

INFLUENCE OF GENDER AND SELF-ESTEEM ON ATTITUDE OF STUDENTS TOWARDS OBESITY

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ABSTRACT

The study investigated the influence of gender and self-esteem on attitude of students towards obesity. A total of 150 undergraduates (63 males and 87 females of Nnamdi Azikiwe University Awka served as participants for the study. The ages of the participants ranged from 18 to 30 years, with a mean age of 24.9 years and standard deviation of 3.2. A 26 item scale on self-esteem and a 25-item scale on obesity were used in the study. Two way analysis of variance (ANOVA) was used to test the research hypotheses. The first hypothesis which stated that there will be no significant difference between male and female students attitude towards obesity was confirmed, $F(1,146) = 2.628$, $p > .05$ level of significance. Also, the second hypothesis which stated that there will be no significant difference between students of high and low self-esteem on attitude towards obesity was confirmed at $F(1,146) = .46$, $p > .05$ level of significance. Finally, the third hypothesis which stated that there will be no significant interaction between gender and self-esteem on attitudes towards obesity among students was confirmed at $F(1,146) = .001$, $p > .05$ level of significance. Recommendations were made among others that people should moderate what they eat and also exercise their bodies regularly to avoid over weight.

Keywords: Obesity, Self-Esteem, Gender, Attitude

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Introduction

Obesity is a medical condition which excess body fat has accumulated to the extent that it may have an adverse defect on health leading to reduced life expectancy and for increased health problems. An obese is a person who is more than 20% heavier than the medically ideal weight for the person's sex height and bone structure, Kosslyn and Rosenberg (2004).

Obesity is a leading preventable cause of death worldwide, with increasing prevalence in genders, adult and children, authorities view it as one of the most

serious public health problems of the 21st century. Also, obesity is stigmatized in most of the modern world. It is perceived as a symbol of wealth and fertility at other times in history and in some part of the world. Obesity can lead to social stigmatization and disadvantaged in employment. When compared to their normal weight counterparts, obese workers on average have higher rates of absenteeism from work and take more disability leave, thus, increasing cost for employers and decreasing productivity.

Current selections are consistent with social attitudes that obese people take up more space than they deserve. O' Hara (1996) noted that airline accommodates seating for individuals with wheel chair and for pregnant women but obese people are expected to purchase two seats. Specific industries such as the airline, healthcare and food industries have special concerns about obese individuals. Due to rising rates of obesity, airlines face higher fuel costs and pressures to increasing seating widths. In 2000, the extra weight of obese passengers cost airlines \$ 275 million. The healthcare industry has had to invest in special facilities for handling severely obese patients, including special lifting equipment and bariatric ambulances. Costs for restaurants are increased by litigation accusing them of causing obesity. In 2005, the US congress discussed legislation to prevent civil law suits against the food industry in relation to obesity; however the bill was not passed to law. United States President, William Howard Taft was often ridiculed for being overweight.

The principal goal of the Fat Acceptance Movement is to decrease discrimination against people who are overweight and obese. However, some of the movements are also attempting to challenge the established relationship between obesity and negative health outcomes. A number of organizations exist that promote the acceptance of obesity. They have increased in prominence in the latter of the 20th century. The US-based National Association to Advance Fat Acceptance (NAAFA) was formed in 1969 and describes itself as a civil rights organization dedicated to ending size discrimination. However, fat activism remains a marginal movement.

A comprehensive literature reviewed by Roehung (1999) summarizes numerous work related stereotypes reported in over a dozen laboratory studies that overweight persons assume to lack self-discipline, lazy, less conscientious, less competent, sloppy, disagreeable and emotionally unstable. Obese persons are also believed to think slower, have poorer attendance records and poor role models. These stereotypes could affect person's self-esteem. It has been observed that gene determines a reaction range of obesity and the environment sets individual within the range. Some people have the propensity to become fat but this can happen in certain environment. Despite this perceived ugly situation, adequate scientific investigation is yet to be conducted

in Nigeria to unveil most of the factors militating against research on this issue. The researchers in the present study want to determine how some factors contribute to attitudes of students towards obesity. Some of the likely variables or factors are gender and self esteem. Gender has to do with the biological state of being male and female and self esteem on the other hand, is a widely used concept, both in popular language and in science of psychology. It is the individual's sense of his or her value or worth or the extent to which a person values, approves, appreciates things or likes himself or herself (Biascorish and Tomaka, 1991). Self-esteem can also be described as the opinion and judgment individuals have and make about themselves (Funder, 2001).

