

Body Mass Index, Body Image Acceptance and Psychological Well - Being among Overweight Adults

Minnu Thomas, Daya K. S.

Abstract: *The present study explores the relation between body mass index (BMI), body image acceptance and psychological well - being among overweight adults. This is a quantitative study and is administered to 120 participants (60 below 25 years and 60 above 25 years). Convenient sampling technique was used to draw the samples from the population. Along with personal data sheet instruments such as body image acceptance scale (Sandoz and Wilson, 2006) and psychological well - being scale (Carol. D. Ryff, 1989) were used for the collection of data collection. Karl Pearson correlation and independent t - test were used for the analysis of data. The results showed a significant moderate positive relationship between psychological well - being and body image acceptance and body mass index showed mild negative correlation between body image acceptance and psychological well - being. Furthermore, there were no significant differences in psychological well - being and body image acceptance between overweight adults below and above 25 years.*

Keywords: Body mass index, Psychological well - being, body image acceptance, overweight adults

1. Introduction

Many a person holds the notion that, to be attractive and slim are considered as an ideal appearance. The celebrities and models follow strict diet plans and heavy exercises for maintaining their beauty. Analogously, young adults also have a strong need to attain that exemplary physique. The people have different convictions about perfect looks. An ideal appearance for females is internalized to be slim and males to be mesomorph (Blashil J. A & Wilhelm S, 2003). In India, production of weight losing products and establishment of physical training centers are ever burgeoning because, body image is an ever concerning topic.

Body image is one's mental image about one's own body. People with overweight or obesity face high stigma in many areas of their life. The divergence of one's body image from socio - cultural beauty ideals can leads to body dissatisfaction. Body dissatisfaction is associated with negative emotions, such as sadness, guilt and shame: it may influence quality of life on a daily basis (Cash, 2002; Rosen, 1992). An antidote against body dissatisfaction is the body image acceptance, which is approving and caring one's body with the real or perceived imperfection (Clemmer, 2016).

When a person has body mass index above 25 is categorized as overweight and above 30 as obesity which may generates to several stressful situations in their life. Since stress induced eating behavior is a contributing factor to overweight, (Torres & Nowson, 2007), it would result in hesitation of body image acceptance among those people. Schwartz and Brownell (n. d) argued that body image might be affected by obesity due to psychological distress, which has an impact on quality of life.

The person with low body image acceptance might develop a kind of self - discrimination and comparison. Self - discrimination associated with taint of being overweight or obese which may affect an individual both physiologically and psychologically. The slur of being overweight is quite different from it on other factors such as race, caste, and so on because, weight is seen as an attribute on which one have

control (Arcaya et. al., 2015). This responsibility for controlling weight might develop distress and the person becomes over conscious about their physical appearance which may expedite the stunted psychological wellbeing in them. Person who is overweight or obese is at higher risk of developing various diseases such as diabetes, stroke, hypertension, high cholesterol and several types of cancers. They not only possess physiological problems but also psychological problems. Since obesity is a threat to emotional well - being, it is positively correlated with some mental disorders such as depression and anxiety (McCreary, 2007).

Objectives

- To find out the relationship between BMI & Body image acceptance among adults.
- To find out the relationship between BMI & Psychological well - being among adults.
- To find out the relationship between Body image acceptance and Psychological well - being among adults.
- To compare the body image acceptance between adults with age above 25 and below 25.
- To compare the psychological well - being between adults with age above 25 and below 25.

Hypotheses

- H: 1 There is no significant relationship between BMI & Body image acceptance among adults.
 H: 2 There is no significant relationship between BMI & Psychological well - being among adults.
 H: 3 There is no significant relationship between Body image acceptance and Psychological well - being among adults.
 H: 4 There is no significant difference in body image acceptance between adults with age above 25 and below 25.
 H: 5 There is no significant difference in psychological well - being between adults with age above 25 and below 25.

2. Research Methodology

In this study, the methodology refers to how the research was done and its logical sequence. It includes the designs, settings, sample, data collection and analysis techniques in the study. The main focus of this study was to investigate the effect of body mass index, body image acceptance and psychological well - being among overweight adults. Therefore the research approach was quantitative.

Sample

The term sampling is defined as the process by which a relatively small number of individuals or measures of objects or events are selected in order to find out something about the entire population or universe from which it is selected.

The sample for this study consists of 120 younger adults (58 above age 25 younger adults and 62 above age 25 younger adults). Random sample method is used here. Random sampling can also mean taking a number of independent observations from the same probability distribution without involving any real population.

