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BODY IMAGE AND SELF-ESTEEM IN A SAMPLE OF STUDENTS OF AL-MUSTANSIRIYAH UNIVERSITY 2024

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ABSTRACT

Background: The perception of the appearance can affect self-esteem. Body image and self-esteem are important part of mental health and especially for college students, it may affect the academic performance. **Objectives:** To assess the level of Body image and self-esteem, find the association between them and determine their relationship with some Sociodemographic variables. Subject and Methods: A cross-sectional study of final-year students, selected randomly from 4 different faculties of Al-Mustansirya University the total number of 771 students. Data were collected in 4 months' period via a structured questionnaire in which, The Body-Image measured by a Likert-scale-based self-assessment, Self-Esteem by Rosenberg Self-Esteem Scale and the Socio-economic status was evaluated by Socio-economic index for health research in Iraq. Statistical analyses included chi-square tests and correlation studies. **Results:** Most students reported partial satisfaction with their Body Image (67.2%) and normal Self-Esteem (79.6%). A weak positive significant correlation was observed between Body Image and Self-Esteem. Faculty played a significant role, with medical students showing higher Body Image dissatisfaction and lower Self-Esteem while Gender and Socio-economic status showed no significant association. About (33.2%) of students were interested in cosmetic interventions, particularly females and medical students, this was linked to Body Image dissatisfaction but not directly to Self-Esteem. **Conclusion:** The findings highlight the complex interaction between Body Image and Self-Esteem among university students, with the academic environment exerting a significant influence, the results underscore the need for targeted interventions to promote positive self-perception and mental well-being, especially in high-pressure academic settings.

KEYWORDS: Body Image, Self-Esteem, University Students, Socioeconomic Status, Cosmetic Intervention, Psychological Well-being.

INTRODUCTION

The relationship between body image and Self-esteem has been a critical area of research, particularly among college students who experience significant physical, emotional, and social challenges during this period of life. The construction of body image is a double-edged sword that can either promote positive individual development or lead to self-depreciation.[1] Body image is the mental representation of the body. It can be influenced by cognitive, biological, behavioural, sociocultural, and environmental factors, related but different terms are often used interchangeably in the literature concerning the state of consciousness in which there is an altered body image perception, including body image distortion, body image misperception, body image disturbance, negative body image, altered body image, and body image dissatisfaction.[2] According to Rosenberg (1965), self-esteem is one's positive or negative attitude toward oneself and overall evaluation of one's thoughts and feelings concerning oneself.[3] There is different component that include the Perception that is how one perceives one's body shape, size, and attractiveness estimation.[4] While Affective part is how individuals feel about their body.[5] Behaviour concept are the Actions taken concerning body image perception (e.g., dieting and exercising) and body image perceptions play a significant role in influencing dietary habits, psychological well-being, and physical activity patterns among young adults in which positive body image perceptions correlate with healthier lifestyle choices, greater psychological resilience, and enhanced overall well-being.[6] a study in Iraq showed that a healthy diet high in vegetable content may decrease depressive symptoms. In contrast, high fat intake increased

anxiety.[7] Cognitive part It is thoughts and beliefs about one's body image (i.e., I'm too fat). A negative cognitive evaluation of one's body can express a negative body image.[8] Studies indicate that a substantial portion of the population experiences negative BI. A study in Brazil showed that most adolescents were dissatisfied with their body image in 2007 (65.2%) and 2017/2018 (71.1%). The prevalence of body dissatisfaction increased over the 10 years.[9] In another cohort study, the proportion of women having reported body dissatisfaction rose from 14.2 to 22.4% between the ages of 22 and 52, and in men, the corresponding increase was from 7.5 to 11.9%.[10] A comprehensive review of Rodgers et al. (2023) examines body image concerns worldwide, argue that body image issues constitute a global mental health concern, in which women from Bahrain, Egypt, Jordan, Oman, and Syria revealed that in each country 32–39% of women reported being dissatisfied with their body weight, and 17–22% reported a preference for the body shape of Western models and 77% of women from southwestern Saudi Arabia, indicated a discrepancy between their actual, perceived, and ideal weights.[11] Another study in United Arab Emirates results showed that 36.7% of students are dissatisfied with their body image.[12] There are many theories including, Social comparison theory in which people compare them self to others in term of appearance, leading to body dissatisfaction if they perceive themselves as lacking, while Self-Discrepancy Theory reflect The discrepancy between the actual self, ideal self, and ought self can lead to body dissatisfaction and affect self-esteem, and Sociocultural theory in which Media, cultural norms, and societal pressure shape body image and can impact self-esteem through unrealistic beauty standards.[13] BI appears to have an indirect relationship with academic outcomes since body image can affect SE, which can affect academic success. This means students with a negative body image are more likely to disengage from school than students who are satisfied with their bodies, leading to poor school attendance and poor performance and suffering from poor body image can be related to eating disorders, leading to affect the general health and so affecting the ability to study leading to lower grades.[14] Objectives: to assess the level of Body image satisfaction and Self-Esteem and find the association between them and relationship with some sociodemographic variables, such as socioeconomic status among a sample of undergraduate's students of Al-Mustansirya University in Baghdad.