Self-esteem can be high or low. In recent times, low self-esteem has been one of the most popular and frequently invoked psychological explanations for behavioral and social commentators and media opinion leaders. People have been willing to accept a limited sense of self-worth which lies behind, just about every social personal ill from drug abuse and delinquency to poverty and business failure.

Concept of obesity: people are considered as obese when their body mass index (BMI), a measurement obtained by dividing a person's weight in kilograms by the square of the person's height in meter, exceeds 30kg/m. Obesity increases the likelihood of various diseases such as cardiovascular disease, type 2 diabetes mellitus, obstructive sleep apnea, and certain types of cancer, osteoarthritis and asthma. Obesity is most commonly caused by a combination of excessive food energy intake, lack of physical activity and genetic susceptibility. Although, a few cases of obesity are caused primarily by genes endocrine disorders, medications or Psychiatric illness.

Evidence to support the view that some obese people eat little yet gain weight due to a slow metabolism is limited, on average, obesity have a greater energy expenditure than their counterparts due to the energy required to maintain an increased body mass. Dieting and physical exercise are the mainstreams of treatment for obesity. Diet quality can be improved by reducing the consumption of energy-dense foods such as those high in fat and sugar and by increasing of dietary fiber. Anti-obesity drugs may be taken to reduce appetite or inhibit fat absorption together with a suitable diet. If diet, exercise and medication are not effective, a gastric balloon may assist with may be performed to reduce stomach volume and / or bowel length, leading to earlier satiation and reduced ability to absorb high calories from food intake. Self-esteem on the other hand, refers to a person's disposition to evaluate themselves positively or negatively in a spontaneous, automatic or unconscious manner. There are many theorists that attempt to define self-esteem. The discrepancy theory of self-esteem may be described as the match between

how he/she sees himself or herself. According to self awareness theory, people are not only usually self focused but certain situation predictably forces us to turn inward and become the object of our own attention. When we talk about ourselves, glance into a mirror, stand before an audience, watch ourselves from video tape or occupy a conspicuous within a group, we enter a start of self awareness that leads us too naturally to compare our behavior to internal standards. This comparison often results to a negative discrepancy and a temporary reduction in self-esteem as we discover that we fall short of our ideas about ourselves.

According to Schlenkes (1996), Self Serving Cognition theory of self-esteem, people take credit for success and distant themselves from failures. While Bashing in the glory of other theory explains how one's self-esteem might to an extent be influenced by individuals and groups with whom ones identities. It seems that people often bash in reflected glory by showing believe that their self-esteem can be boosted by the way of showing off their connection to successful others.

Many early theories suggested that self-esteem is a basic human need or motivation. American Psychologist Abraham Maslow, for example, included self-esteem in two different forms of esteem: the need for respect from others and the need for self-respect or inner self-esteem. Respect from others entails recognition, acceptance, status and appreciation, and was believed to be more fragile and easily lost than inner self-esteem. According to Maslow, without the fulfillment of the self-esteem need, individuals will be driven to seek it and unable to grow and obtain self-actualization. Modern theories of self-esteem explore the reasons humans are motivated to maintain a high regard for themselves. Socio meter theory maintains that self-esteem evolved to check ones level of status and acceptance in one's social group. According to tenor management theory, self-esteem serves a protective function and reduces anxiety about life and death. Self-esteem is the sum of attitudes which depend on perceptions, thoughts evaluations, feelings and behavioral tendencies aimed toward ourselves, the way we are and behave, and our body's and character's features. Gender is very modestly related to self-esteem. Females on average have slightly lower self-esteem than males, the gap between widest is in the late teens. Girls' self-esteem tend to be slightly lower than boys in elementary schools, than after that period, girls' self-esteem drops on periodically where as boys only a little (Basov, 1992). The difference of how males and female feel about themselves, persist through high school and beyond, with males' self-esteem either standing the same or increasing, especially if they do well in their job. Among females not only does self-esteem drops more sharply than males as the beginning of adolescence, but it may even drop further in college (Hessen & Marino, 1999). A study by Rothblum,

