of our bodies in our minds (Roosen & Mills, 2014). Body image is “a multidimensional concept that includes perceptual, attitudinal, affective, and behavioral dimensions” (Cash & Smolak, 2011, p. 146).

Studies suggested that body image is influenced by biological, psychological, historical, individual, cultural, and social factors (T. F. Cash & Smolak, 2011). Body image is linked

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to the development of eating disorders and body dysmorphic disorder (Cash, 2004). The inability to objectively view body shape, size, or appearance is common among people with these disorders. One of the main risk factors of eating disorders is the negative judgment of body shape, size, or appearance known as body dissatisfaction (Jacobi et al., 2004). Body dissatisfaction is associated with unhealthy behaviors such as binge eating, excessive exercise, self-induced vomiting, and caloric restriction (Cash, 2004).

Studies showed that eating disorders risk is high among Arab young female adults. The percentage of female university students at risk for eating disorders was reported to be 28.6% in Palestine (Saleh et al., 2018), 35.4% in Saudi Arabia (Taha et al., 2018), and 24% in the UAE (Thomas et al., 2010). Moreover, it was reported that half of university female students in Palestine had binge eating disorder symptoms (Badrasawi & Zidan, 2019). While one-third of Emirati university students were found to have moderate to severe binge eating disorder (Schulte, 2016).

Fostering a positive body image is one of the strategies that can avert the onset of an eating disorder (Smolak, 1999). Researchers have devised methods to promote positive body image, such as increasing media literacy, which develops skills to protect one's body image from unrealistic media appearance ideals (Cook-Cottone, Kane, et al., 2013; Steiner-Adair & Sjostrom, 2006; Wilksch & Wade, 2009). Measuring positive body image provides a more comprehensive overview of body image (Cook-Cottone, Tribole, et al., 2013).

Tylka and Wood-Barcalow (2015) defined positive body image as a multidimensional construct (Tylka & Wood-Barcalow, 2015). Researchers suggested four themes of positive body image including accepting, respecting, having favorable opinions of one's own body regardless of its appearance, and rejecting unattainable body ideals presented in the media. Based on these themes, the Body Appreciation Scale (BAS) was developed and used as a measuring tool for positive body image. BAS reliability and validity were supported among both women and men with a diverse range of races (Cash & Smolak, 2011).

Receiving pressure to be thin might lead to negative impacts on feelings, thoughts, and behaviors regarding body weight, which arise from the belief that one is not meeting the sociocultural standard of the ideal body (Shentow-Bewsh et al., 2016). Even negative self-talk is associated with women's body dissatisfaction (Mills & Fuller-Tyszkiewicz, 2017).

Media play an important role in one's life, environment, and social interactions. The overflow of information through the media influences people's physical as well as mental growth. Media images play a role in the cultural standardization of beauty and body ideals. Youths are surrounded by various technology tools, which makes them the most affected by media (Sreedharan & Antony, 2012). After much researches on traditional media effects, investigations about social media's effect on body image were conducted due to their growing popularity (Fardouly & Vartanian, 2016). A systematic review found that social media image-related content exposure and engagement are related to higher body dissatisfaction and disordered eating behaviors (Rounsefell et al., 2020). Moreover, a literature review reported that the use of social media was associated with symptoms of eating disorders, body dissatisfaction, desiring to be thin, and disordered eating in Arabic studies (Melisse et al., 2020).

Lifestyle behaviors such as physical activity, dieting, and daily phone time were found to be linked to body image in women (Albawardi et al., 2021). Moreover, it has been suggested that body appreciation motivates healthy behavior (Sundgot-Borgen et al., 2021).

In a time where the media has connected all societies with its “beauty standards,” examining the variables that are linked to positive body image in young Palestinian females will provide insight into how distinct or similar the body image among Palestinian women is compared with females from other societies and different cultures. Young adult women are targeted by all forms of media, and in many cultures, their families put pressure on them to have the “perfect body.” It will be easier to put appropriate measures in place to promote a positive body image in Palestine if you have knowledge of the Palestinian body image-affecting factors. Additionally, it will assist researchers in understanding body image on a larger scale that considers people from various social and cultural backgrounds. The aim of this study was to investigate the associations between positive body image, social pressure, social media use, and lifestyle among female university students in Palestine. We hypothesized that positive body image would be related to lower social media use and more beneficial lifestyle behaviors. Understanding how these various factors relate to positive body image is beneficial in the design and implementation of educational and supportive programs to promote positive body image as a prevention action against eating disorders among university female students in Palestine.

