

Factors Associated With Body Image Satisfaction Among Palestinian University Female Students, Cross-Sectional Study

Reem Abu Alwafa

An-Najah National University <https://orcid.org/0000-0001-9481-2955>

Manal Badrasawi (✉ m.badrasawi@najah.edu)

An-Najah National University <https://orcid.org/0000-0003-4803-1052>

Research Article

Keywords: Body Image, Body Dissatisfaction, Eating Disorders, Social Media, Social Factors, Lifestyle.

Posted Date: June 4th, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-550748/v1>

License:  This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Background

Eating disorders and body dysmorphic disorder are linked to poor body image. People with these diseases commonly lack the ability to objectively assess body shape, size, or attractiveness. This study aimed to investigate the relationship between body image, eating disorders, lifestyle, social pressure, and social media engagements in female university students in Palestine.

Method:

A sample of 905 female undergraduate students from Palestinian universities was included in the study. Arabic validated Body Appreciation Scale (BAS-2) was used to measure body satisfaction. Early screening of eating disorders was conducted using the Arabic validated A-SCOFF tool. One-way ANOVA, independent t-test, Chi-square, Spearman rho correlation test, and simple linear regression tests were used to evaluate the relationships between study variables.

Results

The sample had a high level of body image satisfaction, with a mean score of 4.22 ± 0.74 . It was found that eating disorders ($p < .001$), higher BMI ($p < .001$), following models or celebrities on social media ($p < .01$), following models or celebrities nutritional advice ($p < .05$), family and friends pressure ($p < .001$), dieting ($p < .001$), and daily phone hours ($p < .01$) were associated with lower body satisfaction. While physical activity ($p < .05$) was associated with higher body satisfaction.

Conclusion

Body image among female university students is influenced by lifestyle, social pressure, and social media. To promote awareness about the impact of these variables on body dissatisfaction, which can lead to eating disorders, educational and supporting programs must be undertaken.

Plain English Summary

In this study, we have investigated the effect of different factors on the body image of undergraduate female students. These factors included the presence of eating disorders, BMI, social media engagement, social pressure, socio-demographics, and lifestyle. It was found that reduced body satisfaction among students included having an eating disorder, higher BMI, following models or celebrities on social media, following models or celebrities nutritional advice, family, friends, and self-criticizing or mocking of body shape, dieting, and spending more time on the phone. On the other hand, being physically active was

associated with higher body satisfaction. These findings can be useful for raising awareness toward body image among this age group.

Background

The term “Body Image” was identified about a century ago as the mental picture of our bodies in our minds (Roosen & Mills, 2014). In other words, body image is how people see themselves when looking at their reflection in the mirror. It is also their ideas on their weight, height, body shape, and age. A positive body image is very important to maintain physical and mental health (Sreedharan & Antony, 2012). Studies suggested that body image is influenced by biological, psychological, historical, individual, cultural, and social factors. Body image is linked to the development of eating disorders and body dysmorphic disorder. 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. Body dissatisfaction is associated with unhealthy behaviors such as binge eating, excessive exercise, self-induced vomiting, and caloric restriction (Roosen & Mills, 2014). Studies showed that eating disorders risk is high among Arab young female adults. The percentage of female university students with eating disorders risk was reported to be 28.6% in Palestine (Saleh et al., 2018), 35.4% in Saudi Arabia (Taha et al., 2018), and 24% in 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). Receiving pressure to be thin might lead to negative impacts on feelings, thoughts, and behaviors regarding body weight which raises from the belief that one is not meeting the sociocultural standard of the ideal body (Shentow-Bewsh et al., 2016). Besides, media have an important role in one’s life, environment, and social interactions. The overflow of information through media influences people's physical as well as mental growth. Media images play a role in the cultural standardizing 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). Our study purpose is to investigate the relationship between body image, eating disorders, social pressure, social media engagement, and lifestyle in female university students in Palestine.

Method

Study design

This cross-sectional 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 West Bank, Palestine who are social media users were included in the study. A statement in the introduction of the questionnaire clarified that participation in the study was voluntary. 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.

Study population

Inclusion criteria were undergraduate female social media users under 30 years old. Graduated and postgraduate students were excluded. Duplicated data were removed. One pregnant and one student who reported not using social media were excluded. 905 students were included in the study.

