



## An Examination of The Effect of Weight and Satisfaction with Body Shape on Self-Esteem Among Men in Qatar

IJOTM

ISSN 2518-8623

**Khalid Jamal AL-Naamaa**

University of Liverpool

Email: khalid113553@hotmail.com

Volume 6. Issue II  
pp. 1-17, December 2021

[ijotm.utamu.ac.ug](http://ijotm.utamu.ac.ug)

email: [ijotm@utamu.ac.ug](mailto:ijotm@utamu.ac.ug)

**Eddy K. Tukamushaba**

Uganda Technology And Management University

Email: [etukamushaba@utamu.ac.ug](mailto:etukamushaba@utamu.ac.ug)

### Abstract

This study objective was to establish the effect of body mass index on satisfaction with body shape and self-esteem. An explanatory research design was adopted, and three hypotheses were tested using a sample size of 191 Qatari men. Correlation and regression analyses were used to test the relationship and effect of independent variables on a dependent variable.

Findings showed that body mass index had no effect on self-esteem ( $F(1, 189) = 1.74, p > .05, R^2 = .009$ ), but a significant effect was established between body mass index and satisfaction with body shape ( $F(1, 189) = 36.23, p < .001, R^2 = .161$ ). Also, satisfaction with body shape was found to have significant on self-esteem ( $F(1, 189) = 14.10, p < .001, R^2 = .130$ ) among the surveyed men in Qatar.

It is concluded that the cultural factors could have had an impact on having observed no relationship between BMI and esteem because, generally in Qatar, men who are underweight are perceived to be weak and poor while those who are overweight is a sign of strength and rich. However, satisfaction with body shape appeared to be an important factor that influences self-esteem among Qatari men.

It is recommended that medical practitioners carry out counselling to Qatari men to make them realize that being overweight and obese has health implications and need to live a healthy lifestyle by eating healthy food and doing exercises. This is likely to improve men's BMI, satisfaction with their body shape and self-esteem.

**Keywords:** Body Mass Index, Weight, Satisfaction with body shape, Self-esteem

## Introduction

Even though Gulf Cooperative Council countries struggle with the increased number of obese individuals, sadly to say that Qatar has the highest incidence of obese individuals which made them to be one of the top ten countries for overweight and obese adults (Bener, 2006; Al-Thani et. Al, 2018; Khondaker et.al, 2020). A third of Qataris are considered obese based on BMI values (Ali et al., 2014). The stigmatization of obese people is noticeable and result in more negative stereotyped as lacking self-control and being lazy (Puhl & Heuer, 2009). According to Brown University Health Education, poor body image has been linked to psychological distress such as low self-esteem, anxiety, and depression. Moreover, negative body image may influence Body Dysmorphic Disorder (Brown University, n.d.) for some persons. In fact, people with poor body image are more likely to be vulnerable to disordered eating behavior and negative self-talk of one's appearance tied with depression (Cargill, 2012).

A negative outcome of being obese or overweight is still subject to investigation in Qatar. As a rule of thumb in Qatar society most people wish to be thinner. Unfortunately, most of the attention goes to the negative physical aspects of being obese. According to Swami (2015), many individuals are dissatisfied with their weight appearance and the most common complain that is heard from the adults men is the less level of body muscle and high level of body fat. In other words, men felt self-conscious about their weight status either of too heavy or underweight and both have negative outcomes on their confidence level because they rate themselves unattractive.

A negative self-evaluation about one's body makes them feel less adequate partner in some social life occasions. These concerns and discomforts, impact their overall self-esteem level which may develop potential life-threatening eating disorders (Peplau et al., 2009). In this investigation, the key question of interest is to examine the relationship between the predictor variables and level of body satisfaction and self-esteem among Bedouin and Non-Bedouin Qatari males.

Apparently, the perceptions of overweight individuals might mislead themselves sometimes because they do not consider themselves overweight even if they measure their weight according to BMI standards. These negative perceptions are more obviously in societies with high rate of obesity. Moreover, weight status is underestimated in contest of social environment and weight norms (Johnson, Stewart, & Pusser, 2012). Qatari individuals are significantly influenced by their cultural norms, values and traditions where they are more socialized and engaged in social occasions. According to Christakis and Fowler (2007), adults whose social contacts are obese or overweight, might increase the risk of obesity among normal weight individuals. Therefore, weight satisfaction, level of self-esteem and body image needs to be examined to establish how Bedouin and Non-Bedouin Qataris feel about their satisfaction with body shape and level of self-esteem.

## Literature Review

The consequence of obesity to physical health is well documented, but the psychologically related distress among obese men is not entirely understood. At a broad level, body shape and size are related to the degree of satisfaction with one's body. Latner and Wilson (2009) argued that obesity is linked with much adverse psychological health related issues. Similarly, Puhl and Heuer (2009) in their studies claimed that inadequate health care, lower educational and occupational accomplishment, low self-esteem, anxiety is more prominent among obese individuals as compared to non-obese individuals. Also, Neumark-Sztainer, Paxton, Hannan, Haines and Story (2006) found that body dissatisfaction is linked to psychological distress.

Moreover, it has been argued that the social identity of obese individuals is taken more seriously by an obese person because they feel at risk of being rejected or judged through the eyes of other normal weight

individuals (Major, Mendes, & Dovidio, 2013). This rejection or judgment is what could derive the overall psychological well-being of obese or overweight individual into more negative consequences. Body image is one of the most important evaluations of body size measured in terms of Body Mass Index and contributes to attitudes and physical appearance. A positive body image has been reported to be associated with the person psychological states (Fahimeh and Zahra, 2014).

