

How to Cite:

Alkhutaba, M., & Nashwan, N. A. (2022). Body image disorder and its relationship to health behavior among sample of overweight women. *International Journal of Health Sciences*, 6(S8), 3034–3044. <https://doi.org/10.53730/ijhs.v6nS8.12750>

Body image disorder and its relationship to health behavior among sample of overweight women

Malek Alkhutaba

Department of Psychology, Isra University, Jordan

Corresponding author email: Malek.alkhutabq@iu.edu.jo

Nashwan Abdallah Nashwan

Faculty of arts, Isra University, Jordan

Email: nashwan.nashwan@iu.edu.jo

Abstract--With a group of overweight women, this study aims to increase our understanding of the relation between body image issue and health behaviour. The study also looks at how social status and academic achievement relate to body image disorders and health behaviour in overweight women. To engage in this study, 102 overweight women were chosen using a descriptive correlational study design. Utilizing five-point Likert style scales, their body image disorder and health-related behaviours were measured. Results of the study showed that the means scores of the body image disorders scale and its dimensions, and the health behaviour scale and its dimensions were statistically significant at ($\alpha \leq 0.05$). A strong negative statistically significant correlation between body image disorders and health behaviour among sample of overweight women were found. Moreover, results presented no statistically significant at ($\alpha \leq 0.05$) in participants' body image disorders and health behaviours based on social status variable. Furthermore no statistically significant at ($\alpha \leq 0.05$) in participants' body image disorders according to academic qualification variable. Finally, the results revealed a statistically significant at ($\alpha \leq 0.05$) in participants health behaviour regarding the academic qualification variable.

Keywords--body image, health behaviour, overweight women.

Introduction

Body image issues and health behavior are serious health issues that affect women of all ages, from childhood through adulthood (Rodgers, Chabrol and

Paxton, 2011). Body dissatisfaction in women is caused by a failure to adjust to a socially stereotyped body image. In turn, disordered health behavior is linked to body dissatisfaction, psychosocial functioning, and an unhealthy lifestyle (Sharpe, et al., 2017). Young ladies typically want to achieve a perfect body image. The desire for thinness in women is associated to several health-harming weight loss-related behaviors, including dieting, dysfunctional exercise, purging, using laxatives, etc. (Neumark-Sztainer, Wall, Chen, Larson, and Christoph, 2018). These aspirations are connected to the drive for muscularity, which includes attitudes and actions related to body such: dieting, excessive exercise, eating, and health behavior (Baceviciene, Jankauskiene and Balciuniene, 2020).

Body image is the subjective perception that people have of their own bodies, regardless of how those bodies actually seem (Shoraka, Amirkafi and Garrusi, 2019). It's also a complicated construct made up of thoughts, feelings, assessments, and actions relating to one's physical appearance (Spreckelsen, Glashouwer, Bennik, Wessel and de Jong, 2018). Misperceptions about women body are widespread in society, also its a major factor in several serious illnesses, such as anorexia nervosa, body dysmorphic disorder, and bulimia nervosa (Gaudio, Brooks and Riva, 2014). The body image disorder is uncomfortable, and may have tragic outcomes such mood, competence, self-esteem, social functioning. In addition to the vocational functioning can be negatively impacted by body image and physical and psychological health (Sadibolova, Ferrè, Linkenauger and Longo, 2019).

The psychological and physical behavior associated to body image issues in both of women and men (Bearman, Martinez, Stice, Presnell, 2006). According to studies looking at how these issues affect perceived quality of life such study of Grilo, Wilfley, Brownell, and Rodin (1994) women who have a negative body image are more prone to diet, skip meals, develop disordered eating, avoid social situations, and even put off seeking medical attention. Additionally, binge eating disorder has been linked to sadness and has been shown to mediate the associations between binge eating and health behavior in both men and women in their teen years (Keizer, van Elburg, Helms and Dijkerman, 2016). Furthermore, eating disorders have been linked to lower mental and physical health behavior in men and women (Silva, Ferriani, Viana, 2019), and studies have shown that body dissatisfaction acts as a mediator between body mass index and health behavior in female (Yamamotova, Bulant, Bocek and Papezova, 2017). Increased body shape concerns and emotional eating are linked to worse quality of life in individual-aged women, whereas lower quality of life in individuals-aged men is linked to lower attractiveness rating (Price, 2006).