Tools

Ryff's Psychological well - being Scale - RYFF'S (1989)

The Ryff scale of psychological well - being is a theoretically grounded instrument that specifically focuses on measuring multiple facets of psychological well - being. It was proposed by Carol Ryff and her colleague (Ryff, 1989; Ryff & Keyes, 1995). The conceptualization of psychological well - being presented by ryff and her colleague is theoretically based up on the literature on positive psychological functioning of individuals. It consists of 18 - items where respondents use 6 point scale to rate the frequency of occurrence.

Scoring

The scale consist of 18 items in which 7 questions were score negatively such as 1, 4, 5, 15, 16, 17 & 18. i. e, for the response of 1 the score given is 6, for 2 score given is 5 and so on.

All the other questions are scored directly i. e, for response of 1 the given score is 1, for 2 the score given is 2 and so on.

Reliability

The test retest reliability of Ryff psychological well - being Scale was found to be 0.82.

Validity

Concurrent validity with the scale "Satisfaction with life", "Happiness" and "Self - esteem" was found to be .47, .58 and .46 respectively.

The body image - acceptance and Action Questionnaire - Sandoz and Wilson (2006)

The BIAQ is a 29 item self - report scale that has been designed to measure the extent to which an individual exhibits an accepting posture toward negative thoughts and feeling about his or her body shape and or weight.

Reliability

The scale is internally consistent with cronbach's alpha = 0.93.

Validity

Construct validity is also good. Scores also predict performance on an implicit rational assessment procedure with body - and self - related.

Scoring

Respondents are asked to rate items on a 7 - point scale that ranges from 1 ('never true') to 7 ('always true'). Higher score indicates more acceptances.

Reverse scored items are: 2, 3, 4, 7, 8, 10, 11, 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29.

Inclusion criteria

- People above 18 years
- People with BMI above 25
- People in India

Exclusion criteria

- People below 18 years
- People above 40 years
- People outside India
- People with BMI less than 25

Procedure

For the purpose of data collection, the investigator met the participants individually and received their consent to participate in the study. Instructions were given to the participants. They were assured that the data collected will be confidential and use only for research purpose. The three tools were given in the following order such as personal sheet, body image acceptance and psychological well - being.

The participants were asked to take time and give their responses sincerely. The tools used were self - administering in nature, where the instructions were printed in the tool itself. Doubts were clarified.

Another way of collecting data was done by converting the questionnaire into Google form and the link was shared to the participants through mails and other social - medias. The participants were requested to answer sincerely and have assured that the collected information will remain confidential and will only use for research purpose.

Statistical Analysis

The statistical techniques selected were based on the objectives and hypotheses formulated. The statistical techniques used are as follows.

Pearson Product Moment Correlation was calculated to find out the relationship among two study variables. The correlation coefficient is a measure of linear association between two variables. Usually the Karl Pearson's correlation is used. Values of the correlation coefficient are always between - 1 and +1. A correlation coefficient of +1 indicates that two variables are perfectly related in a positive

linear sense, and a correlation coefficient of 0 indicates that there is no linear relationship between the two variables.

Independent sample 't' test is a parametric test used for judging the significance of mean or judging the significant of differences between means of two samples. It is the ratio of static to its standard error. The statistical significance of t is dependent upon its size and the number of degrees of freedom, or the number of observations minus the number dependent restrictions on the sample. A common use of t is in the determination of the significance of differences between two means. The 't' test was used to compare difference between menopausal women and non menopausal women on emotional intelligence and psychological distress.

3. Results and Discussions

Table 1.1: Correlation between Body mass Index, Psychological well-being and Body image acceptance

Sl. No	Variables	Body Mass Index	Psychological well-being	Body Image Acceptance
1	Body Mass Index (BMI)	- 0.111
2	Psychological well-being	0.671**
3	Body Image Acceptance	- 0.130

**Correlation is significant at 0.01 level (2-tailed)

Table 1.2: Mean, SD, t value and level of significance obtained by the overweight adults below 25 years and above 25 years in psychological well-being.

Variable	Group	Mean	S. D	df	t-value	significance
Psychological well-being	Below 25 years	50.49	9.490	118	2.069	0.041
	Above 25 years	46.50	10.508			0.050
Body image acceptance	Below 25 years	51.96	15.40	118	1.499	0.137
	Above 25 years	47.52	14.29			0.128

Table 1.2 indicates the mean, standard deviation, t-value and level of significance in psychological well-being and body image acceptance among overweight adults below 25 years and above 25 years. From the table, it is seen that there is no significant difference in psychological well-being and body image acceptance between overweight adults below and above 25 years because, the mean scores obtained by overweight adults below 25 years in these two variables are not much more than overweight adults above 25 years. Therefore the null hypotheses stands are accepted.