Apparently, individuals own point of views about their physical appearance play a role in daily function. Social psychology studies have shown that the non-obese individuals base on their physical appearance to negatively evaluate the obese individuals as being unattractive. This negative evaluation as a result reduces obese individuals social contact and social engagement in different social functions (Berscheid, Dion, Walster, & Walster, 1971; Langlois & Stephan, 1981). This negative evaluation of obese individuals result into social concerns that lead them to be preoccupied with how other individuals are evaluating and judging them, and this may result into an increase in the psychological distress.

Furthermore, poor body image increases the risk of developing low self-esteem, depression, and exercise avoidance. In addition, obese persons have a 55% chance of risk to develop depression overtime compared to non-obese persons (Gatineau & Dent, 2011). Moreover, Friedman, Simon, Reichmann, Costanzo and Gerard (2002) in their study which was attempted to understand the relationship between obesity and psychological distress, found that those with more negative evaluations of their appearance shows low level of self-esteem and higher level of depression. It is therefore hypothesized that:

***H1: There is a significant effect of Body Mass Index on self-esteem.***

Remarkably some individuals may perceive poor body image in terms of more negative emotional reactions. According to Pila et al. (2013), obese individuals reported more body related shame and guilt compared to normal body weight individuals. Bacon et al. (2005) however found that weight acceptance improves overall psychological well-being, which appears to suggest that negative self-perceptions increase the psychological dysfunction because of ongoing social concerns to maintain accepted or ideal body image based on some cultural standards for some societies.

Hamad Medical corporation raised the national concerns when it published an article about “Slimming through surgery” (The Peninsula newspaper, 2013). The author stated that over 1400 weight loss surgeries were carried out in less than two years. This number translates into an average of 70 to 100 operations per month. Moreover, over than 2000 individuals were on waiting list for six months to one year to perform such operation. Moataz (2013) states in the same article, that the patient's level of confidence increases after the operation and became more active. ***Therefore, it is hypothesized that:***

***H2: The emotional distress of being overweight and obese has a negative effect on satisfaction with body image.***

There is a lack of studies in Qatar with regards to the psychological impact of weight and satisfaction of body image especially among men. Most of the studies conducted in Qatar are about obesity and its relationship with physical diseases. According to International Association for the Study of Obesity in 2009, around 70 percent of Qatari children led unhealthy lifestyles. They are more likely to have junk food and not interested in physical exercises, thus they become obese and less self-confident. Therefore, Qatar has the highest prevalence of obese young boys. Qatar ranked the sixth place in obesity worldwide (Heley, 2011).

Furthermore, about 76 percent of Qatari adult males are overweight or obese. Most of the research being conducted in terms of obesity are related to the physical disorders such as high blood pressure, diabetes and metabolic syndrome and there is lack of psychological studies related to obesity. As a result, the impact of weight, satisfaction with body image and self - esteem on men in Qatar is unknown.

Additionally, most of these studies that have been conducted are from western countries due to the historical importance of obesity related psychological and physical impact in the west (Willett, 2002). **Hence, this study intends to examine the effect of Body Mass Index, satisfaction with body shape and self - esteem among men in Qatar.**

## **Method**

This study was aimed to establish the psychological impact of obesity and its effect on overall wellbeing among men in the State of Qatar. Explanatory research design was used to guide the data collection and analysis. Correlation and regression analyses were used to test the expected relationship among variables and effect of independent variables on dependent variables. Therefore, the independent variables were salary, age, height, weight, occupational group, ethnic group. While the dependent variable were level of body satisfaction and level of self-esteem.

### ***Population and Sampling***

According to Ministry of Development Planning and Statistics, the total population of Qatar is 2,559,267 as of April 2016, and the Qatari nationals was only 278000. The number of Male and female Qataris is around 13% of entire population. Based on the population, the sample size of 384 respondents was determined based on 95% confidence level using Krejcie and Morgan (1970) sample size determination table. The recruited participants were chosen using purposive sampling method and data was collected using Survey Monkey an online survey software.

The Inclusion criteria for the participants in this study were obese and non-obese Qataris males aged between 25-45 years. The marital status for the respondents were the married and divorced, and the occupational group was mainly from Oil and Gas industries or other industries. The occupational sample were chosen from oil and gas industries compared with other citizen workers from different industries because the country is highly dependent on oil and natural gas industry which almost 70% of government revenue comes from this sector. Most of the Qataris are directly or indirectly related with this sector and they played an important role in modern life of Qatar (Oxford Business Group, 2016). The ethnic group was Bedouin Qataris and Non - Bedouin Qataris. This sample category helped to understand how modern life impacts different ethnic groups and how they perceive the world around them and more specifically in this study their response enabled the researcher to know how different ethnic groups react to obesity as well. Exclusion criteria of the participants were, Qatari male age below 25 and above 45 years, those who are not able to provide informed consent and the female are also excluded from the participant's criteria

The researcher publicized the study twice advertisement of the study via email and social media (Twitter, Instagram, and Snapchat) using the personal accounts of the researcher. Moreover, friends and relatives were visited in their Majles (a place where family members gather to discuss various issues) to also talk about the study to those who were willing to take a part in the research and the study links were sent to them to fill the online survey. Out 384 targeted respondents 221 participants took part in the study representing 58% response rate. This response rate is considered high for online surveys. The responses were collected over a period of three weeks.