Mazzeschi, et al., (2021) uncovered the personality traits and its relationship to healthy behaviors among overweight and obese people. The researchers adopted the experimental approach in order to achieve the objectives of the study through compare between a clinical group consisting of (46) overweight and obese participants their age ranging between (18 to 55) years, and a health control group of (46) participants. Both of experimental and control group consisting of (14 males and 32 females). Several of personal and psychopathological aspects were measured using the Personality Assessment List (PAL). Results of the study

showed that overweight or obese patients had higher scores of physical complaints, depression, and borderline personality traits than the control group. Abdel-Fattah (2019) revealed the "relationship between body image and life orientation, and to know the differences between married and unmarried in both variables". The researcher adopted the body image scale (Shukir, 2002), and life orientation scale (Al-Ansari, 2002). Sample of the study (381) participants from female students in the departments, Kindergartens, Special Education, Home Economics, Islamic Studies from the faculty of education in Wadi Aldawasir, during the second semester of the academic year 2016/2017. The results presented a positive life orientation and a positive body image among the participants. It's also revealed a positive correlation between life orientation and body image. Finally, the results did not find any significant differences between the participants in body image and life orientation based to marital status variable.

Hidalgo-Vega, et al., (2017) investigated "the impact of obesity on health-related quality of life in Spain", the Spanish National Health Survey (SNHS) 2011–2012 was used to evaluate the statistical relationship between BMI and HRQOL, as determined by the EuroQol-5D-5L questionnaire. We performed probity regressions for each of the five dimensions of the EuroQol-5D-5L as well as linear regression analysis for the Visual Analogue Scale (VAS) of the EuroQol-5D-5L. results of the study presented that the Self-perceived issues in the five EuroQol-5D-5L dimensions, particularly in the mobility and pain/discomfort dimensions, rose along the BMI. Even in the absence of chronic conditions, having a BMI below 35 lowered HRQOL. Severe obesity reduced the VAS score by an average of 1.9 points when comorbidities were taken into account, and significantly increased the likelihood that people would report any HRQOL issue with mobility (11.8%), self-care (2.2%), typical activities (4.3%), and pain/discomfort (7.4%). There is no link between weight and mental health issues. All the factors considered indicate that women and those 65 years of age and older had considerably lower HRQOL than the general population.

Liberska and Boniecka (2016) emphasized that a person can change his or her body image throughout life and that the body image may be molded by a variety of situations. Individuals and process the study group included 112 high school students between the ages of 17 and 18. In Poland, the study was carried out from March to June 2014. Techniques: For the objective of the study, S. Franzoi and S. Shields' Body Esteem Scale (BES) was utilized. The scale is employed in body image research. The Z. Juczyski Health Behaviour Inventory (HBI) was the second research tool used. The same tool is commonly utilized in research with kids, even though the guidelines are established for adults. Results Only the overall health behavior indicator was shown to correspond with body appraisal. The girls who participated in the study had higher body evaluations the higher the overall health behavior indicator was. Body mass index (BMI) and appraisal of the entire body, however, did not significantly correlate. Conclusions The study showed a substantial correlation between adolescent girls' body image and their desire to be thin to a lower extent and their health care to a greater level.

Study Problem

Overweight is one of the factors that directly affect women's body image and healthy behavior and is one of the most important social and health phenomena in their lives. What enhances the importance of the realistic or imagined appearance of the body is its direct impact on women's self-acceptance and mental health, considering that the perception of a woman's body image is a key component of mental health. Desouki (2006) noted that individuals who suffer from body image disorder because of their excess weight hold mixed emotions that they may not be able to reveal, such as disgust with their body image and anxiety and fear in different social situations. Eckler, Kalyango and Paasch (2017) also stressed that overweight women have a negative assessment and distorted image of their body and are more likely to develop various depressions and mental disorders. Due to the difficulty of losing weight through natural diets and exercise to obtain an accepted or perfect body, weight gain has become an undeniable phenomenon, affecting women's mental health and behavior, and creating significant health and social challenges. Weight gain contributes to several changes in women's lifestyles and many expected health risks. Nonetheless, there is a lack of research on the relationships between body image disorder and the healthy behavior of overweight women, as well as neglect of the role posed by psychologists to help overweight women accept, understand, and psychologically support them to form a positive image of their bodies and enhance their psychological competence to enjoy their lives and meet the challenges and risks of being overweight. The current study attempts to examine the relationship between body image disorder and healthy behavior in a sample of overweight women.