METHOD

Study Design and Setting: A cross-sectional study with some analytical elements was conducted, at Al-Mustansiriyah University in Baghdad. Al-Mustansiriyah University is composed of 13 different colleges by simple random sampling using lottery method 25% that is 4 out of the original 13 different colleges were selected and they are College of Medicine, College of Administration and Economics, College of Science, and College of Literatures. Each college has many different departments, one department of each college was selected by simple random sampling using the lottery method. And data was collected over 4 months' period. The sample size was calculated from 1,027 students (total number of students in the 4 selected colleges) by using the equation for the calculation of sample size of cross-sectional studies.[15]

$n = (Z\ 1-\alpha/2)^2\ p\ (1-p) / d^2$

$n = (1.96)^2\ (0.5)\ (0.5) / (0.05)^2 = 384.16$

According to the equation, the sample size is 384.16, almost double the sample was collected 771. The sample size of each college was taken according to their percentage of the total (proportional). The same thing was done for the number of selected male and female students from each college, as shown below:

Table 1: Distribution of Sample Size and Gender across Colleges.

College	Total n 1027	n%	Male n	Male n %	Female n	Female n %
Medicine	410	39.9	177	43.2	233	56.8
Science/Biology	215	20.9	32	14.9	183	85.1
Literatures/Translation	120	11.7	28	23.3	92	76.7
Administration and Economic	282	27.5	124	44	158	56

Table 2: Gender Distribution of Study Participants by College.

College	n	Male	Female
Medicine	306	132	174
Biology	163	25	138
Translation	91	22	69
Administration and Economics	211	93	118
Total	771	272	499

Inclusion and Exclusion criteria

Inclusion criteria: Convenient final-year (choosing final year students because they have more experiences in college and life than freshman students) male and female students from Al-mustansiriyah University whom accepted the invitation to participate in the study during the data collection period.

Exclusion criteria: Students who have already been diagnosed with psychological disease.

Study tool and data collection: The data was collected by distributing the self-administered questionnaire, which the students supervised by the researcher filled it out, taking only 10 to 15 minutes to fill it The data was collected in four consecutive months and the questionnaire has four parts

1st Sociodemographic: features include age, gender, marital status, faculty, history of psychological disease, and history of any cosmetic intervention.

2nd Socioeconomic status (SES) calculated using the simple equation derived from the socioeconomic index for health research in Iraq by Wali Omar and Tariq Alhadithi.[16]

SES = Education + Occupation + (House ownership * 0.5) + (Car ownership * 0.1) + (age-20)/100 – (Retired/unemployed/ deceased).

Variables are converted into numbers by a scoring system the calculated score was divided into three equal parts (Low= 0-4.7, middle= 4.8- 9.4, high SES= 9.5-14.05).