Sample size calculation and sampling method

The participants were recruited by simple random sampling. The sample size was determined using proportions: difference between two independent proportions, for a finite population. Sample size calculations using G power software with an alpha of 0.05 (two-sided) and 90% power, allocation ratio 1. A minimum of 846 participants was needed to determine the difference between the two groups (differences in body satisfaction among participants with disordered eating and participants without). After considering 10% drop out (missing data, invalid data or met the exclusion criteria), the sample size was increases to 930 participants.

Collected data

Female students from different universities in the west bank were asked to fill an online Arabic language questionnaire. The questionnaire included 7 sections (socio-demographics, medical history and lifestyle, social media engagement, social pressure, body image satisfaction tool, and disordered eating screening measurement). The collected socio-demographic data were age, weight, height, academic year, major, living place, living condition, marital status, family income, personal income, working status, and university fee payment. Medical history and lifestyle questions were about the presence of chronic disease, taking medications, having surgery, smoking, sleeping hours, using phone hours, physical activity, dieting, and eating while watching TV or using the phone. While in 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 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?.

Study instruments

Body image satisfaction was evaluated using the Arabic translated version of the Body Appreciation Scale (BAS-2). 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 by the average of the 10 items score. The higher the overall score the higher 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 reliability.

The prevalence of eating disorders among the sample was measured using A-SCOFF which is the Arabic translated version of the tool SCOFF. SCOFF is an early screening tool composed of 5 questions with yes/no answers. 2 or more yes answers give a positive result of A-SCOFF. The validity of A-SCOFF for Arabic culture respondents has been approved (Aoun et al., 2015). The reliability of this tool was tested in this study the Cronbach's alpha was .420.

Data analysis

Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 23. Means and standard deviations of sample characteristics variables were calculated. One-way ANOVA, independent t-test, and Chi-square tests were applied to evaluate the relationships between study variables. Spearman rho correlation test and simple linear regression test were conducted to evaluate the relationship between BAS-2 scores and BMI and daily phone hours.

Results

Students' socio-demographics, medical history and life style

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-demographics of participants are shown in Table 1. The majority of students 790 (87.3%) did not suffer from any chronic health problem. While 115 (12.7%) reported that they had a chronic health problem including allergies, stomach problems, irritable bowel syndrome, and others. 73 students (8.1%) reported that they used medication regularly and 832 of them (91.9%) did not. Moreover, 140 students (15.5%) had medical surgery, while 765 students (84.5%) did not have surgery. Students' lifestyle habits are shown in Table 2.

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, Facebook with 37.7% of students using it the most. 9.2% of students reported that they use other social media platforms the most including WhatsApp, YouTube, TikTok, and others. Table 3 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 Satisfaction and eating disorders

The mean score of BAS-2 of students was 4.22 ± 0.74 (Range= 1.2 – 5). A-SCOF test revealed that 40.3% (365) of the sample had positive results while 59.7% (540) had a negative result. Independent t-test showed that body satisfaction and A-SCOF results were significantly related ($p < .001$). As expected, students with negative A-SCOF results had significantly higher body satisfaction scores ($4.42 \pm .62$) than those with a positive result indicating a presence of an eating disorder ($3.92 \pm .82$).

Body Satisfaction and BMI

A significant relationship was found between BMI and body satisfaction ($p < .001$). Those who have normal or underweight had higher body satisfaction scores than those who are overweight or obese. Besides, overweight students had significantly higher body satisfaction levels than obese students.

A correlation test was conducted between body satisfaction score and BMI. Body satisfaction score was significantly correlated with BMI ($P < .001$). Pearson's correlation coefficient was $-.183$. Moreover, univariate analysis showed that BMI was significantly related to body satisfaction score ($r = .034$, $p < .001$) (Table 4).

Body satisfaction, social media, & social pressure

No significant relationship was found between the most used social media platform and body satisfaction in students. There was a difference in body satisfaction scores between those who engage with models or celebrities' accounts and those who do not. However, this difference was not statistically significant. While following models or celebrities on those platforms was significantly negatively related to body satisfaction ($p < .01$). Similarly, following their nutritional advice was significantly negatively related to body satisfaction ($p < .05$). Moreover, family, friends, and personal criticizing or mocking body shape were significantly negatively related to body satisfaction ($p < .001$) (Table 5).