Significance of the Study

Women receive multiple indicators and messages related to their body image from many sources, such as family, friends, and co-workers, as well as the role played by various media, social media sites, and advertisements related to fitness and fashion. These signals increase women's interest in their body image to an exaggerated degree, negatively affecting women's response and perception of the reality of their real body. The study derives its importance from contemporary concerns about body image disorder and its relationship to certain social and psychological variables, particularly healthy behavior in overweight women, as weight gain is an important cause of anxiety, depression, and body deformity, mainly in women. The study adopts a variable of healthy behavior associated with body image disorder. The current study is a serious step to emphasize researchers' scientific and practical interests in the relationship between body image disorder in overweight women and their level of healthy behavior as a key goal of personality building and social development to reach a safe level of well-being. The study also attempts to provide and assist those interested in mental health and psychology with data, information, and realistic knowledge of body image and healthy behavior in overweight women, to support and promote these important psychological concepts of positive outcomes in the target group.

Objectives of the Study

The current study aims to detect the level of body image disorder and healthy behavior in a sample of overweight women. The study also aims to identify the impact of age variables, social status, and scientific qualification on the level of body image disorder and healthy behavior in a sample of overweight women.

Study questions

This study was seeking to answers the following questions:

1. What are the levels of body image disorders and health behaviour among sample of overweight women?
2. What is the relationship between body image disorders and health behaviour among sample of overweight women?
3. To what extent can variation in body image disorders and health behaviour among sample of overweight women be explained through variation in the participants' academic qualification and social status?

Methodology

The study approach and methods used for this study are covered in this section. It also outlines the justification for the approach employed and discusses the factors that inspired the creation of research techniques and protocols. It also gives a general summary of the methodology that was applied to the data collecting and analysis for this study. (102) overweight women chose to take part in this study in order to gather data. As shown in Table 1 below, the participants were from various cities and socioeconomic levels.

Table 1: The descriptive of the participants

Variables	Category	Number	100%
Academic qualification	Secondary school	21	20.58%
	Diploma	30	29.41%
	Graduate	37	36.27%
	Postgraduate	14	13.72%
Social status	Single	44	43.13%
	Married	51	50.00%
	Divorced	5	4.90%
	Absolute	2	1.26%

Tools

The following scales were used in the study to collect data:

1. Body image disorder scale (Buthaina Mansour, 2015): consisting of (54) items divided into 7 dimensions: excessive preoccupation with the body, complaints of imaginary or minor defects in the head and face, avoid detailed description of defects due to embarrassment, continue to confirm the defect for hours of the day, excessive exercise and diet and frequent

change of clothes, some individuals develop delusions, and cloudiness may lead to hospital sitting or suicidal thinking.

2. Health behaviour scale (Ahmad Smadi and Mohammad Smadi, 2011): consisting of (52) items divided into four dimensions: general health, body care, drug use , and psychological and social health.

A team of professionals in psychology, psychometrics, and mental health examined and revised the scales to ensure their validity. The suggestions and criticisms of the team were considered. The experts concurred that the scales are appropriate for the study's purpose and that the items were clear. Two statistical techniques, Cronbach's Alpha correlation and Split-Half, were used to assess the scales' reliability. the scales' body image disorders and health behaviour Split-Half values were (0.832 and 0.876) respectively. while the Cronbach's Alpha coefficients were (0.849 - 0.887) respectively. These findings would suggest that the study's scales have a highly reliability.