3rd Body image self-assessment questionnaire: It is designed to help identify symptoms of negative body image and helps examine thoughts, feelings, and behaviours. This validated questionnaire had ten items, and the responses were marked on a 5-point Likert scale: never, 'rarely, 'sometimes, 'most of the times, 'and. Always score from 1-5; the worst possible answer corresponds to 1 point, while the best score corresponds to 5 points The possible range of scores was from10-50. A higher score on the scale indicated body image dissatisfaction it's classified in to 3 equal classes (Highly satisfied <15, partially satisfied 15-29, Dissatisfied ≥ 30).[17]

4th Self-esteem: was assessed using the Rosenberg self-esteem scale (RSES).[18] It is a ten-item Likert-type scale with items answered on a four-point scale from strongly disagree to strongly agree, scored from 0-3, and the worst possible answer corresponds to 0 points, while the best possible corresponds to 3 points. Five items have positively worded statements, and five have negatively worded ones. The scale measures self-esteem by asking the respondents to reflect on their feelings in the past 6 weeks, of the ten items, five items were reverse scored (2, 5, 6, 8, 9) Higher scores were indicative of higher self-esteem, the maximum score was 30 points, and the minimum score was 0 points and its divided in to three classes that is (Low self-esteem <15, Normal self-esteem15-25, High self-esteem >25).[17]

Statistical Analysis: Data introduction, coding, and tabulation were performed via Microsoft Excel 365 version. Descriptive and analytic statistics were performed using Minitab version 21 software statistical program. The descriptive statistics include mean ± Standard Deviation (SD) for measurable variables and frequencies and percentages for categorical variables. A chi-square and fishers exact test were performed to compare categorical variables. P-values < 0.05 were considered statistically significant.

RESULTS

Table 3 presents the demographic breakdown of the 771 students included in the study.

Table 3: Sociodemographic characteristics of studied students (Total number =771).

Variables		**Mean ± SD**	**Range**
Age (years)		23.0 ± 1.2	21 – 26
		N. [total = 771]	**Percent %**
Sex	Male	267	34.6
	Female	504	65.4
Marital status	Married	37	4.8
	Single	729	94.6
	Divorced	5	0.6
Faculty	Medicine	306	39.7
	Administration	211	27.4
	literatures	91	11.8
	Science	163	21.1
History of any cosmetic intervention?	Yes	44	5.7
	No	727	94.3
Are you planning to have one if you have the opportunity?	Yes	256	33.2
	No	515	66.8

Table 4 shows that a majority (67.2%) of students were partially satisfied with their body image, self-esteem, 79.6% had average self-esteem, Socio-economic status (SES) distribution indicated that most students fell into the middle SES category (60.2%).

Table 4: Distribution of the studied students' body image, self-esteem, and socioeconomic status score.

Variables		Mean ± SD	Range
Body image score (max = 50)		20.8 ± 7.2	10 – 50
Self-esteem score (max =30)		20.7 ± 4.3	3 – 30
Socioeconomic status score (max =14.05)		7.3 ± 2.8	1.3 – 14.05
		N. [total = 771]	**Percent %**
Body image Satisfaction	Highly satisfied (<15)	160	20.8
	Partially satisfied (15-29)	518	67.2
	Dissatisfied (>29)	93	12.1
Self-esteem level	High self-esteem (>25)	102	13.2
	Normal self-esteem (15-25)	614	79.6
	Low self-esteem (<15)	55	7.1
Socioeconomic status categories	High SES (9.5-14.05)	168	21.8
	Middle SES (4.8-9.4)	464	60.2
	Low SES (0-4.7)	139	18.0

Chart 1 showed a weak positive significant association between body image and self-esteem (r=-0.380, p=0.001).

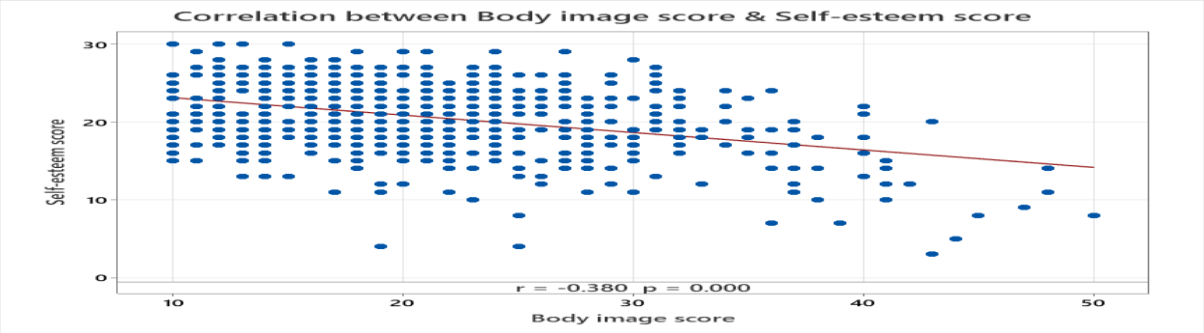

Chart 1: The correlation between body image and self-esteem score.