## Measurement

Questions for the survey were classified into three sections. The first part of the questionnaire was to obtain demographic data of the participants such as marital status, age group, annual salary, educational level, ethnic group, occupational group as of oil and gas industries and others, weight and height of the participants were included as covariates because of their established association with weight status (Wang & Bedouin, 2007; Wardle et al., 2002). To determine body mass index, the formula which was proposed by the World Health Organization was utilized by calculating the person's weight in kilograms divided by the square of the individual's height.

The second part of the questionnaire measures the self-esteem scale using Rosenberg Self-Esteem Scale to measure the global self-worth by measuring both negative and positive feeling about self. Each item measured through a 4-point Likert scales ranging from strongly agree to strongly disagree and this scale contained 10 items, an example of which is "I certainly feel useless at times" The scores ranged from 4 to 40. Rosenberg Self Esteem scale showed a good internal consistency, with Cronbach's alpha of ( $\alpha = 0.78$ ), which is above the minimum cut off point of .70 (Cronbach, 1951, Nunnally, 1978). Higher summated score indicates a more positive orientation to oneself. (Gray-Little, Williams & Hancock, 1997. Baumeister, Campbell, Krueger & Vohs, 2003. Sinclair et al., 2010;).

The third part of the questionnaire was intended to evaluate weight and the satisfaction with the shape of the body through Body Shape Questionnaire BSQ-8C (Cooper et al., 1987; Waadt, Laessle, & Pirke, 1992). The scale of BSQ-8c range from 1 (Never) to 6 (Always) and this scale contained 8 items, each item measures the concern about body shape, and it focuses on the phenomenological experience of "feeling fat". The Cronbach's alpha ( $\alpha=0.84$ ) which indicated high internal consistency (Pook & Tuschen-Caffier, & Stich, 2002).

The score format is based on the sum of scores of the items and convert the score by multiplying 34/8. The category of scores, if the result were less than 19 points it means "no concern with the shape" and if the total points between 19 to 25 it means "mild concern with the shape" if the total points between 26 and 33 it means "moderate concern with the shape" if the total points are over 33 it means "marked concern with the shape".

## Procedure

Participants were informed that the study was intended to examine the relationship between weight, satisfaction of body image and self-esteem of men in Qatar. Informed consent was obtained from the participants that they were free to withdraw from the study at any point of time. In addition, they received a brief description about the study during the announcement of the research. Ethical approval was gained through the University of Liverpool ethics committee which required informed consent from each of the participants. In addition, post participation debriefing was carried out for the participants. Moreover, the responses were anonymous, and completion of the questionnaire took approximately 15 min. There were no incentives for people who participated in the research.

## Results

### Demographic characteristics of the sample

The sample was majorly made up 63.4% of non-Bedouin Qataris of which 49.7% were married and 45% were single. The occupational group comprised of 72.3% of men working in non-oil and gas industries majority of whom were aged between 18-30 with 53.9%, followed by 31-45 with 44%. The average annual

salary of 25000 \$-35000 \$ was the highest at 49.2% followed by those who earned 45000 \$ or above at 28.8%. Lastly, the majority of the respondents had bachelor's degree with 58.1%, followed by those with High school graduate with 24.1%, masters with 15.2% and those with PhD with 2.6%. This distribution is generally a reflection of how education levels guide employment levels in Qatar. Table 1 shows the summarizes the frequency distribution of the sample

Table 1: *Frequency distribution of demographic characteristics (N=191).*

<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Ethnic group</b>		
Bedouin Qataris	70	36.6
Non-Bedouin Qataris	121	63.4
<b>Marital Status</b>		
Married	95	49.7
Single	86	45.0
Divorced	10	5.2
<b>Occupational group</b>		
Oil and Gas industries	53	27.7
Other industries	138	72.3
<b>Age group</b>		
18 to 30	103	53.9
31 to 45	84	44.0
46 to 60	4	2.1
<b>Annual Salary (Household Income in US \$)</b>		
25000 \$-35000 \$	94	49.2
35000 \$ – 45000 \$	42	22.0
45000 \$ or above	55	28.8
<b>Education Level</b>		

High school graduate	46	24.1
Bachelor's degree	111	58.1
Master's degree	29	15.2
Ph.D	5	2.6

### Descriptive statistics for Self-Esteem

Overall the item that received higher ratings of strongly agree was “I am able to do things as well as most other people” with (M=1.69, SD=.593), followed by “I feel that I have a number of good qualities” (M=1.71, SD=.631) and the item where respondents strongly disagreed was “All in all, I am inclined to feel that I am a failure” with (M= 3.02, SD=.827). There was no remarkable variation in responses for all the items. Table 2 shows the descriptive statistics for all the 10 items measuring self-esteem where 1=Strongly Agree and 4= Strongly Disagree)

**Table 2. Descriptive statistics for Self-esteem scale (N=191)**

Items	Mean	Std. Deviation
1. All in all, I am inclined to feel that I am a failure	3.02	0.827
2. I feel I do not have much to be proud of	2.98	0.824
3. I certainly feel useless at times	2.85	0.833
4. At times I think I am no good at all	2.60	0.839
5. I wish I could have more respect for myself	2.47	0.961
6. On the whole, I am satisfied with myself.	2.12	0.671
7. I feel that I'm a person of worth, at least on an equal plane with others	1.86	0.609
8. I take a positive attitude toward myself	1.76	0.626
9. I feel that I have a number of good qualities	1.71	0.631
10. I am able to do things as well as most other people	1.69	0.593