Data collection and analysis

The researchers employed two scales to assess the individuals' health-related Behaviors and body image disorders for the aim of data collecting. The researchers used Google Forms as an online surveying tool to get the most volunteers possible. The participants received an email or social media message with a link to the online version of the scales. A consent form and a component for gathering participant background data were both included in the online questionnaires (e.g., academic qualifications and social status). Data were collected in summer of the academic year 2021/2022. Data were entered into IBM SPSS Statistics 26.0 after the 102 participants' responses were received. Several statistical tests were conducted to provide answers to the study questions posed before. The following sections will show, clarify, and debate the results.

Findings

This part focuses on analysing the information obtained from the exam created for this study. The present study sought to explore the body image disorder and its relationship to healthy behaviour among sample of overweight women. The study's results are presented in this section. To address the study's questions, the general statistical tests were run. The sequence of the study questions determines how the findings are interpreted. There are descriptive statistics: means, standard deviations, Pearson correlation, one-sample t-test, and ONE WAY ANOVA results provided.

Research question one: What are the levels of body image disorders and health behaviour among sample of overweight women?

One-sample t-test was performed to find the answer to this research topic. Referring to Table 2 below.

Table 2: One-sample t-test for variables and its dimensions

Variables	Dimensions	Mean	<i>Std.dev</i>	t	Sig
Body	continue to confirm the defect for hours of	3.89	0.63	18.80	0.01*

		the day			
image disorders	excessive preoccupation with the body	4.16	0.47	27.61	0.00*
	complaints of imaginary or minor defects in the head and face	3.90	0.52	25.72	0.03*
	excessive exercise and diet and frequent change of clothes	3.83	0.42	24.80	0.04*
	cloudiness may lead to hospital sitting or suicidal thinking	3.61	0.29	29.26	0.00*
	avoid detailed description of defects due to embarrassment	3.77	0.39	23.01	0.02
	some individuals develop delusions	3.79	0.36	24.22	0.01
	Total	3.88	0.39	32.47	0.02*
	general health	3.71	0.71	13.79	0.00*
	body care	3.63	0.84	12.48	0.04*
	drug use	3.40	0.83	9.63	0.02*
Health behavior	psychological and social health	3.60	0.78	10.31	0.00*
	Total	3.60	0.75	11.28	0.03*

* Sig at ($\alpha \leq 0.05$)

The results in table (2) find out that the means scores of the body image disorders scale and its dimensions, and the health behaviour scale and its dimensions were statistically significant at ($\alpha \leq 0.05$). the total values of body image disorders ($mean = 3.88$ and $sig = 0.02$), while the total values of health behaviour ($mean = 3.60$, $sig = 0.03$). This would indicate that the level of body image disorders, and health behaviour were high among the participants. In another hand, the results presented that the excessive preoccupation with the body, and the general health as a sub-dimension were the highest among the overweight women, while the dimension of cloudiness may lead to hospital sitting or suicidal thinking and drug use the were the lowest.

Research question two: What is the relationship between body image disorders and health behaviour among sample of overweight women?

Pearson Correlation Coefficient was used to examine whether there would be any statistical correlation significant between body image disorders and health behaviour among sample of overweight women. The results are summarised in Tables 3.

Table 3: Pearson Correlation coefficient test between the variables.

Variables	Body image disorders	Health behaviour
Body image disorders	1	- 0.593**
Health behaviour	- 0.593**	1

** Sig at ($\alpha \leq 0.01$)

Table (3) presented strong a negative statistically significant correlation between body image disorders and health behaviour among sample of overweight women ($r = - 0.593$, $sig = \alpha \leq 0.01$). Research question three: To what extent can variation in body image disorders and health behaviour among sample of overweight women be explained through variation in the participants' academic qualification and social status?

One-way ANOVA tests were used to examine whether there were statistically significant differences between the participants' body image disorders and health behaviours that were related to their social status and academic qualification in order to answer the research question (as listed in below Table 4).