Miller and Gambit (1998) on job applicants for sales and business positions: Negative judgment for obsessed women and non obese women. One hundred and four participants rated obsessed applicants are lacking self-esteem, having low supervisory potential and having poor personal hygiene and professional appearance. They found out that obsessed applicants remain vulnerable to negative evaluations because of their weight. Pingitore, Dangoru, Tindale and spring (1994) revealed a videotaped mock interview with the same professional actors acting as job applicants for computer and sales positions. Weight was manipulated with theatrical prosthesis using 320 participants. it indicated that employment bias was much greater for obese applicants than for average weight applicants, and the bias was more apparent for women than men.

Statement of the Problem

Obesity is one of the health issues that are capable of affecting the obese in different ways. Most of such people find it difficult to get job or do some certain kinds of job. Therefore, obesity is seen as a thing of no value or advantage. However, the issue of the factors influencing people's attitude to obesity has not been fully resolved. Some exhibits negative attitude to obesity while some exhibit positive attitude to the problem. The additional question on the determinants of people's attitude to obesity is yet to be answered. Some of such questions are:

1. Does gender disparity have influence on student's attitude to obesity?
2. Does self-esteem influence student attitude to obesity?

Purpose of the study

1. The purpose of the study is aimed at comparing male and female students on their attitude to obesity.
2. It is also aimed at comparing students of high and low self-esteem on their attitude to obesity.
3. The researcher will also aim at determining if there is any significant interaction between gender and self-esteem on students' attitude to obesity

Relevance of the study:

This study will help to widen the scope of understanding the pragmatic concept of obesity to know the level of difference between male and female of different self-esteem on obesity. As this will go a long way in helping them to know how to go about cutting peoples' pervasive behavior or attitude towards obesity and self-esteem.

Definition of key study variables

Obesity: it is a state of being very fat, in a way that is not healthy. Obesity can also be defined as a medical condition in which excess body fat has accumulated to the extent that it can lead to adverse effect on health, leading to reduced life expectancy and increased health problems.

Self-Esteem: It ones attitude with one's opinion or self evaluation of oneself which may be positive (high) or negative (low).

Gender: it is the biological role of being male or female.

Attitude: It is a learned tendency to respond to people, object, or institutions in a positive or negative way.

Hypotheses.

- i. There will be no significant difference between male and female students on attitude to obesity.
- ii. There will be no significant difference between students of high and low self-esteem on attitude to obesity.
- iii. There will be no significant interaction between gender and self-esteem on attitude of students towards obesity.

Method

Participant:

A total of 150 under graduates (63 males and 87 female) of Nnamdi Azikiwe University Awka served as participants for the study. The researchers were able to use stratified sampling technique to draw out participants for the study including part time and regular students from different departments in the faculty of social sciences. The ages of the participant ranged from 18-30 years, with a mean age of 24.9 years and standard deviation of 3.2. Further attribute data shows that out of 150 participants, 24 were married while 126 are single.

Instrument

The researchers used carefully designed questionnaires to collect data on various variables of the study. The instruments include self-esteem questionnaire and scale measuring obesity. Self-esteem was measured using a 26-item scale developed by Hudson (1982). The item responses were scored from 1 (none of the time), 2 (a bit of the time), 3 (average of the time), 4 (many of the time) and 5 (most of all the time). A test retest coefficient of .74 on the self-esteem scale was obtained for the study. Also, obtained was a concurrent validity coefficient of 0.83 by correlating the scale with Rosenbery (1979) self-esteem scale.

Obesity was measured using this body image scale developed by Bonified and Macabre (2001). It was revalidated in Nigeria by Irokansi (2007). The item was rated on a 5 point Likert format to measure obesity among students. The items were scored from 1 (strongly agree) to 5 (strongly disagree). Irokansi (2007) obtained 0.80 alpha coefficients after test retest reliability study.

Procedure

The researchers met with the course advisers of the various departments (psychology, political science, mass communication sociology/Anthropology and Economics) to solicit for the assistance to allow their students participate in the study. A letter of introduction from the head of Department of psychology, Nnamdi Azikiwe University, Awka, was presented to seek permission from the authorities of the various Departments, to administer the questionnaires. The participants were selected through convenience sampling technique. The questionnaires were administered to the students while they were in the lecture hall.