Body Satisfaction, socio-demographics & lifestyle

A significant relationship was found between students' majors and body satisfaction scores. As Table 6 shows, students who major in human sciences and arts had significantly lower body satisfaction scores than other students ($p < .05$). Moreover, students' living nature was significantly related to their body satisfaction ($p < .05$). Those who live with their families had significantly higher body satisfaction scores than those who live in student housing or with their relatives. No significant relationship was found between medical history and the body satisfaction of students.

For lifestyle variables, Smoking was significantly related to body satisfaction ($p < .05$). Non- and irregular smokers had higher body satisfaction levels than smokers. There was a significant relationship between physical activity and body satisfaction ($p < .05$). Students who are not physically active had lower body satisfaction levels than those who are regularly and irregularly active. Moreover, following a diet had a significant relationship with body satisfaction ($p < .001$). Students who have been on a diet had significantly lower body satisfaction scores. In addition, the reason for diet was also significantly related to the body satisfaction of students ($p < .001$). Those who have been on a diet for other reasons had

significantly higher scores than those who dieted to lose weight or for therapeutic reasons. However, no significant difference was found between those who dieted for other reasons and for gaining weight. And no significant difference was found between those who dieted to lose, or gain weight, or for therapeutic reasons. Eating while being on screens was significantly negatively related to body satisfaction ($p < .05$).

A correlation test was done between body satisfaction score and daily phone hours. Daily phone hours were significantly related to body satisfaction ($p < .01$). Pearson's correlation coefficient was $-.103$. Table 7 shows that univariate analysis found a significant relationship between body satisfaction score and daily phone hours ($r = .011$, $p < .01$).

Discussion

A representative sample of Palestinian female university students from different universities in West Bank, Palestine was included in this study. The mean body satisfaction scale BAS-2 score was 4.22 ± 0.74 , which reflects a high degree of satisfaction among students. In contrast, high body dissatisfaction prevalence was found among Jordanian women in a study. 66% of Jordanian women wanted to lose weight and 13.7% wanted to gain weight (Madanat et al., 2011). Similarly, a study found that 87% of Saudi women attending fitness centers were dissatisfied with their body shape (Albawardi et al., 2021). This difference might be caused by the difference in age group, as the Jordanian study reported that older women desired more weight change (Madanat et al., 2011), and older Saudi women had higher body dissatisfaction (Albawardi et al., 2021).

Body image and eating disorders

A-SCOF test revealed that 40.3% of students had a positive result that indicates a presence of an eating disorder. As expected, students with positive results had significantly lower body satisfaction scores ($3.92 \pm .82$) than those who had negative A-SCOF results ($4.42 \pm .62$) ($p < .001$). Similarly, body dissatisfaction was associated with disordered eating behaviors in female undergraduate students in the UAE (Radwan et al., 2018; Thomas et al., 2010). The same relationship was reported in a Spanish study on female college students. It was found that a significant relationship between lower body satisfaction scores and a higher probability of having eating disorders (Aparicio-Martinez et al., 2019).

Body image and BMI

A significant relationship was found between BMI and body satisfaction ($p < .001$). Normal and underweight students had higher body satisfaction scores than overweight and obese students. And overweight students had higher body satisfaction levels than obese ones. This was also seen in Saudi women, where those with higher BMI had a significantly higher level of body image dissatisfaction (Albawardi et al., 2021; Aljadani, 2019). Likewise, Emirati studies reported that higher BMI was significantly related to higher body dissatisfaction for both women and men (Alharballeh & Dodeen, 2021; Radwan et al., 2019). Moreover, body satisfaction was significantly negatively correlated with BMI (r

= .034, P-value < .001). This correlation was smaller than the correlation between BMI and women body image dissatisfaction found by a Saudi study ($r = .135$, P-value > 0.01) (Aljadani, 2019).

Body image and social media

The most used social media platform by students was Instagram (48.8%) followed by Facebook (37.7%). However, no significant relationship was found between the most used social media platform and body satisfaction among students in this study. A recent study found that spending 7 minutes 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 to our sample.