### Descriptive Statistics for Body shape scale

This scale was anchored on 6-point Likert scale that ranged from 1= Never to 6 = Always. From Table 3, it is observed that four items had a mean value ranging from (M=3.01 to M=3.10) which reflects “Sometimes” respondents answered questions such as “Have you thought that you are in the shape you are because you lack self-control?” with (M=3.01, SD=1.608). Two items had a mean value close to 4 that describes “Often”. Item “Have you been afraid that you might become fat (or fatter)?” had the highest rating with (M=3.82, SD=1.751), followed by item “Has feeling full (e.g., after eating a large meal) made you feel fat?” with (M=3.80; SD=1.580). The item with the lowest rating was “Have you felt excessively large and rounded?” (M=2.57; SD=1.389).

**Table 3. Descriptive Statistics for satisfaction with body shape scale (N=191)**

Items	Mean	Std. Deviation
1. Have you been afraid that you might become fat (or fatter)?	3.82	1.751
2. Has feeling full (e.g., after eating a large meal) made you feel fat?	3.80	1.580
3. Have you been particularly self-conscious about your shape when in the company of other people?	3.10	1.478
4. Has seeing your reflection (e.g., in a mirror or shop window) made you feel bad about your shape?	3.08	1.592
5. Has thinking about your shape interfered with your ability to concentrate (e.g., while watching television, reading, listening to conversations)?	3.01	1.357
6. Have you thought that you are in the shape you are because you lack self-control?	3.01	1.608
7. Have you imagined cutting off fleshy areas of your body?	2.71	1.631
8. Have you felt excessively large and rounded?	2.57	1.389

#### Body mass index categories

Body mass index was used to represent the variable weight because it accounts for height of the respondents. Table 4 shows that 41.9% of the respondents had normal weight, followed by those who were overweight with 29.3%. Those who were obese were 26.7% and only 2.1% were underweight.

Table 4. *Body Mass Index categories of the respondents (N=191)*

BMI Categories	Frequency	Percent	Cumulative Percent
Under weight	4	2.1	2.1
Normal weight	80	41.9	44.0
Overweight	56	29.3	73.3
Obese	51	26.7	100.0

#### Satisfaction with body shape categories

The results show that the respondents in this study were generally happy with their body shape. Table 5 shows the frequency distribution of satisfaction with the body shape categorization based on the summative scores. Most of the respondents had no concern for their body shape with 36.1%, followed by those who had mild concern about their body shape with 33.5%. Only 7.9% of the respondents had a marked concern about their body shape.



**Table 5. Satisfaction with body Shape categories (N=191)**

Body Shape Categories	Frequency	Percent	Cumulative Percent
No Concern with shape	69	36.1	36.1
Mild Concern with shape	64	33.5	69.6
Moderate concern with shape	43	22.5	92.1
Marked Concern with shape	15	7.9	100.0

**Hypothesis testing.**

The main objective of this study was to establish whether Body Mass Index (BMI) and satisfaction with one’s body shape influences the individual’s self-esteem. To achieve this objective, two tests were performed. First, Pearson’s correlations were performed to establish whether there was a relationship between BMI of the respondents with satisfaction with body shape and self-esteem. Table 6 shows the correlation analysis results.

**Table 6. Correlation analysis (N=191)**

	Body Mass Index	Satisfaction with body shape	Self- esteem
Body Mass Index	1.000		
Satisfaction with body Shape	.401**	1.000	
Self- esteem	0.095	.357**	1.000

**\*\*.** Correlation is significant at the 0.01 level 2-tailed).

Table 6 shows that there was a moderate significant and positive relationship between Body Mass Index (Weight in Kg/ Height squared) and satisfaction with body shape with (r (190) =.401,  $p < .001$ ). However, Body mass index (BMI) had no relationship with self-esteem (r (190) =.095,  $p > .05$ ). Moreover, satisfaction with body shape had a moderate significant and positive relationship with self-esteem with (r (190) =.357,  $p < .001$ ).

**Regression analysis**

A Linear Regression was performed to establish which of the predictor variables had an effect on the dependent variable. The two predictors were Body Mass Index (BMI) and Body Shape satisfaction, and the dependent variable is self-esteem. Three hypotheses were tested.

**HI: There is no effect of BMI on satisfaction with body shape.**

Results from the linear regression indicated that there was a significant effect of body mass index on satisfaction with body shape, (F (1, 189) = 36.23,  $p < .001$ ,  $R^2 = .161$ ). The predictor was also examined further and indicated that BMI was a significant predictor of satisfaction with body shape ( $\beta = 53.11$ ,  $t = 6.02$ ,  $p < .001$ ). These results further show that BMI explained 16.1% of the explained variance observed in satisfaction with body shape thus rejecting the null hypothesis that there was no effect of Body Mass Index on satisfaction with body shape.

### ***H2: There is no effect of BMI on self-esteem.***

Results from the linear regression indicated that there was no significant effect of body mass index on self-esteem ( $F(1, 189) = 1.74, p > .05, R^2 = .009$ ). The predictor was also examined further and indicated that BMI was not significant predictor for self-esteem ( $\beta = .072, t = 1.32, p > .05$ ). These results further show that BMI did not add any explanation value to the observed variance in self-esteem in the current model thus accepting the null hypothesis that there is no effect of BMI on self-esteem.