Method

Study procedure

This cross-sectional study was conducted after receiving the ethical approval from the Internal review board committee – IRB – at An-Najah National University (Agr.-March.2021/4). This study was conducted through an online structured questionnaire that was made on Google Forms and shared via Facebook Palestinian university students’ official pages. Also, researchers contacted university instructors to share the questionnaire with their students. Palestinian female students from universities all over the West Bank, Palestine who are social media users were included in the study. A statement in the introduction of the questionnaire clarified the study objectives and indicated that participation was voluntary. Informed consent was obtained from all individual participants included in the study. No incentive or promotion was provided. The study methods have been used according to relevant guidelines and regulations. All data were treated confidentially and used for research purposes only. Sample size calculations using G Power software with an alpha of 0.05 (two-sided) and 90% power, allocation ratio of 1 (Tanner, 2018). A minimum of 846 participants was needed to determine the difference between the two groups (differences in body appreciation among participants with body mass index – obese and overweight with normal weight). After considering 10% drop out (missing data, invalid data or met the exclusion criteria), the sample size was increased to 930 participants. Data collection was done in March 2021 (6/3–21/3). Accepting responses was stopped once the calculated sample size was reached. The total number of responses was 941.

Sampling method and study population

The participants were recruited by convenience sampling. Inclusion criteria were undergraduate female students. Only those who use social media were included in the study.

Students under 30 years old were included since this study is focusing on young female adults. Five participants were excluded because they had already graduated or were post-graduate students. 16 duplicate responses were removed. Nine responses with missing data were also excluded. And a participant who reported not using social media was excluded. In addition, five pregnant participants were excluded because it has been reported that some women's body image issues can be caused or worsened during pregnancy (National Institutes of Health (NIH), 2018). 905 students were included in the study. The mean age of the participants was 20.16 ± 1.55 years old. 50.8% of the sample were medicine and health sciences students, 27.2% were applied sciences students, and 22.15% were human sciences and arts students. The majority of the participants were single (91.6%), and 89.6% of them did not work.

Study instruments

The online Arabic language questionnaire included 7 sections (socio-demographics, lifestyle, social media engagement, social pressure, and the Body Appreciation Scale (BAS-2)).

The collected socio-demographic information included: age, academic year, major, living place, living condition, marital status, family income, personal income, working status, and university fee payment. Lifestyle information included smoking (yes, no), smoking frequency (regularly refers to daily smoking, and irregularly refers to occasionally smoking), smoking type (cigarette, pipe "Shisha"), body mass index (BMI) calculated from the self-reported weight (kg) and height (m), sleeping hours, daily phone time (total hours spent on the phone everyday according to the participants' estimation), physical activity (regularly refers to daily exercising, and unregularly refers to occasionally exercising, never), dieting (yes, no), dieting reason (weight loss, weight gain, therapeutic diet, other), and eating while watching TV or using the phone (yes, no).

While in the social media engagement sections, participants were asked about the most used social media platform (Facebook, Instagram, Snapchat, other), following models and celebrities accounts, engaging with their accounts (like, comment, share), and following their nutritional advice. The social pressure section included 3 yes or no questions: "Does your family criticize or make fun of your body shape?", "Do your friends criticize or make fun of your body shape?", and "Do you criticize or make fun of your body shape?".

Body appreciation was evaluated using the Arabic-translated version of the Body Appreciation Scale (BAS-2) (Tylka & Wood-Barcalow, 2015) BAS-2 is a 10-item questionnaire with a 5-point Likert scale, where 1 = never and 5 = always. The overall BAS-2 score is calculated as the average of the 10 items' scores. The higher the overall score the higher the body appreciation is. The validity of this tool has been approved for Arabic culture respondents (Vally et al., 2018). In this study, Cronbach's alpha of this test was .934 showing high internal consistency.