68.6% of students follow either models or celebrities on social media. Following models or celebrities was significantly negatively related to body satisfaction ($p < .001$). This agrees with the results if a study stated that following appearance-focused Instagram account 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 satisfaction was significantly related to following models or celebrities' nutritional advice ($p < .05$). Thus, students might follow such advice believing that they could have the similar 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 satisfaction. A study found that rather than the engagement with Instagram pictures; appearance comparisons negatively affected body image in female university students in the US (Hendrickse et al., 2017). Hence that, harmful comparing behavior may occur no matter social media users engage actively or passively with what they are exposed to.

Body image and social pressure

In this study, 24.5% and 15.1% of students received criticizing or mocking from their families and friends, respectively. Those family and friends' comments were significantly negatively related to body satisfaction ($p < .001$). A study in 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 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 on their body image

perception (Sreedharan & Antony, 2012). Moreover, the family influence was significantly related to disordered eating behaviors among Emirati university students. Besides, this study found that disordered eating behaviors were correlated with body image concerns (Radwan et al., 2018). A study on undergraduate females in the US reported that family influence was related to both body image dissatisfaction and bulimic symptoms (Kluck, 2010). Hence that family pressure may cause body image concerns that turn into behaviors. 39.1% of students in this study criticize or mock their body shape. Personal criticizing or mocking body shape was also significantly negatively related to body satisfaction ($p < .001$). Which agrees with previous studies, a meta-analysis found that negative self-talk on 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 to body dissatisfaction rather than a consequence of it (Mills & Fuller-Tyszkiewicz, 2017).

Body image and lifestyle

Physical activity and body satisfaction were significantly related ($p < .05$). Those who are not physically active had lower body satisfaction 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 satisfaction ($p < .001$). Students who have been on a diet had significantly lower body satisfaction scores. The reason for dieting was also significantly related to body satisfaction among students. Those who have been on a diet to lose weight or for therapeutic reasons had significantly lower body satisfaction 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 were higher than those who are satisfied with their bodies. Moreover, the percentage of students who wanted to lose weight and have been on a diet was higher than those who wanted to gain weight and dieted (Radwan et al., 2019).

Daily phone hours were significantly correlated with body satisfaction score ($r = .011, p < .01$). Likewise, screen time was significantly correlated to perceived body image ($r = 0.108, p = 0.032$) in Saudi women (Albawardi et al., 2021).

Strengths And Limitations

The study has successfully evaluated different factors related to body image satisfaction in a representative sample of a vulnerable age group. One of the limitations of the study is that it did not compare between social media users and non-users that might give a wider perspective. In addition, it could not investigate if there is any positive effect of social media on body image. Future research should consider studying different aspects of social media effects on body image and involve those who do not use it.

Conclusions

The degree of body satisfaction was significantly related to lifestyle, social pressure, social media usage, and eating disorders among Palestinian female undergraduate students. Presence of eating disorders, higher BMI, following models and celebrities on social media, family and friends pressure, dieting, and daily phone hours were associated with lower body satisfaction. While physical activity was associated with higher body satisfaction. Educational and supportive programs must be implemented to raising awareness of the influence of these factors on body dissatisfaction that might lead to eating disorders.

List Of Abbreviations

BAS-2 Body Appreciation Scale

BMI Body Mass Index

NIS New Israeli Shekel

SPSS Statistical Package for Social Sciences

Declarations

Ethics approval and consent of participants

This study was approved by the institution review board at An-Najah National University (Agr.March.2021/4). An informed consent was provided to participants. A statement in the introduction of the questionnaire clarified the study objectives and that participation in it was voluntary. No incentive or promotion were provided. The study methods have been used according to relevant guidelines and regulations. All data were treated confidentially and used for research purposes only.

Consent for publication

Not applicable.

Availability of data and materials

The dataset used and analyzed in this study is available from corresponding Author on reasonable request.

Competing interest

The authors declare they have no competing interests.

Funding

The authors declare that no external financial support was received for this study.

Authors' contributions

M.B approved the methodology, supervised data collection, and was responsible for manuscript editing. R.A was responsible for data analysis, data interpretation and manuscript writing.

Acknowledgments

We would like to express our gratitude to female undergraduate students who agreed to participate in this study.