### ***H3: There is no effect of satisfaction with body shape on self-esteem.***

Results from the linear regression indicated that there was a significant effect of satisfaction with body shape on self-esteem, ( $F(1, 189) = 14.10, p < .001, R^2 = .130$ ). The predictor was also examined further and indicated that satisfaction with body shape was a significant predictor of self-esteem ( $\beta = .217, t = 5.122, p < .001$ ). These results further show that satisfaction with body shape explained 13% of the explained variance observed in self-esteem thus rejecting the null hypothesis that satisfaction with body shape has no effect on self-esteem.

## **Discussion and recommendation**

The first objective of this study was to establish whether Body Mass Index had effect on satisfaction with body shape among men in Qatar. Studies have shown that some individuals may perceive poor body shape to be associated with negative emotional reactions. For example, Pila et al. (2013) found that, obese individuals reported more body-related shame and guilt compared to healthy body weight individuals. People have different perceptions towards their ideal weight, and this is an important aspect of mental health during the entire life (Ballard & Sira 2011).

In some situation the obese persons are evaluated by others who perceive themselves to have normal weight, and this may create an adverse effect on their normal life. This study found that about 30.4% of the men had moderate and marked concern with satisfaction with their body shape. In 1980 James argued that the self-esteem is “the satisfaction or dissatisfaction with oneself” (Mizuho, Ayumi, Chikako, Keizou, & Kumi, 2012).

Satisfaction with one's body shape also known as body image has been defined as “an individual's appraisal and feelings about the body” (Cornwall & Schmitt, 1990). It is recognized that body image is a part of identity and self-concept which might also influence the way individuals think about themselves and their capabilities. Individuals with higher level of body image dissatisfaction are more likely to show symptoms of depression and anxiety disorder. Moreover, some studies there is a strong association between feelings about the body, self-worth and wellbeing (Forman-Hoffman et. al., 2007).

The second objective for this study was to establish whether Body Mass Index influenced self-esteem among men in Qatar. Results showed that there was no effect of Body Mass Index on self-esteem. Webber (2006) claimed that body mass is one of the main aspects of social acceptance and he found that being an overweight is an important predictor for low self-esteem level. Similarly, Griffiths and Persson (2010) summarized 25 cross studies, found evidence that the level of body self-esteem is associated with body mass and this had an impact on the quality of individual's life span.

The third objective was to establish whether satisfaction with body shape influenced self-esteem. Results for this study showed that satisfaction with body shape had an influence on self-esteem. In Qatari culture, people who have high income or higher occupational positions are concerned more about their shape and image which in both participants group might lead them to be more ambitious to have better image and impression

based on their expectation level. The findings of current study are aligned with the previous study conducted by Fahimeh and Zahra (2014) which found that, one of the main factors for decreasing adolescent's body image and their self-esteem in Iran was obesity. Another study conducted by Magallares et. al. (2011) that analyzed the personal and social costs of being obese found that the experience of social discrimination influences psychological health, self-esteem, and life satisfaction.

Similarly, they found that obese individuals see themselves less skilled for some positions which provoke a decrease in the job skills and finally they received a lower wage as they are less confident while working due to their low self-esteem level. These findings support the current result which showed that satisfaction for body shape only explained 13% of explained variance observed in self-esteem for studied men in Qatar.

Mintem, Horta, Domingues and Gigante (2015) study that aimed to identify the prevalence and factors associated with body dissatisfaction using body satisfaction Stunkard Scale (Scagliusi et al., 2006) found that body dissatisfaction was observed among men and women with healthy weight, but it was more evident in the obese individuals. This finding suggests that to improve both males and females' self-esteem, they should be counseled appropriately because body size perception can lead to unhealthy behaviors such as bad diet choices and physical inactivity. In the current study, the result for BSQ score shows that when participants asked, "Have you imagined cutting off fleshy areas of your body?" most of the participants chose "sometimes". This means most people have concern for their body shape as previous findings. It can be concluded that individuals who are dissatisfied with their body shapes will likely develop low self-esteem.

Chen, Fox, and Haase (2008) intended to estimate the level of body shape dissatisfaction among Taiwanese adolescent boys and girls with different weight categories. They found that both of boys and girls prefer to be thinner while some boys prefer to have larger body which might be a sign for masculinity. The researchers also argued that the dissatisfaction of weight statues in eastern cultures might be perceived differently. Additionally, a study conducted by Reddy (2013) that was intended to understand how men evaluate their appearance and aging bodies while they strive to maintain positive evaluation of their physical appearance found that young men are more concerned about their appearance in order to look good, while men in their middle age, the functionality of body was more important than the appearance. It was further argued that, younger men focus on their appearance to gain social capital while elder men focus mainly on health and fitness.

### **Conclusion**

The current study has provided some empirical evidence to explain the relationship between Body Mass Index, satisfaction with body shape and level of self-esteem. Different aspects of different body shapes may play a role in accepting oneself which impact positively or negatively on the level of self-esteem. This study results shows that men who have poor body image are more concerned and suffer with low self-esteem. Even though the findings of the study is promising and could be an indication of the association relationship between the predictors variables such as weight statues and household income with the level of self-esteem and body image but these finding cannot be generalized due to the limited number of participants.