Data analysis

Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 28. The means and standard deviations of sample characteristic variables were calculated.

One-way ANOVA and independent t-tests were applied to evaluate the relationships between study variables. Effect size was measured by Cohen's d and Partial Eta Square tests. Pearson's correlation and simple linear regression tests were conducted to evaluate the relationship between BAS-2 scores and BMI and daily phone time. In addition, a mixed regression model was used to identify the predictors of Body Appreciation. Variables which showed significant association with BAS in univariate analysis were included in the model as independent variables; BMI, daily phone time, social media engagement – that were significant in the univariate analysis-, smoking, physical activity, been on diet, reason of dieting and eat on screen. The model was adjusted to age.

Results

Students' socio-demographics and lifestyle

The total number of participants was 905 female students from 9 different universities around West Bank, Palestine. The Age of students ranged from 17 to 30 years old (mean = 20.16 ± 1.55). More details about the socio-demographic characteristics of participants are shown in Table 1. The Phone time (hours/day) mean was 7.02 ± 3.36 (range = 1–20). While sleeping hours/day mean was 7.79 ± 1.65 (range = 2.5–18).

Students' social media engagement & social pressure

The most popular social media platform among students was Instagram, 48.8% of them reported that they use it the most. Then there is Facebook, with 37.7% of students using it the most. 9.2% of students reported that they use other social media platforms the most,

Table 1. Participants' demographics characteristics (N = 905).

Variable	Total (N= 905)		
	Number (N)	Percentage (%)	
Faculty	Medicine & health sciences	458	50.8
	Applied sciences	245	27.2
	Human sciences & Arts	199	22.1
Academic year	1 st	168	18.6
	2 nd	241	26.6
	3 rd	230	25.4
	4 th and higher	266	29.4
Area of Living	City	465	51.4
	Outside city	440	48.6
Type of housing	With family	853	94.3
	Student housing/ With relatives (extended family)	52	5.7
Marital Status	Single	829	91.6
	Married	51	5.6
	Other	25	2.8
Family income	<1500 NIS*	76	8.4
	1500 – 3000 NIS	319	35.2
	3000 – 5000 NIS	273	30.2
	More than 5000 NIS	237	26.2
Working status	Working regularly	27	3
	Working irregularly	67	7.4
	Not working	811	89.6
Study Funding	Family	779	86.1
	Scholarship	83	9.2
	Other	43	4.8

*New Israeli Shekel.

including WhatsApp, YouTube, TikTok, and others. Table 2 shows more detailed information about students' social media engagement. The social pressure on students was evaluated by receiving criticisms or mockery on their body shape. 24.5% of students (222) receive them from their families, 15.1% of them (137) from their friends, and 39.1% of them (354) criticize or mock their body shape.

Body appreciation and BMI

A significant difference of body appreciation level was found between students with different BMI categories ($p < .001$). Those who were normal or underweight had higher body appreciation scores than those who are overweight or obese. Besides, overweight students had significantly higher body appreciation levels than obese students. A correlation test was conducted between the body appreciation score (4.22 ± 0.74) and the BMI (22.95 ± 4.23). Body appreciation score was significantly negatively associated with BMI ($P < .001$). Pearson's correlation coefficient was $-.312$ ($p = .000$). Moreover, simple linear regression showed that BMI was significantly associated with body appreciation score ($r = .183$, $p < .001$), Beta coefficient was $-.183$, 95% CI $[-.234 - .113]$.

Body appreciation, social media, & social pressure

There was no statistically significant difference in body appreciation scores among students who reported different "most used social media platforms." While students who reported following models or celebrities on those platforms had significantly lower body appreciation scores than those who did not report following such accounts ($p < .01$). Similarly, those who reported following models or celebrities' nutritional advice had significantly lower body appreciation scores than those who did not ($p < .05$). Moreover, those who reported family, friends, and personal criticizing or mocking about their body shape had significantly lower body appreciation scores compared to their counterparts ($p < .001$) (Table 2).

Table 2. Relationship between social media engagement, social pressure, and body appreciation.