They were encouraged to do so honestly. Participants were given time to ask questions to be clarified before completing the questionnaires. The researchers urged the students to submit the filled questionnaires to their class representatives for easy collection. The researcher used two days to administer and retrieve the questionnaires.

After responding to the questionnaires, the researchers thanked the students for the job well done and at the end a total of 150 questionnaires that was properly filled were used for the data analysis of this study.

Design and statistics

The researchers conducted a survey study and adopted 2x2 factorial designs. Two way analysis of variance (ANOVA) was used as the appropriate statistics for testing the hypotheses, since each of the independent variables consist of two independent groups (**gender**: males and females and **self esteem** = high and low) that were compare on one dependent variable; Attitude towards obesity.

Results

The results were present in order in which the hypotheses were tested.

Table 1: mean and standard deviation of gender and self-esteem with respect to attitude to obesity

Gender	Mean	N	S.D
Male	78.37	63	7.73
Female	81.92	87	15.59
Total	80.43	150	12.97
Self-esteem			
High	80.84	73	13.55
Low	80.04	77	12.48
Total	80.43	150	12.97

The mean results show no significant difference between male and female students on their attitude towards obesity. The mean result also shows no significant difference between students with high self-esteem and those with low self-esteem on attitude on their attitude towards obesity

Table 2: Summary table of 2-way ANOVA on the influence of gender and self-esteem on students' attitude to obesity.

Source	Type summary squares	3 DF of	Mean square	F	Sig
Corrected model	469.44	3	156.48	928	.43
Intercept	9265.70	1	926575.70	5496.67	.00
Gender	442.98	1	442.98	2.63	.11
Self-esteem	7.78	1	7.78	.05	.83
Gender *self Esteem	.14	1	.14	.00	.98
Error	24611.25	146	168.57		
Total	995348.00	150			
Corrected total	25080.69	149			

The first hypothesis which stated that there will be no significant difference between male and female as regards to obesity was confirmed, $F(1,146) = 2.628$, $P > .05$ level of significance.

The second hypothesis which stated that there will be no significant difference between students of high self-esteem and those of low self-esteem as regards to obesity was confirmed, $F(1,146) = .046, P > .05$ level of significance.

The third hypothesis which stated that there will be no significant interaction between gender and self-esteem on obesity was confirmed, $F(1, 146) = .05, P > .05$ level of significance.

Discussion

The study investigated the influence of gender and self-esteem on attitudes of students towards obesity. The first hypothesis that stated that there will be no significant difference between males and female as regards to obesity was confirmed. This shows that biological difference in terms of gender is not the determinant of disparities between males and females on obesity. This is not in line with the study of Pingitore, Dangoru, Tindale & Spring (1994), which indicated that the bias was more apparent in women than in men.

The second hypothesis that stated that there will be no significant difference between people of low self-esteem and people of high self-esteem on obesity was confirmed. This finding is contrary with the work of Tobin (2014), which indicated that there is significant difference between low and high self-esteem on obesity. According to Taylor (2015), individuals who are low in self-esteem actually have a realistic view of themselves than most others who are better adjusted.

The third hypothesis that stated that there will be no significant interaction between gender and self-esteem on obesity was confirmed, this means that both male and female have the same level of self-esteem on perception of obesity. In obesity set points are only one piece in a complex puzzle that scientists are trying to solve. Their search is fueled by the fact that obesity is a major health risk and for many, a source of social stigma and low self-esteem (Brownell, 1982). If eating were controlled only by internal needs, fewer people would over eat. If people are sensitive to external cues, you are most likely to eat when food is attractive, highly visible, and easy to obtain (Schechter & Rodin, 1974). People of all weight can be found who are unusually sensitive to external eating cues, so this is not strictly a problem of the obese (Rodin, 1981). It is tempting to assume that fatness comes from constant overeating, but this is a myth. Study by Rodin (1978) show that overeating occurs mainly when a person is gaining weight. Once excess weight is gained, it can be maintained with a normal diet. An added problem is that as people gain weight, many reduce their activity level and burn fewer calories. As a result, some overweight persons may continue to gain weight while consuming fewer calories than their slimmer neighbours (Bell & Crinker, 1981).