However, it can help to promote psychological well-being and overall health and wellness, since most people in the society suffers from overweight physical health disease it is the time to shed the light on the negative side from the psychological perspectives on overall health

Pila et al. (2013) found that the individuals who are categorized as an obese or overweight exhibit more related guilt and shame than normal weight individuals. Most people in Qatari culture consider thin individuals as a sign of weakness and of low social status. This might be a reason that motivate individuals in

the society to gain some weight to maintain the perceived status based on the cultural weight related reasons. Therefore, more consideration should be given to assess the perception of weight status because the weight stigma was not assessed to establish the possibility of guilt and shame in terms of social constructions of weight (Conradt et al.,2007).

Although, the Rosenberg Self Esteem indicator was the main variable explained in this study and an attempt was made to understand its association with BMI, satisfaction with body shape, clinical intervention strategies need to be explored to help promote overall quality of life and mental health Raevuori et al. (2007). Particularly, the negative psychological impact of being overweight or obese can lead the primary health care providers to reduce such impact by educating those individuals about the benefit of self-compassion and mindfulness in addition to motivate them to set an achievable goal to reduce the excess weight which at the end will increase their level of self-esteem and will post their health in more positive perspectives (Jazaieri et al., 2014).

A negative body image may contribute to low self-esteem level which might derive mainly because of high BMI score and negative self-evaluation of appearance. There are some factors currently impacting overall BMI for men, because now the social trend in Qatari society is that most men are concerned about their body image because they want to reduce fat and to gain muscle. Further studies should consider exploring reasons that influence males to desire to gain a muscular physical appearance and how this affects concern for body image and self-esteem when compared with other peer individuals who maintain their body shape.

### **Limitations of the study**

The main challenge is sometimes people are not interested to take a part in the study, while running the analysis we saw many people didn't complete the questions which lead us to exclude their participation results. Even though, the confidentiality of the participants is being protected, some participants when we visited them in "AL-Majles, "were doubted and anxious about taking a part in the study and this is totally acceptable. This desire being respected, and it could be justified as well; it shows that our culture is very sensitive to share some personal information even for academic purpose.

This study was somehow limited, as it only examines the Bedouin and Non-Bedouin Qatari citizen, in this regards it eliminate the other potential ethnic part of the society which are the black Qatari citizen. In future research whole component of society should be considered to see if the ethnic group can significantly impact the body shape questionnaire and self-esteem level.

Due to the limited ethnic group study shown in the research and the small sample size, which cannot clearly see the difference even though there is a small indication in the final score level of self-esteem and body shape questionnaire compared for both ethnic group of Qatari citizens.

Another limitation is the age of participants, in the research it has been focused to study people whom age group is between 25 and 45 years old. There might be a significant variation among other age group and how they perceive themselves in terms of their body shape and self-esteem which might deviate somehow the findings of the study and how they perceive themselves during the life span.

From the current study it is noticed that, when the BSQ scores were assessed for the occupational group the variance in scores which lead the attention to see that workers from non-oil and gas industries are remarkably concerned with their body shape, but this cannot draw the conclusion based on the comparison between those who work in oil and gas industries and other industries due to small number of participants from people working in oil and gas industries who participated in the study. In addition, future studies should consider

self-esteem and body shape towards cultural perception whom having an ideal body according to their norms and standards.

### Funding

This study was self-funded.

### References

- Abdulbari, B. & Ihab, T. (2006). Prevalence of overweight, obesity, and associated psychological problems in Qatari female population. *Obesity Reviews*, 7, 139-145
- Al-Thani, M., Al-Thani, A., Alyafei, S., Al-Chetachi, W., Khalifa, S., Ahmed, A., Ahmad, A., B Vinodson, B., & Akram, H. (2018) The prevalence and characteristics of overweight and obesity among students in Qatar. *Public Health*, 160, 143-149. doi: 10.1016/j.puhe.2018.03.020.
- Ali, M., Nikoloski, Z., Reka, H., Gjebrea, O. And Mossialos, E. (2014). The diabetes-obesity hypertension nexus in Qatar: Evidence from the World Health Survey. *Population Health Metrics*, 28, 12-18. doi: 10.1186/1478-7954-12-18.
- Ata, R. N., Ludden, A. B., & Lally, M. M. (2007). The effects of gender and family, friend, and media influences on eating behaviors and body image during adolescence. *Journal of Youth and Adolescence*, 36(8), 1024-1037
- Bacon, L., Stern, J.S., Van Loan, M.D., & Keim, N.L. (2005). Size acceptance and intuitive eating improve health for obese, female chronic dieters. *Journal of the American Dietetic Association*, 105(6), 929-936.
- Ballard S. & Sira N. (2011), Gender differences in body satisfaction: an examination of familial and individual level variables. *Family Science Association*, 7-16.
- Baumeister, R. F., Campbell, J. D., Krueger, J. I., & Vohs, K. D. (2003). Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychological Science in the Public Interest*, 4(1), 1-44
- Bedouin. (2014). Traditional Bedouin Culture. Retrieved from. <http://www.newworldencyclopedia.org/entry/Bedouin>
- Bener, A. (2006). Prevalence of obesity, overweight, and underweight in Qatari adolescents. *Food and Nutrition Bulletin*, 27(1), 39-45. doi: 10.1177/156482650602700106
- Berscheid, E., Dion, K., Walster, E., & Walster, G. W. (1971). Physical attractiveness and dating choice: A test of the matching hypothesis. *Journal of Experimental Social Psychology*, 7, 173-189.
- Cargill, Byron R. Ph. D. Binge Eating, Body Image, Depression, and Self-Efficacy in an Obese Clinical Population. (9/6/12) Web (5/10/15): <http://onlinelibrary.wiley.com/doi/10.1002/j.1550-8528.1999.tb00421.x/abstract>