Variable		BAS-2 Score			95% CI	
		Mean	<i>p</i> -value	Effect Size	Lower	Upper
Follow models/ celebrities accounts	Yes	4.17 ± 0.77	.001*	.235	.094	.376
	No	4.34 ± 0.67				
Engage with models/ celebrities posts	Yes	4.17 ± 0.77	.057	.128	-.004	.259
	No	4.26 ± 0.72				
Follow models/ celebrities nutritional advices	Yes	4.09 ± 0.88	.014*	.227	.069	.386
	No	4.26 ± 0.7				
Share personal pictures	Yes	4.24 ± 0.75	.475	-.048	-.178	.083
	No	4.2 ± 0.74				
Family criticize/mock body shape	Yes	3.74 ± 0.95	.000**	.914	.757	1.071
	No	4.38 ± 0.59				
Friends criticize/mock body shape	Yes	3.9 ± 0.96	.000**	.517	.334	.701
	No	4.28 ± 0.69				
Student criticize/mock their body shape	Yes	3.71 ± 0.81	.000**	1.362	1.214	1.509
	No	4.55 ± 0.46				

*Significant at $p < 0.05$ using independent t-test.

**Significant at $p < 0.01$ using independent t-test.

Body appreciation & lifestyle

The relationships between body appreciation and lifestyle variables are shown in Table 3. Those who were regular smokers had significantly lower body appreciation scores than non-smokers and irregular smokers ($p < .05$). Those who were regularly physically active had significantly higher body appreciation scores than those who were not physically active ($p < .05$). Moreover, participants who followed a diet had significantly lower body appreciation scores than their counterparts ($p < .001$). In addition, the reason for diet also significantly differed to the body appreciation of students ($p < .001$). Students who reported that they eat while being on screens had significantly lower body appreciation scores than those who did not ($p < .05$). A correlation test was done between the body appreciation score (4.22 ± 0.74) and daily phone time (7.02 ± 3.36 h).

Multiple regression model

Regression analysis in Table 4 showed that 1 unit increase in BMI is associated with -0.194 decrease in body appreciation $p < 0.001$. Being more physically active is associated with 0.155 increase in body appreciation, $p < 0.01$. Among the social media engagement variables; following models/ celebrities, was significantly associated with decrease in body appreciation, $p < 0.01$. Family criticism of body shape $p < 0.01$ or self-criticism were substantially connected with a decline in body appreciation, $p < 0.001$.

Discussion

The purpose of this study was to look into the relationships between positive body image, social pressure, social media use, and lifestyle among Palestinian female university students. Higher BMI, following models/celebrities on social media, following their nutritional advice, social pressure, previous dieting, and longer daily phone time were found to be significantly negatively related to body appreciation in our sample.

Table 3. The distribution of body appreciation among participants' groups based on lifestyle.

Variable	(N)	BAS-2 Score				95% CI	
		Mean	p-Value	Effect Size	Lower	Upper	
Smoking	Non-smoker	777	4.25 ± 0.72^a	.001*	.015	.003	.033
	Irregular smoker	105	4.16 ± 0.72^a				
	Regular smoker	23	3.69 ± 1.24^b				
Physical activity	Regularly	44	4.38 ± 0.74^a	.019*	.009	.000	.023
	Unregularly	521	4.26 ± 0.73^{ab}				
	Never	340	4.14 ± 0.77^b				
Been on a diet	Yes	404	4 ± 0.82^b	.000**	.549	.416	.683
	No	501	4.4 ± 0.63^a				
Reason for diet	Weight loss	321	3.91 ± 0.84^b	.000**	.058	.017	.102
	Weight gain	45	4.3 ± 0.54^{ab}				
	Therapeutic diet	19	4.14 ± 0.84^b				
	Other	17	4.71 ± 0.32^a				
Eat on screen	Yes	683	4.18 ± 0.77^b	.001**	.244	.092	.396
	No	222	4.36 ± 0.66^a				

^{abc}Different superscript letters in a row are significantly different.

*Significant at $p < 0.05$ using one way ANOVA test/ Independent t-test.