References

1. Albawardi, N. M., Altamimi, A. A., Almarzooqi, M. A., Alrasheed, L., & Hartmann, A. S. (2021). *Associations of Body Dissatisfaction With Lifestyle Behaviors and Socio-Demographic Factors Among Saudi Females Attending Fitness Centers*. *12*(February), 1–10. <https://doi.org/10.3389/fpsyg.2021.611472>
2. Alharballeh, S., & Dodeen, H. (2021). *Prevalence of body image dissatisfaction among youth in the United Arab Emirates: gender, age, and body mass index differences*.
3. Aljadani, H. M. (2019). The correlation between Body Mass Index and Body Image Dissatisfaction and Body Image Perception in young Saudi women. *Progress in Nutrition, 21*(4), 984–991. <https://doi.org/10.23751/pn.v21i4.8913>
4. Aoun, A., Azzam, J., El Jabbour, F., Hlais, S., Daham, D., El Amm, C., Honein, K., & Déchelotte, P. (2015). Validation de la version en langue arabe du questionnaire SCOFF pour le dépistage des troubles alimentaires. *Eastern Mediterranean Health Journal, 21*(5), 326–331. <https://doi.org/10.26719/2015.21.5.326>
5. Aparicio-Martinez, P., Perea-Moreno, A. J., Martinez-Jimenez, M. P., Redel-Macías, M. D., Pagliari, C., & Vaquero-Abellan, M. (2019). Social media, thin-ideal, body dissatisfaction and disordered eating attitudes: An exploratory analysis. *International Journal of Environmental Research and Public Health, 16*(21). <https://doi.org/10.3390/ijerph16214177>
6. Badrasawi, M. M., & Zidan, S. J. (2019). Binge eating symptoms prevalence and relationship with psychosocial factors among female undergraduate students at Palestine Polytechnic University: a cross-sectional study. *Journal of Eating Disorders, 7*(1), 1–8. <https://doi.org/10.1186/s40337-019-0263-1>
7. Brown, Z., & Tiggemann, M. (2016). Attractive celebrity and peer images on Instagram: Effect on women's mood and body image. *Body Image, 19*, 37–43. <https://doi.org/10.1016/j.bodyim.2016.08.007>
8. Cohen, R., Newton-John, T., & Slater, A. (2017). The relationship between Facebook and Instagram appearance-focused activities and body image concerns in young women. *Body Image, 23*(October), 183–187. <https://doi.org/10.1016/j.bodyim.2017.10.002>