- Chen, L., Fox, K.R., & Haase, A.M. (2008). Body shape dissatisfaction and obesity among Taiwanese adolescents. *17 (3): 457-460.*
- Christakis, N. A., & Fowler, J. H. (2007). The spread of obesity in a large social network over 32 years. *The New England Journal of Medicine, 357, 370–379*
- Conradt M, Dierk J-M, Schlumberger P, et al. (2007) Development of the Weight- and Body-Related Shame and Guilt Scale (WEB-SG) in a non clinical nonclinical sample of obese individuals. *Journal of Personality Assessment 88(3): 317–327.*
- Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The development and validation of the body shape questionnaire. *International Journal of Eating Disorders, 6(4), 485e494*
- Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The development and validation of the body shape questionnaire. *International Journal of Eating Disorders, 6(4), 485e494*
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16(3), 297-334*
- Fahimeh, S., & Zahra, G. (2014). The relationship between the satisfaction of body image and self-esteem among obese adolescents in Abadan. *Iranian Journal of Diabetes and Obesity, 5(3), 126-131.*
- Feingold, A. (1992). Good-looking people are not what we think. *Psychological Bulletin, 111(2), 304.*
- Figurbewusstsein (FFB, deutsche Version des Body Shape Questionnaire). *Verhaltenstherapie, 12, 116e124*
- Figurbewusstsein (FFB, deutsche Version des Body Shape Questionnaire). *Verhaltenstherapie, 12, 116e124*
- Forman-Hoffman, V. L., Yankey, J. W., Hillis, S. L., Wallace, R. B., & Wolinsky, F. D. (2007). Weight and depressive symptoms in older adults: direction of influence? *The Journals of Gerontology: Series B, 62(1), S43–S51.*
- Friedman, K. E., Simona, K., Reichmann, P. R., & Musante, G. J. (2002). Body image partially mediates the relationship between obesity and psychological distress. *Obesity Research, 10(1), 33–41.*
- Gatineau, M., and Dent, M. (2011). *Obesity and Mental Health.* Oxford: National Obesity Observatory. Retrieved from [http://www.noo.org.uk/uploads/doc/vid\\_10266\\_Obesity%20and%20mental%20health\\_FINAL\\_070311\\_MG.pdf](http://www.noo.org.uk/uploads/doc/vid_10266_Obesity%20and%20mental%20health_FINAL_070311_MG.pdf) *Gerontology, 62B, S43-S51.*

- Gray-Little, B., Williams, V.S.L., & Hancock, T. D. (1997). An item response theory analysis of the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, 23(5), 443–451. <https://doi.org/10.1177/0146167297235001>
- Griffiths L., Hill A. & Parrsons T. (2010), Self-esteem and quality of life in obese children and adolescents: A systematic review. *International Journal of Pediatric Obesity*, 1-23
- Heley, S. (2011). Fattest Nation On Earth. Retrieved From <Http://www.theatlantic.Com/Health/Archive/2011/11/The-Richest-Fattest-Nation-On-Earth-Its-Not-The-United-States/248366/>
- Jazaieri H, McGonigal K, Jinpa T, et al. (2014) A randomized controlled trial of compassion cultivation training: Effects on mindfulness, affect, and emotion regulation. *Motivation and Emotion* 38(1): 23–35.
- Johnson, W. G., Stewart, R., & Pusser, A. T. (2012). The perceptual threshold for overweight. *Eating Behaviors*, 13, 188–193. <http://dx.doi.org/10.1016/j.eatbeh.2012.01.008>.
- Khondaker,M., Khan ,J., Refaee,M., El Hajj,N., Rahman ,M., Alam, T. (2020). Obesity in Qatar: A case-control study on the identification of associated risk factors. *Diagnostics (Basel, Switzerland)*, 10(11), 883. doi: 10.3390/diagnostics10110883.
- Krejcie, V.R., & Morgan, W.D. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- lifestyles? *Psychological Science in the Public Interest*, 4, 1-44.
- Magallares, A., J. Francisco Morales,A. J., & Rubio,M.A. (2011). The effect of work discrimination on the well-being of obese people. *International Journal of Psychology and Psychological Therapy*, 11(2), 255-267
- Major, B.N., Mendes, W.B., & Dovidio, J.F. (2013). Intergroup relations and health disparities: A social psychological perspective. *Health Psychology*, 32,514–524.<http://dx.doi.org/10.1037/a0030358>
- Mintem.G.C., Horta.B.L, Domingues. M. R, & Gigante.D.P. (2015). Body size dissatisfaction among young adults from the 1982 Pelotas birth cohort. *European Journal of Clinical Nutrition*, 69, 55–61
- Mizuho Hosogi, Ayumi Okada, Chikako Fujii, Keizou Noguchi, and Kumi Watanabe . (2012). Importance and usefulness of evaluating self-esteem in children. Retrieved from. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3337795/>
- Moin, V., Duvdevany, I., & Mazor, D. (2009). Sexual identity, body image, and life satisfaction among women with and without physical disability. *Sexuality and Disability*, 27(2), 83–95.