**Significant at $p < 0.01$ using one way ANOVA test/ Independent t-test.

Table 4. Multiple regression model for determinants of body appreciation.

Variables	Beta	P value ^a	95% CI	R square for the model	P value ^b
Age	-0.081	0.154	-0.379-0.213	0.382	0.000**
BMI	-0.194	0.000**	-0.19-0.08		
Regularly physically active	0.155	0.001*	-0.281-1.17		
Being smoker	0.121	0.726	-0.13-0.99		
Being on diet	-0.155	0.009	-0.462-2.75		
Time using smart phone	-0.008	0.851	-0.002-0.018		
Social media – following models/ celebrities	-0.259	0.006*	-0.41-0.06		
Social media – following models/ celebrities' nutrition advice	-0.114	0.123	-0.26-0.032		
Family criticize/mock body shape	-0.396	0.001*	-0.101-0.08		
Friends criticize/mock body shape	-0.155	0.208	-0.31-0.068		
Student criticize/mock their body shape	-0.670	0.000**	-0.35-0.19		

^ap-value for the variable.

^bp-value for the model.

*Significant at < .0.01 level.

**Significant at <0.001 level.

Body image and BMI

A significant relationship was found between BMI and body appreciation. Normal and underweight students had higher body appreciation scores than overweight and obese students. And overweight students had higher body appreciation levels than obese ones. This was also seen in Saudi women, where those with a higher BMI had a significantly higher level of body image dissatisfaction (Albawardi et al., 2021; Aljadani, 2019a). Likewise, Emirati studies reported that a higher BMI was significantly related to higher body dissatisfaction for both women and men (Alharballeh & Dodeen, 2021; Radwan et al., 2019). Moreover, body appreciation was significantly negatively correlated with BMI, which was also seen in a Saudi study, where BMI was correlated with body image dissatisfaction in women (Aljadani, 2019b).

Body image and social media

The most used social media platform by students was Instagram followed by Facebook. However, no significant relationship was found between the most used social media platform and body appreciation among students in this study. A recent study found that spending 7 min on Instagram had a more negative effect on the body image of undergraduate females than Facebook. This was explained by the more image-focused content on Instagram (Engeln et al., 2020). However, the comparison in our study was between the overall usage of the different social media platforms rather than the effect of scrolling on them for a short time. Additionally, there could be a similar pattern of content on Facebook and Instagram exposed by our sample. 68.6% of students follow either models or celebrities on social media. Following models or celebrities was significantly negatively related to body appreciation. This agrees with the results of a study that stated that following appearance-focused Instagram accounts was significantly related to

body image concerns among young women living in Australia (Cohen et al., 2017). A study revealed that exposure to Instagram pictures of attractive celebrities and peers had a significantly greater negative effect on the body image of female university students compared to travel pictures. The study reported that appearance comparison was the reason behind this effect (Brown & Tiggemann, 2016). Similarly, a study found that female university students Facebook users had a significantly lower rate of their body image after comparing themselves with celebrities than comparing themselves with friends or peers (Fardouly & Vartanian, 2015). Perhaps this explanation leads us to another observation among our sample where lower body appreciation was significantly related to following models or celebrities' nutritional advice. Thus, students might follow such advice, believing that they could have the same body shape of models and celebrities they are comparing themselves with.

However, no significant relationship was found between engagement by like/share/comment on models' or celebrities' posts and body appreciation. In contrast, a study found that engagement with Instagram pictures was related to appearance comparisons which negatively affected body image in female university students in the US (Hendrickse et al., 2017).

Body image and social pressure

In this study, family and friends' comments were significantly negatively related to body appreciation. Which aligns with previous studies, a study of Emirati young women reported that many of them are being pressured by their families or friends about their body weight. This pressure was not only on obese or overweight women but on some underweight women as well (Trainer, 2010). Another study reported that students living in the UAE were more influenced by family and friends' attitudes than media in their body image perception (Sreedharan & Antony, 2012). Similarly, a study on undergraduate females in the US reported that family influence was related to body image dissatisfaction (Kluck, 2010).