9. Engeln, R., Loach, R., Imundo, M. N., & Zola, A. (2020). Compared to Facebook, Instagram use causes more appearance comparison and lower body satisfaction in college women. *Body Image, 34*, 38–45. <https://doi.org/10.1016/j.bodyim.2020.04.007>
10. Fardouly, J., & Vartanian, L. R. (2015). Negative comparisons about one's appearance mediate the relationship between Facebook usage and body image concerns. *Body Image, 12*(1), 82–88. <https://doi.org/10.1016/j.bodyim.2014.10.004>
11. Fardouly, J., & Vartanian, L. R. (2016). Social Media and Body Image Concerns: Current Research and Future Directions. *Current Opinion in Psychology, 9*, 1–5. <https://doi.org/10.1016/j.copsyc.2015.09.005>
12. Hendrickse, J., Arpan, L. M., Clayton, R. B., & Ridgway, J. L. (2017). Instagram and college women's body image: Investigating the roles of appearance-related comparisons and intrasexual competition. *Computers in Human Behavior, 74*, 92–100. <https://doi.org/10.1016/j.chb.2017.04.027>
13. Kluck, A. S. (2010). Family influence on disordered eating: The role of body image dissatisfaction. *Body Image, 7*(1), 8–14. <https://doi.org/10.1016/j.bodyim.2009.09.009>
14. Madanat, H., Hawks, S. R., & Angeles, H. N. (2011). Obesity and body size preferences of Jordanian women. *Health Education and Behavior, 38*(1), 91–98. <https://doi.org/10.1177/1090198110376351>
15. Melisse, B., de Beurs, E., & van Furth, E. F. (2020). Eating disorders in the Arab world: a literature review. *Journal of Eating Disorders, 8*(1), 1–19. <https://doi.org/10.1186/s40337-020-00336-x>
16. Mills, J., & Fuller-Tyszkiewicz, M. (2017). Fat Talk and Body Image Disturbance: A Systematic Review and Meta-Analysis. *Psychology of Women Quarterly, 41*(1), 114–129. <https://doi.org/10.1177/0361684316675317>
17. Radwan, H., Hasan, H. A., Ismat, H., Hakim, H., Khalid, H., & Al-fityani, L. (2019). *Body Mass Index Perception , Body Image Dissatisfaction and Their Relations with Weight-Related Behaviors among University Students.*
18. Radwan, H., Hasan, H. A., Najm, L., Zaurub, S., Jami, F., Javadi, F., Deeb, L. A., & Iskandarani, A. (2018). *Eating disorders and body image concerns as influenced by family and media among university students in Sharjah , UAE.* 27(December 2016), 695–700. <https://doi.org/10.6133/apjcn.062017.10>
19. Roosen, K. M., & Mills, J. S. (2014). Body Image, Overview. In T. Teo (Ed.), *Encyclopedia of Critical Psychology* (pp. 179–185). Springer New York. https://doi.org/10.1007/978-1-4614-5583-7_403
20. Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T. A. (2020). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition and Dietetics, 77*(1), 19–40. <https://doi.org/10.1111/1747-0080.12581>
21. Saleh, R. N., Salameh, R. A., Yhya, H. H., & Sweileh, W. M. (2018). Disordered eating attitudes in female students of An-Najah National University: A cross-sectional study. *Journal of Eating Disorders, 6*(1), 1–6. <https://doi.org/10.1186/s40337-018-0204-4>
22. Schulte, S. J. (2016). Predictors of binge eating in male and female youths in the United Arab Emirates. *Appetite, 105*, 312–319. <https://doi.org/10.1016/j.appet.2016.06.004>

23. Shentow-Bewsh, R., Keating, L., & Mills, J. S. (2016). Effects of anti-obesity messages on women's body image and eating behaviour. *Eating Behaviors, 20*, 48–56. <https://doi.org/10.1016/j.eatbeh.2015.11.012>
24. Sreedharan, J., & Antony, A. (2012). Media Influence on the Body Image Among Students in UAE. *Journal of Community Medicine & Health Education, 02*(09), 2–5. <https://doi.org/10.4172/2161-0711.1000182>
25. Taha, A. A. A. E.-A., Abu-Zaid, H. A., & Desouky, D. E.-S. (2018). Eating Disorders Among Female Students of Taif University, Saudi Arabia. *Archives of Iranian Medicine, 21*(3), 111–117.
26. Thomas, J., Khan, S., & Abdulrahman, A. A. (2010). Eating attitudes and body image concerns among female university students in the United Arab Emirates. *Appetite, 54*(3), 595–598. <https://doi.org/10.1016/j.appet.2010.02.008>
27. Trainer, S. S. (2010). Body image, health, and modernity: Women's perspectives and experiences in the United Arab Emirates. *Asia-Pacific Journal of Public Health, 22*(SUPPL. 3). <https://doi.org/10.1177/1010539510373127>
28. Vally, Z., D'Souza, C. G., Habeeb, H., & Bensumaidea, B. M. (2018). The factor structure and psychometric properties of an Arabic-translated version of the Body Appreciation Scale-2. *Perspectives in Psychiatric Care, 55*(3), 373–377. <https://doi.org/10.1111/ppc.12312>

Tables

Table 1
Participants socio-demographics presented in n(%)

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	1st	168	18.6
	2nd	241	26.6
	3rd	230	25.4
	4th 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	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 unregularly	67	7.4
	Not working	811	89.6
Study Funding	Family	779	86.1
	Scholarship	83	9.2
	Other	43	4.8