People with weight problems are just as likely to eat when they are anxious, angry, or sad, as when hungry (Schotte et.al., 1990). Furthermore, unhappiness often accompanies obesity in our fat-conscious culture. The result is a pattern of overeating that leads to emotional distress and still more overeating. This cycle makes weight control extremely difficult. In summary, overeating results from a complex interplay of internal and external influences, diet, emotions, genetics, exercise, and many other factors.

Conclusion

Based on the findings of the study, the researchers concluded that there is no significant difference between males and females as regards to obesity. The researchers also conclude that there is no significant difference between people of low self-esteem and people of high self-esteem on their attitudes towards obesity.

Finally, the researchers concluded that there is no significant interaction between gender and self-esteem on obesity. The study implies that male and female are virtually the same with regards to obesity. The findings of this study imply that there is no equality between people of low self-esteem and people of high self-esteem with regards to obesity. People of low self-esteem have a more realistic view of themselves than people of high self-esteem who might be proud of themselves.

One of the limitations of this study was that the. Participants were reluctant to cooperate with the researchers because they were very busy; however, the researchers using persuasive techniques convinced them to cooperate. Author limitation of this study was that all the measures used in the variables were self report assessment

Recommendations

1. People should regulate should regulate the amount of food they take on daily basis and exercise their bodies regularly to avoid overweight.
2. People should eat food that have less calories and they should also eat less cholesterol level.
3. The researchers finally recommend that researchers should amplify their effort in carrying out more research on obesity and self-esteem. This will help to increase the volume of literature on the topic there by solving the problem of limited materials on this subject matter.

REFERENCES

- Ball, G.G., & Grinker, J.A. (1981). *Overeating and Obesity*. In S.J. Mule (Ed). *Behaviour in Excess*, 194-220. New York: Free Press.
- Bia Scorish, & Tomaka, (1991). *Measures of self- esteem*. San Divgo, CA: Academic press.
- Brownell, K. D. (1982). Obesity; Understanding and treating a serious, prevalent, and refractory disorder. *Journal of Consulting and Clinical Psychology*, 50, 820-840.
- Bonified & Macabre (2001). Development of Body Image Scale. *International Journal of Consulting Psychology*, 67, 31- 45.
- Funder, D. (2000). *The personality Puzzle* (4th ed). New York.PP.47-48
- Hudson, W. (1982). *Construction and Validation of Self-esteem Scale*. New York Othorn.
- Ironkansi, H. N. (2007). Revalidation of Body Image Scale. *Journal of Health Psychology*, 87, 44-58.
- Pingitore, R., Dangoru, B.L., Tindale, R.S., & Spring, B. (1994). Bias against over Weight job applicant in a stimulate employment interview. *Journal of Applied Psychology*, 79:909-917.
- Rodin, J. (1978). Stimulus- bound behaviour and biological self-regulation; Feeding, Obesity, and external control. In G.E. Schwartz, & D. Shapiro (Eds), *Consciousness and self-regulation*. New York: Plenum.
- Rodin, J. (1981). Current Status of the Internal- external hypothesis for Obesity; what went wrong? *American Psychologists*, 36, 361-372
- Rolehungs, M. (1999) weight-based discrimination in employment: psychological and legal aspects. *Journal of personality Psychology*, 52:969-1017.
- Rothblum, E., Miller, C., & Gamit, B. (1998). Stereotypes of obese female job applicant. *International Journal of Healing Disorder*, 7, 277-283

- Rosen Berg, M. (1979). *Evaluate statements like; I am good at tennis*. NJ: Princeton university press.
- Schachter, S., & Rodin, J. (1974). *Obese humans and rats*. Potomac, M.D: Earbaum.
- Schotte, D. E., Cools, J., & McNally, R.J. (1990). Film- induced negative effect triggers overeating in restrained eaters. *Journal of Abnormal Psychology*, 99(3), 317-320.
- Taylor, Y.M (2015). Impact of Self-esteem on Attitude towards Obesity. *Journal of Health Psychology*, 56, 21-35.
- Tobin, B.J (2014). Perception of Obesity and Self-esteem. *Psychological Bulletin*, 71, 50-64.