Chart (2) showed that there was no significant correlation between body image score and socioeconomic status score (r=0.033, p=0.367).

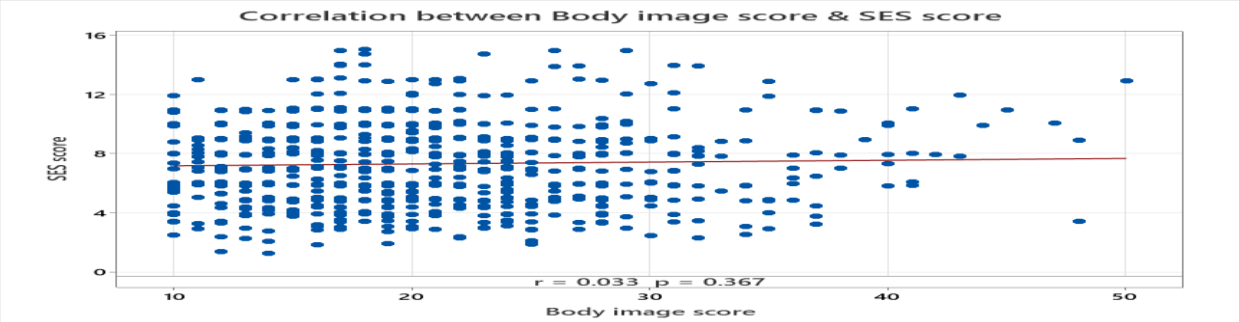

Chart 2: The correlation between body image and socioeconomic status scores.

Chart 3 showed no significant correlation between self-esteem and socioeconomic status scores (r=-0.036, p=0.325).

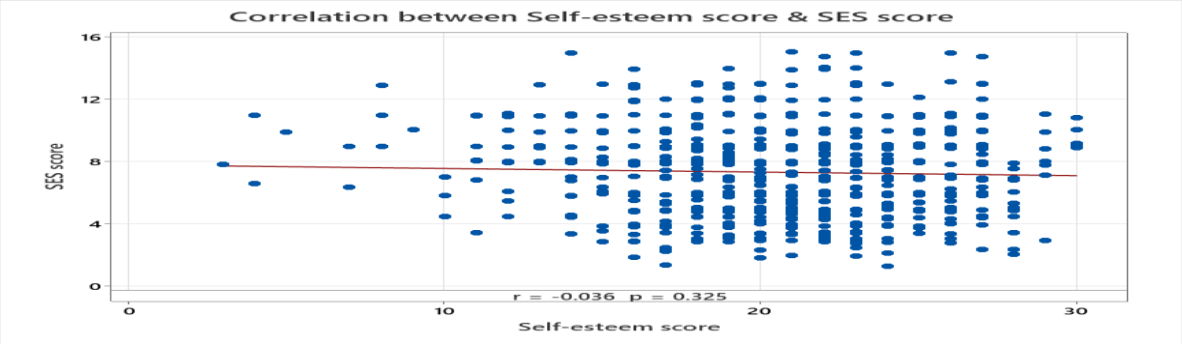

Chart 3: The correlation between self-esteem and socioeconomic status scores.

Table 5 presents the association between sociodemographic characteristics and body image satisfaction. The data indicates that both genders exhibited similar levels of body image satisfaction. Students from the Faculty of Medicine demonstrated higher levels of dissatisfaction (16.3%) compared to their peers in other faculties, students with a history of or intent to undergo cosmetic procedures showed a notable association with BID.

Table 5: The association between sociodemographic characteristics and body image satisfaction of 771 students.