Table 2
Students' lifestyle

Variable		Total (N = 905)	
		Number (N)	Percentage (%)
Smoking	Non-smoker	777	85.9
	Irregular smoker	105	11.6
	Regular smoker	23	2.5
Reported type of smoking	Cigarette	12	9.4
	Pipe (shisha)	115	90.6
Physical Activity	Regularly	44	4.9
	Unregularly	521	57.6
	Never	340	37.6
Been on a diet	Yes	404	44.6
	No	501	55.4
Reason for diet	Weight loss	321	79.9
	Weight gain	45	11.2
	Therapeutic diet	19	4.7
	Other	17	4.2
Eat while on Screen	Yes	683	75.5
	No	222	24.5
	Mean \pm SD	Range	
Phone time (hours/day)	7.02 \pm 3.36	(1–20)	
Sleeping (hours/day)	7.79 \pm 1.65	(2.5–18)	

Table 3
Students' social media engagement

Variable	Total (N = 905)		
	Number (N)	Percentage (%)	
Social Media	Facebook	341	37.7
	Instagram	441	48.8
	Snapchat	39	4.3
	Other	83	9.2
Follow models/ celebrities accounts	Yes	621	68.6
	No	284	31.4
Engage with models/ celebrities posts (Like, share, comment)	Yes	396	43.8
	No	509	56.2
Follow models/ celebrities nutritional advices	Yes	197	21.8
	No	708	78.2
Share personal pictures	Yes	482	53.3
	No	423	46.7

Table 4
Relationship between body satisfaction and BMI

Factors	Univariate Analysis	
	Beta (95% CI)	P Value
BMI	-.183 (-.023 -- .011)	.000*
*p < .001 using simple linear regression		

Table 5
Relationship between social media engagement, social pressure, and body Satisfaction

Variable	BAS-2 Score		p-value
		Mean	
Follow models/ celebrities accounts	Yes	4.17 ± 0.77	.001*
	No	4.34 ± 0.67	
Engage with models/ celebrities posts	Yes	4.17 ± 0.77	.057
	No	4.26 ± 0.72	
Follow models/ celebrities nutritional advices	Yes	4.09 ± 0.88	.014*
	No	4.26 ± 0.7	
Share personal pictures	Yes	4.24 ± 0.75	.475
	No	4.2 ± 0.74	
Family criticize/mock body shape	Yes	3.74 ± 0.95	.000**
	No	4.38 ± 0.59	
Friends criticize/mock body shape	Yes	3.9 ± 0.96	.000**
	No	4.28 ± 0.69	
Student criticize/mock their body shape	Yes	3.71 ± .81	.000**
	No	4.55 ± .46	
*Significant at p < 0.05 using independent t- test			
**Significant at p < 0.01 using independent t- test			

Table 6
Socio-demographic and lifestyle factors influenced body satisfaction

Variable	(N)	BAS-2 Score		
		Mean	p-value	
Faculty	Medicine & health sciences	458	4.28 ± .7 ^a	.026*
	Applied sciences	245	4.19 ± .76 ^{ab}	
	Human sciences & Arts	199	4.12 ± .81 ^b	
Living nature	With family	853	4.24 ± .72 ^a	.023*
	Student housing/ with relatives	52	3.92 ± .97 ^b	
Smoking	Non-smoker	777	4.25 ± .72 ^a	.001*
	Irregular smoker	105	4.16 ± .72 ^a	
	Regular smoker	23	3.69 ± 1.24 ^b	
BMI	Underweight	94	4.36 ± .64 ^a	.000**
	Normal	574	4.37 ± .65 ^a	
	Over weight	189	3.89 ± .75 ^b	
	Obese	48	3.49 ± 1.06 ^c	
Physical activity	Regularly	44	4.38 ± .74 ^a	.019*
	Unregularly	521	4.26 ± .73 ^{ab}	
	Never	340	4.14 ± .77 ^b	
Been on a diet	Yes	404	4 ± .82 ^b	.000**
	No	501	4.4 ± .63 ^a	
Reason for diet	Weight loss	321	3.91 ± .84 ^b	.000**
	Weight gain	45	4.3 ± .54 ^{ab}	
	Therapeutic diet	19	4.14 ± .84 ^b	
	Other	17	4.71 ± .32 ^a	
Eat on screen	Yes	683	4.18 ± .77 ^b	.001**
	No	222		

^{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 7
Relationship between body satisfaction and phone hours

Factors	Univariate Analysis	
	Beta (95% CI)	P Value
Phone hours	-.103 (-.037 - -.008)	.002*
* $p < .001$ using simple linear regression		