Table 4: One-way ANOVA for social status and academic qualification

Variable	Scale	Variance	Sum of Squares	df	Means Squares	F	Sig
Social status	Body image disorder	between group	0.57	3	0.21	0.63	0.48
		within group	28.25	98	0.17		
		Total	28.82	101			
	Health behavior	between group	1.38	3	0.75	1.59	0.29
		within group	34.81	98	0.41		
		Total	36.19	101			
Academic qualification	Body image disorder	between group	1.12	3	0.28	1.87	0.55
		within group	27.33	98	0.19		
		Total	28.45	101			
	Health behavior	between group	2.77	3	2.83	2.95	0.03*
		within group	31.58	98	0.56		
		Total	34.35	101			

* Sig at ($\alpha \leq 0.05$)

Table (4) presented no statistically significant at ($\alpha \leq 0.05$) in participants' body image disorders and health behaviours based on social status variable. Furthermore no statistically significant at ($\alpha \leq 0.05$) in participants' body image disorders according to academic qualification variable. the results also revealed a statistically significant at ($\alpha \leq 0.05$) in participants health behaviour regarding the academic qualification variable. to find out the sources of differences in health behaviour with attribute of qualification variable, "Least Significant Difference (LSD) Analysis" has been calculated as presented in table 5.

Table 5: "Least Significant Difference (LSD) analysis"

Variable	Category	Mean	Secondary school	Diploma	Graduate	Postgraduate
Health behaviour	Secondary school	3.50	-----	-----	-----	-----
	Diploma	3.85	-----	-----	-----	-----
	Graduate	4.09	*	-----	-----	-----
	Postgraduate	4.31	*	*	-----	-----

*Significant at ($\alpha \leq 0.05$)

Results of "Least Significant Difference (LSD)" analysis as presented in Table (5) find out a statistically and significant difference between the category of secondary school ($mean = 3.50$) and the category of graduate and postgraduate

(*mean*= 4.09 & *mean*= 4.31) respectively in favour of both graduate and postgraduate category. Also, there were statistically and significant differences between the category of Diploma (*mean*= 3.85) and the category of Postgraduate (*mean*=4.31) in favour of the category of Postgraduate.

Discussion

In the current study, a sample of overweight women were examined to investigate the relationship and interplay between body image disorder and its relevance to health behaviour. The study also looked into the relationship between participants' levels of body image disorder and health-related behaviours and their social standing and educational background. Finding of the study. The mean scores on the scales for health behaviour and body image disorders were statistically significant, as were their respective dimensions.

A sample of overweight women revealed a strong negative statistically significant association between disorders of body image and health-related behaviour. Results showed that participants' body image disorders and health behaviours depending on social status variables were not statistically significant. Additionally, the academic qualification variable had no statistically significant effect on the subjects' body image disorders. The results also showed that the participants' health behaviour in relation to the academic qualification variable was statistically significant. It is crucial to realize that women thoughts determine their behaviour and perceptions regarding health. their attitudes toward how they appear can actually affect how they feel. Negative thoughts are only one aspect of how having a poor body image affects your mental health. People who have body dysmorphic disorder or weight obsessions exhibit higher degrees of depressive and anxiety symptoms and are more prone to have suicidal thoughts. Because of this, keeping a healthy body image is a necessary component of maintaining mental health. You can enhance your health behaviour by showing your body respect and practicing body love.

The finding of current study agrees with results of study of Liberska and Boniecka (2016) which reported the overall health behaviour indicator was shown to correspond with body appraisal. The girls who participated in the study had higher body evaluations the higher the overall health behaviour indicator was. Also agrees with results of Abdel-Fattah (2019) which reported the findings did not indicate that the study sample's body image or life orientation varied according to marital status.

Limitations of the study

Only the data collection and analysis portions of the study used quantitative methodologies. It is advised that future studies triangulate their data collecting by using qualitative techniques including case studies, interviews, and observations. The variance in women's body image disorders and health behaviours over time should also be examined, since this can help researchers better understand how body image disorders and health behaviours interact. The socio-cultural or socio-economic background of the subjects has not been looked into in this study. The relationship between those elements and women's body image disorders and

health behaviours will likely be the subject of future study. Finally, more investigation is required to examine the relationship between women's body image issue and other variables.

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