From the result, it is evident that, the psychological well-being among all overweight adults are same regardless of age category which means, if body mass index increases above 25, the psychological well-being will dwindle without any categorization. It might be due to several factors. First and foremost, everyone has an ideal concept about one's body image which was imposed by society and formulated by people itself since years ago. Hence, the populace might not accept their body image if it is incongruent with their ideal perfect image. Ergo, both older and younger people are striving to attain the perfect body image and body weight and if they are not able to achieve it, they might become depressed.

Nevertheless, although there are ideal body concepts in society, body weight will also cause manifold physiological

Table 1.1 indicates the product moment correlation between study variables. It is depicted that, body mass index has mild negative correlation with psychological well-being ($r = -0.111$, $p > 0.01$) and body image acceptance ($r = -0.130$, $p > 0.01$). So the hypotheses which state there is no significant relationship between body mass index and body image acceptance (H1) and there is no significant relationship between body mass index and psychological well-being (H2) are rejected. In addition, the table illustrates that there is also a moderate positive correlation between psychological well-being and body image acceptance. Hence, the hypothesis states, there is no significant correlation between psychological well-being and body image acceptance (H3) is rejected.

By analyzing the result, it is evident that, if body mass index increases, psychological well-being and body image acceptance will reduce. It might be because the population would get stressed if they could not meet the visionary body image and in due course, it may lead to low body image acceptance. The populace with overweight might become confused about their dressing, clothes preferences etc. and also they might not get comfortable with all dresses. Hence, they would be psychologically down and slowly leads to plummeted psychological well-being.

problems as well as psychological problems. Physiological problems such as diabetes, cholesterol, high body temperature, fatigue, and so on are common among overweight adults and it eventually leads to psychological issues such as low self-confidence, low self-esteem, depression, guilty feelings and then to low psychological well-being and low body image acceptance. The people also might get problems such as anxiety, irritation etc. while eating because of their diet control and at some point in the future, it may lead to eating disorders too including bulimia nervosa, anorexia nervosa, and other disorders.

4. Summary and Conclusion

There are several studies done in the areas of overweight adults which have provided more information about the physiological and psychological effects of overweight. The present study was conducted to find out the relationship between body mass index, body image acceptance and psychological well-being among overweight adults below 25 years and above 25 years and also to find out the significant difference in psychological well-being and body image acceptance between overweight adults below 25 years and above 25 years.

The sample for the present study consisted of 120 women (60 overweight adults below 25 years and 60 overweight

adults above 25 years) from different places of India. Psychological well-being scale and body image acceptance scale were used in the study. The collected data were analyzed using appropriate statistical technique such as t-test and Pearson correlation coefficient.

Tenability of Hypotheses

Hypotheses	Tenability
There is no significant relationship between BMI & Body image acceptance among adults.	Rejected
There is no significant relationship between BMI & psychological well-being among adults.	Rejected
There is no significant relationship between body image acceptance & psychological well-being among adults.	Rejected
There is no significant difference in psychological well-being between overweight adults below 25 years and above 25 years	Accepted
There is no significant difference in body image acceptance between overweight adults below 25 years and above 25 years	Accepted

5. Implications of the studies

Studies are the growing pillars for next generation. Overweight adults endure many discomforts both physiologically and psychologically. The fundamental reason of psychological problems is the societal concepts whereas; the physiological problems have to be solved by controlling diet and exercises. If an individual is comfortable with one's own body image without any physiological problems, the society has no right to judge it because; everyone has their own concepts and ideals. So, try not to impose any pressure on other person. Other than physique, a person's attitude, behaviour, body language, acceptability, congruency, and so on are paramount in an individual and these are the prudent things people should have in their life. On other hand, if a person has physiological problems, balanced diet, regular exercises, and healthy food intake would become imperative. At the same time, it would also depend on a person's priority, preferences and convenience. Ergo, this is the time to revamp unwritten societal ideals and concepts about one's body image.

6. Limitations of the Study

- Sample size was comparatively small and so cannot be generalized.
- This is a cross sectional study.
- Limited to a particular country.
- Study was conducted in a short term.
- Mood state of participants
- Lack of interest
- Tiredness
- Number of items in a questionnaire
- The truthfulness of the study depends on the honesty of those who filled the questionnaire.

In the quantitative study, the results are limited as they provide numerical description rather than detailed narrative and generally provide less elaborate accounts of human perception.

7. Scope for Further Research

The variables included in the present study were limited. Hence further studies may be conducted incorporating new variables.

The study can redesign to include more samples from different area. Various extraneous factors, such as family structure, physical status, emotional maturity etc should also be explored in the future study. The study can redesign by following longitudinal study.

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