Personal criticizing or mocking body shape was also significantly negatively related to body appreciation. In line with previous studies, a meta-analysis found that negative self-talk about the body, known as "Fat talk" was linked to body dissatisfaction in women. Moreover, it was suggested that this kind of self-talk is a risk factor for body dissatisfaction rather than a consequence of it (Mills & Fuller-Tyszkiewicz, 2017).

Body image and lifestyle

Physical activity and body appreciation were significantly related. Those who are not physically active had lower body appreciation levels than students who are regularly and irregularly active. Similarly, more body-satisfied women were more physically active than those who were dissatisfied with their bodies in Saudi (Albawardi et al., 2021) and Emirati studies (Radwan et al., 2019).

Dieting was also significantly related to body appreciation. Students who have been on a diet had significantly lower body appreciation scores. The reason for dieting was also significantly related to body appreciation among students. Those who have been on a diet to lose weight or for therapeutic reasons had significantly lower body appreciation

scores than those who dieted for “other reasons”. Similar to our findings, a Saudi study reported that weight loss attempts were significantly associated with higher body dissatisfaction among women (Albawardi et al., 2021). Also, an Emirati study found that the percentage of body dissatisfied female university students and had been on a diet was higher than that of those who were satisfied with their bodies. Moreover, the percentage of students who wanted to lose weight and had been on a diet was higher than that of those who wanted to gain weight and dieted (Radwan et al., 2019).

Daily phone time were significantly correlated with body appreciation score. Likewise, screen time was significantly correlated to perceived body image in Saudi women (Albawardi et al., 2021).

According to the results of the univariate analysis showed that BMI and daily phone time had a significant adverse relationship with body appreciation. Moreover, the multivariate regression model showed a significantly negative relationship between body appreciation and BMI, regular physical activity, following influencers/models’ nutritional advice, and family and self – body shape criticism and mockery.

Our research shows that there are a number of factors that might be related to university women’s body image. Making strides in these aspects can be aided by implementing educational and supportive programs aimed specifically at female young adults. In addition, it may be possible to help and improve the body image of Palestinian young women by raising awareness of the negative influence of social media through the promotion of knowledge that is both scientifically based and culturally appropriate through social media educational and verified accounts.

In an era when the media has equated all societies with its “beauty standards,” analyzing the factors that are associated with positive body image in young Palestinian females will shed light on how different or similar the body image among Palestinian women is compared with females from other societies and different cultures. All media outlets specifically target young women, and in many countries, their families put pressure on them to achieve the “perfect body.” Knowing the Palestinian body image-affecting elements will make it simpler to implement the necessary policies to promote a positive body image in Palestine. Additionally, it will help researchers comprehend body image on a bigger scale that takes into account individuals from different social and cultural backgrounds. According to our research, positive body image was related social media and lifestyle choices. Our study aimed to examine the relationships between social pressure, social media use, and lifestyle among female university students in Palestine. When developing and implementing educational and supporting programs to promote positive body image as a preventative measure against eating disorders among university-aged female students in Palestine, it is helpful to understand how these diverse aspects connect to it.

Strengths and limitations

The study has successfully evaluated different factors related to body appreciation in a representative sample of a vulnerable age group. The cross-sectional design of the current study is one of the major concerns because it precludes cause-effect relationships between variables and body appreciation. Another limitation of the study is that social media related factors were evaluated using direct questions only. Additionally, sample bias might be relevant as the data collection was done through the internet. Future

research should consider developing culturally appropriate measures for factors associated with body appreciation in the Palestinian population and to investigate how these factors might be related with body appreciation.

Conclusions

The degree of body appreciation was significantly related to lifestyle, social pressure, and social media usage among the study's sample. A higher BMI, following models and celebrities on social media, family and friends' pressure, dieting, and daily phone time were related to lower body appreciation. While being more physically active was linked to a higher body appreciation.

Ethical statement

The study was conducted in accordance with the declaration of Helsinki and was approved by an institutional review board/ethics committee. See details under methods.

List of abbreviations

BAS-2 Body Appreciation Scale.
BMI Body Mass Index.
NIS New Israeli Shekel.
SPSS Statistical Package for Social Sciences.

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Informed consent

All participants in this study electronically provided informed consent to participate then filled the required data.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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