Variables		Body image Satisfaction						P-value*
		Highly satisfied Total=160		Partially satisfied Total=518		Dissatisfied Total= 93		
		n.	%	*n.*	%	*n.*	%	
Sex	Male	57	21.3	179	67.0	31	11.6	0.932
	Female	103	20.4	339	67.3	62	12.3	
Marital status	Married	10	27.0	25	67.6	2	5.4	0.471
	Single	150	20.6	489	67.1	90	12.3	
	Divorced	0	0.0	4	80.0	1	20.0	
Faculty	Medicine	46	15.0	210	68.6	50	16.3	**0.002**
	Administration	60	28.4	132	62.6	19	9.0	
	Literature	18	19.8	61	67.0	12	13.2	
	Science	36	22.1	115	70.6	12	7.4	
History of any cosmetic intervention?	Yes	4	9.1	31	70.5	9	20.5	0.053
	No	156	21.5	487	67.0	84	11.6	
Planning to have cosmetic intervention if you have the opportunity?	Yes	33	12.9	182	71.1	41	16.0	**0.001**
	No	127	24.7	336	65.2	52	10.1	

***Chi-square test was used and fishers exact test.**

Table 6 examines the relationship between sociodemographic factors and SE. it reveals no significant differences in SE levels between The 2 genders. However, students from the Faculty of Medicine displayed a higher prevalence of low self-esteem than those in other faculties, while marital status and cosmetic intervention history did not show a significant impact on SE, students planning future cosmetic procedures were more likely to exhibit lower self-esteem levels. However, this association was not significant.

Table 6: The association between sociodemographic characteristics and Self-esteem level.

Variables		Self-esteem level						P-value*
		High self-esteem Total=102		Normal self-esteem Total= 614		Low self-esteem Total= 55		
		n.	%	*n.*	%	*n.*	%	
Sex	Male	35	13.1	213	79.8	19	7.1	0.997
	Female	67	13.3	401	79.6	36	7.1	

Marital status	Married	8	21.6	28	75.7	1	2.7	0.345
	Single	94	12.9	581	79.7	54	7.4	
	Divorced	0	0.0	5	100.0	0	0.0	
Faculty	Medicine	41	13.4	228	74.5	37	12.1	**0.001**
	Administration	22	10.4	179	84.8	10	4.7	
	Literature	17	18.7	71	78.0	3	3.3	
	Science	22	13.5	136	83.4	5	3.1	
History of any cosmetic intervention?	Yes	9	20.5	31	70.5	4	9.1	0.274
	No	93	12.8	583	80.2	51	7.0	
Are you planning to have one if you have the opportunity?	Yes	29	11.3	202	78.9	25	9.8	0.091
	No	73	14.2	412	80.0	30	5.8	

***Chi-square test and Fishers exact test were used**

Table 7, the results showed a statistically significant association with sex (p=0.001), where females are more likely than males to plan for cosmetic intervention. There is also a significant relationship with faculty affiliation, with medical students showing the highest likelihood of considering surgery. Marital status does not show a significant relationship.

Table 7: The association between planning to have cosmetic surgery and other sociodemographic characteristics.

Variables		**Are you planning to have one if you have the opportunity?**				**P-value***
		Yes Total= 256		**No Total= 515**		
		n.	**%**	***n.***	**%**	
Sex	Male	64	23.9	203	76.1	**0.001**
	Female	192	38.1	312	61.9	
Marital status	Married	14	37.8	23	62.2	0.684
	Single	241	33.1	488	66.9	
	Divorced	1	33.2	4	80.0	
Faculty	Medicine	123	40.2	183	59.8	**0.001**
	Administration	43	20.4	168	79.6	
	Literature	35	38.5	56	61.5	
	Science	55	33.7	108	66.3	

