ORIGINAL ARTICLE

Perceived Weight Stigma, Cognitive Sophistication and Attitudes Towards Self in Young Adult Fat Working and Non-Working Women

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ABSTRACT

Objective: This study examined the relationship between perceived weight stigma, cognitive sophistication, and self-attitudes in fat young adult women, comparing working and non-working groups. The main hypothesis was that (a) there would be a significant relationship between perceived weight stigma and attitudes towards self, (b) cognitive sophistication would predict a weakening in the relationship between perceived weight stigma and attitudes towards self, (c) there is a difference in working and non-working women for perceived weight stigma, cognitive sophistication and attitudes towards self.

Methodology: A total of 200 women aged 18–30 completed the Weight Self-Stigma Questionnaire (WSSQ), Attitudes Toward Self Scale, and Actively Open-Minded Thinking Scale. Differences were assessed based on employment and marital status.

Results: Perceived weight stigma was positively related to negative self-attitude and increased with age. Single and unemployed women reported higher stigma and more negative self-views. Cognitive sophistication did not significantly moderate the stigma–self-attitude relationship.

Conclusion: The study highlights important implications for the mental health and psychological support needs of fat young adult women, particularly in the context of employment and marital status.

Keywords: Perceived Weight Stigma, Cognitive Sophistication, Attitudes Towards Self

INTRODUCTION

Obesity is a present global epidemic in all age groups and in both developed and developing countries. This increasing prevalence has led to several researches on the possible consequences on both the physical and mental health of the population,[1] Obesity is a condition in which there is an excess of fat which adds up in the adipose tissue due to which the health of the individual is at risk. Obesity is associated with a greater risk of disability or premature death and is also considered to carry serious implications for the psychosocial health of an individual.[2]

This directive is based on social discrimination against obesity. In more recent times, one of the most significant psychosocial concerns regarding obesity is **weight stigma.**[3] It is suggested that phobia (or weight stigma) gives rise to a person's mental health problems. Therefore with both sides in consideration, we can assume that increased perceived weight bias can predict an effect on an individual's attitudes towards self. However the question still remains 'will cognitive sophistication imply a weakening of this relationship?'.[4,5]

To study this concept we can deduce three variables from the arguments presented and analyze their relationship. This study uses the terminology "fat" to describe the sample population as terms including "obese" are a source of perpetuating stigma, alienating fat individuals and as an offensive term that harms the fat community.[6]

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Specifically, the main objectives of this paper are:

a) To examine the relationship between perceived weight stigma and attitudes towards self in young adult, fat, working and non-working women.
b) To investigate if cognitive sophistication moderates this relationship
c) To explore the differences in young adult, fat, working and non-working women for perceived weight stigma, attitudes towards self and cognitive sophistication.

Weight bias and weight stigma have a significant negative influence on mental health. Fat people who faced weight stigma showed an increasing vulnerability to stress, rates of depressor, and they had lower self-esteem relating to their poor body image and workout evading tendencies.[7]

Stanovich and Toplak conducted a research on fat individuals to find that they are at a significant risk for mental health complications due to weight related discrimination by others and how they respond to it. This weight stigma was most commonly related to depression in fat individuals. They found that more stigmatizing and marginalizing experiences and incidents were significantly related to depression.[8]

THE CONCEPTUAL FRAMEWORK: THE CONCEPTUAL MODEL AND HYPOTHESES

The Conceptual Model depecting the relationship between perceived weight stigma, attitudes towards self and cognitive sophistication has been shown in figure -1

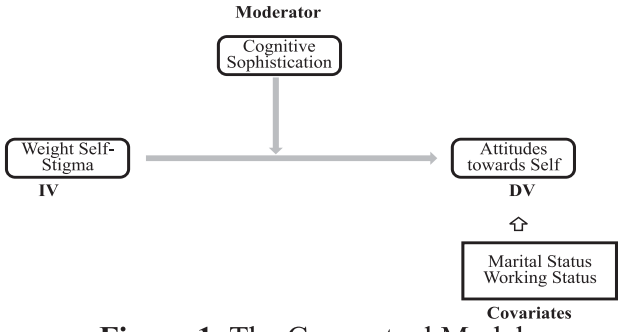

Figure 1. The Conceptual Model

PERCEIVED WEIGHT STIGMA

Weight stigma, also known as weight bias or weight-based discrimination, is discrimination or stereotyping based on a person's weight. Exposure to weight stigma has been associated with low self-esteem, depression and avoiding health promoting behavior.[9] Media Outlets often reinforce stereotypes, depicting fat individuals as undesirable or with low self-control Celebrities are often plastered on magazine covers, ridiculed for gaining weight.