- Neumark-Sztainer, D., Paxton, S.J., Hannan, P.J., Haines, J., & Story, M. (2006). Does body satisfaction matter? Five-year longitudinal associations between body satisfaction and health behaviors in adolescent females and males. *Journal of Adolescent Health, 39*(2), 244–251.
- Nunnally, J.C. (1978) *Psychometric theory*. 2nd Edition, McGraw-Hill, New York.
- Oxford Business Group. (2016). Focus on fundamentals: Belt tightening is the new normal for corporate across the Gulf region. Retrieved from. <http://www.oxfordbusinessgroup.com/news/focus-fundamentals-belt-tightening-new-normal-corporates-across-gulf-region>
- Peplau, L. A., Frederick, D. A., Yee, C., Maisel, N., Lever, J., & Ghavami, N. (2009). Bodyimage satisfaction in heterosexual, gay, and lesbian adults. *Archives of SexualBehavior, 38*, 713–725. <http://dx.doi.org/10.1007/s10508-008-9378-1>
- Pila E, Brunet J, Crocker P, et al. (2013) Intrapersonal characteristics of body-related self-conscious emotion experiences. *Presented at the Canadian Society for Psychomotor Learning and Sport Psychology*, October 17–19, Kelowna, BC, Canada.
- Pila E, Brunet J, Crocker P, et al. (2013) Intrapersonal characteristics of body-related self-conscious emotion experiences. Presented at the Canadian Society for Psychomotor Learning and Sport Psychology, October 17–19, Kelowna, BC, Canada.
- Pook, M., Tuschen-Caffier, B., & Stich, N. (2002). Evaluation des Fragebogens zum
- Pook, M., Tuschen-Caffier, B., & Stich, N. (2002). Evaluation des Fragebogens zum
- Professions, 33(1), 56e80 University Health Education. (N.D.) Body Image. Retrieved From [https://www.brown.edu/student\\_services/health\\_services/health\\_education/nutrition\\_&\\_eating\\_concerns/body\\_image.php](https://www.brown.edu/student_services/health_services/health_education/nutrition_&_eating_concerns/body_image.php)
- Puhl, R.M., & Heuer, C.A. (2009). The stigma of obesity: A review and update. *Obesity, 17*(5), 941–964
- Reddy, S. L. (2013). Understanding the Body Image Experiences of Older Men. *International Journal of Humanities and Social Science, 3*(9), 34-42
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton
- Rosenberg, Morris. (1989). *Society and the Adolescent Self-Image*. Revised edition. Middletown, CT: Wesleyan University Press
- Sarah E. Jackson, Rebecca J. Beeken, and Jane Wardle (2015). Obesity, Perceived Weight Discrimination, and Psychological Well-Being in Older Adults in England.



- Scagliusi FB, Alvarenga M, Polacow VO, Cordás TA, Queiroz GKO, Coelho D (2006). Concurrent and discriminant validity of the Stunkard's figure rating scale adapted into Portuguese. *Appetite*, 47: 77–82
- Sidra On Obesity (2013, March 18) Retrieved From [Http://Www.Qf.Org.Qa/News/91](http://www.Qf.Org.Qa/News/91)
- Sinclair, S. J., Blais, M. A., Gansler, D. A., Sandberg, E., Bistis, K., & LoCicero, A. (2010). Psychometric properties of the Rosenberg self-esteem scale: overall and across demographic groups living within the United States. *Evaluation and the Health*
- Sinclair, S. J., Blais, M. A., Gansler, D. A., Sandberg, E., Bistis, K., & LoCicero, A. (2010). Psychometric properties of the Rosenberg self-esteem scale: overall and across demographic groups living within the United States. *Evaluation and the Health*
- Swami, V. (2015). Cultural influences on body size ideals: Unpacking the impact of Westernisation and modernisation. *European Psychologist*, 20, 44–51. <http://dx.doi.org/10.1027/1016-9040/a000150>
- The Peninsula (2013). Slimming through surgery. retrieved from <http://thepeninsulaqatar.com/news/qatar/252940/slimming-through-surgery>
- University Press.
- Walker, L . (2014). Study: Qatar's Weight Problem Dates Back Three Decades. Retrieved from. <http://dohanews.co/qatars-young-people-face-obesity-crisis/>
- Wang Y and Beydoun MA (2007) The obesity epidemic in the United States—Gender, age, socioeconomic, racial/ethnic, and geographic characteristics: A systematic review and meta regression analysis. *Epidemiologic Reviews* 29(1): 6–28.
- Wang Y and Beydoun MA (2007) The obesity epidemic in the United States—Gender, age, socioeconomic, racial/ethnic, and geographic characteristics: A systematic review and meta regression analysis. *Epidemiologic Reviews* 29(1): 6–28
- Wardle J and Cooke L (2005) The impact of obesity on psychological well-being. *Best Practice & Research: Clinical Endocrinology & Metabolism* 19(3): 421–440.
- Webber, B., A. (2006), A South African study of the association between global self esteem and Body Mass Index scores, in adolescent females: An investigation of differences in perceived weight problems, racial identity, physical exercise, weight control behaviour and stage of pubertal development, University of Witwatersrand, Johannesburg, 10-31
- Weight and depressive symptoms in older adults: Direction of influence? *The Journals of*
- Willett, W, C.(2002). Balancing Lifestyle and Genomics Research for Disease Prevention. *Science*. 296:695–98