***Chi-square test was used.**

DISCUSSION

Recently, many studies internationally have been concerned with BID and SE, especially among young people such as college students. Body image is an integral part of self-esteem, and both are important for psychological well-being and academic achievement.[19] This study showed that nearly three-quarters of students had partial satisfaction, and more than three-quarters of college students had normal SE. A survey in a Nigerian private university showed that most students were partially satisfied with their body image.[20] Brazil the majority, 61.20%, had a normal perception.[21] With the invasion of social media, college students are exposed to international trends, and beauty standards are being globalized, which can cause similarities in body image perceptions. In China, the rate of BID among college students was high.[22] This range of differences may be due to the Chinese obsession with thin figures. United Arab Emirates indicated that more than quarter of students with BID may be due to increasing exposure to Western beauty ideals, which often emphasize slimness, muscularity, and youth. This can pressure men and women in the UAE to follow these standards.[12] In Egypt, most college students (83%) had positive BI and most (91%) students had high SE.[23] Egyptian culture promotes diverse body types and beauty standards acceptance In contrast, Iraq's culture and societal norms may be less open to this variety. Also, Iraq faced prolonged conflict and security instability, which can negatively affect SE in Iraqi students. The current study showed a weak positive significant correlation between BI and SE. this is supported by many other studies like Mosul.[24] Oman.[25] India.[17] Egypt.[23] study that shows no correlation between body image and self-esteem was challenging to find, as most studies indicated some degree of correlation. the current study showed no difference between BI, SE, and gender; this is supported by another study in Iraq at Baghdad University[26] Kenya[27] China[22] A study in Oman among college students showed that females were more affected.[28] May be because they experience more social pressure related to appearance, and seek beauty. A study in UAE (2021) showed that men were more dissatisfied with their body image than women.[12] men have started to

show concern with BI, which may be due to changes in the values, media influence, and celebrities' ideals that they follow This means that both genders need the same attention when studying BID. A study in India showed that gender difference was seen in body image perception, and self-esteem.[29] this may be because increasing awareness and empowering women with increased opportunities for education and work. The current study showed that marital status has no relation to BI and SE, this is supported by a study in Oman[25] Kenya no statistical association between marital status and self-esteem[30] this may be because some individual maintain their personality not letting their partner affect them by any means, while other studies as in Egypt may show significant correlation with BI[23] A study in Iran showed marital status dose influence BI and SE[31] Jordan[32] Partners can influence each other's self-esteem and in turn BI. Supportive acts can increase self-esteem, while criticism and blame can diminish it. Current study showed students from the Faculty of Medicine demonstrated higher levels of BID and a higher prevalence of low SE compared to those in other faculties, suggesting a possible link between their academic environment and body image perceptions, this is supported by other studies as in Baghdad university[26] Kenya[27] Cairo[23] this may be due to each department often fosters its own culture; art departments may celebrate the diversity of body types more than business departments, which can prioritize professionalism. Medical students often face academic pressure due to the demanding nature of their studies. The extended study hours and high expectations can lead to increased stress, anxiety, a study in Iraq showed high level of depressive symptoms among students at Al-Kindy College of Medicine.[33] The health awareness of medical students can make them more critical of their bodies as they compare themselves to clinical definitions of health and well-being. The current study showed an association between body image dissatisfaction and cosmetic intervention, particularly among those planning for future cosmetic interventions, but it did not show a significant impact on self-esteem. Body image is a central component of the psychological aspects of cosmetic surgery. a study in 2020 provides evidence of changes in body image, body satisfaction and self-esteem in patients after having experienced an aesthetic plastic surgery.[34] While a systematic review and meta-analysis of clinical trial studies indicate that cosmetic surgery improves self-esteem and body image suggesting that students planning future cosmetic procedures were more likely to exhibit lower self-esteem levels.[35] This study showed that there was no significant correlation between BI, SE, and socioeconomic status, and other studies support this as in Kenya[30] this may be due to education and increased awareness of body positivity and mental health can empower individuals to embrace their self-worth, regardless of their socioeconomic status. . A search identified 20 Studies published from 2002 to 2021 that focused on cosmetic surgical procedures among male and female college students, Different studies showed that young women were generally more likely to express interest in cosmetic surgical procedures than young men. In 2018 Plastic Surgery Statistics Report found that 92% of all cosmetic surgical procedures were performed on women. These Studies showed an inverse relationship between body satisfaction and the use of aesthetic procedures among this population[36] The faculty also play a role in which a study in Iraq showed that more than half of the medical student in Al Nahrain College of Medicine found cosmetic rhinoplasty is socially accepted and less than one third would like to do cosmetic intervention if it was free.[37] May be because of health awareness and better access to health resources.

CONCLUSION

Most students had partial BIS and normal SE, with a weak positive significant association between BIS and SE. faculty showed significant association in which medical students had the highest percent of BID and low SE. Interest in the future cosmetic intervention was associated with BID but not with SE and Interest in future cosmetic intervention had a statistically significant association with gender and faculty differences, with female medical students being more likely to plan for cosmetic intervention.

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