Researchers have explored the theoretical models that lead to weight stigma practices and attitudes, the psychological impact and processes that run side by side with this concept and the history, origins and the social contexts for this discrimination.[10]

ATTITUDES TOWARDS SELF

Attitude towards self emphasizes how individuals evaluate themselves. An attitude towards self includes three self-regulatory vulnerabilities. They include holding of extremely high standards, the tendency to be self-critical at any failure to perform well and the tendency to generalize from a single failure to the broader sense of self-worth.[11] Attitudes towards self can take many forms. A positive attitude towards self can be depicted by self-acceptance, optimistic approach and encouraging outlook on others. It can lead to people developing good social skills and overall good social adjustment. However, when stigma is internalized, it may distort these attitudes leading people to devalue themselves.[12]

COGNITIVE SOPHISTICATION

It refers to the depth and complexity of thought processes that individuals apply in understanding themselves and others. It includes elements such as systemic neglect, belief in anxiety, sensitivity to balance, resistance to desire, and the tendency to think of others.[13] Comprehensive comprehension can be measured in the following categories according to the psychological processes studied: cognitive abilities (intellectual and high performance) and thought processes (open cognitive thinking, deceptive thinking,

and the need for understanding). This study represents the element of complex understanding that furthers the cognitive processes required in the assessment of fat social phobia and the self-interpretation of open-minded thinking.[14]

HYPOTHESES

Therefore, the following main research hypotheses were investigated:

- $H1_A$: There is likely to be a significant relationship between perceived weight stigma and attitudes towards self in young adult, fat, working and non-working women.
- $H1_B$: Cognitive sophistication is likely to predict a weakening in the relationship between perceived weight stigma and attitudes towards self in young adult, fat, working and non- working women.
- $H1_C$: There will be a difference in young adult, fat, working and non-working women for perceived weight stigma, cognitive sophistication and attitudes towards self

RESEARCH METHODOLOGY

This section highlights the research design and research sample.

RESEARCH DESIGN

The study was aimed at assessing the relationship between perceived weight stigma and attitudes towards self as well as the moderation of cognitive sophistication. Correlational research design was used to study the relationship between perceived weight stigma, cognitive sophistication and attitudes towards self in young adult fat working and non-working women.

RESEARCH SAMPLE

The study was a quantitative, cross-sectional research utilising non-probability convenient sampling technique. The sample consisted of 200 women, comprised of 128 working and 72 non-working females between the ages of 18-30. Firstly, permission from the authors of the relevant scales was taken, via email, to use their measures for research purpose. For the data collection, permission letter was taken from the Director of the Institute of the Applied Psychology, Punjab University and signed from the concerned authorities of the respective universities from which the sample was taken. Consent forms were provided to the willing participants and they were assured that their participation was completely voluntary and their confidentiality was maintained. They were clarified about purpose and nature of the research study.

INDEPENDENT AND DEPENDENT CONSTRUCTS' MEASUREMENT: VALIDITY AND RELIABILITY TEST

Present research aimed to investigate the relationship between perceived weight stigma, cognitive sophistication and attitudes towards self in young adult working and non-working women. In this research, the results are based on total scores of each scale. The data analytical strategy included performing (i) Descriptive Statistics and Reliability Analysis of the Scales used (ii) Pearson product moment correlation (iii) Hierarchical regression analysis (iv) t-test based on marital status and t-test based on employment status.

Cronbach's alpha levels of the instruments used in the current study have good reliability. Open Minded Thinking Scale (α=.99) has the strongest reliability, followed by the scales for Perceived Weight Stigma (α=.96) and Attitudes Towards Self (α=.91) that also show excellent reliability. The subscales of Attitudes Towards Self also had moderately good reliability with the Self-Criticism Scale holding the highest reliability (α=.88), followed by High-Standards Subscale (α=.69) and Generalization Subscale (α=.63).

ANALYSIS AND RESULTS CORRELATION ANALYSES

It was hypothesized that there is likely to be a relationship between perceived weight stigma, cognitive sophistication and attitudes towards self in young adult working and non- working women. To assess this relationship, Pearson Product moment correlation was applied (Table I). Results showed that employment status has a significant negative correlation with

perceived weight stigma which suggests that employed women perceive more weight stigma. Employment status also has a strong negative correlation with all three subscales of attitudes towards self, suggesting that employed women have worse attitudes towards self in terms of holding high standards, being self-critical and generalization. It is also suggested from the correlation that employed women hold more open-minded thinking skills than those who are unemployed. Results in Table 1 also revealed that there is a significant positive relationship between perceived weight stigma and attitudes towards self. With increased weight stigma, there is an increase in all three aspects of attitudes towards self, most significantly in self-criticism, followed by high standards and then generalization. Thus proving that perceived weight stigma does correlate with negative attitudes towards self.

Then Independent Samples t-test was used to further analyze and determine the significance of the differences between married and single women in terms of perceived weight stigma, attitudes towards self and cognitive sophistication as shown in Table II.

Results show that there is a significant difference between single and married women in all three variables. Single women obtained higher scores in perceived weight stigma (*M=49.59*) than married women (M=34.71), and there was a significant difference between the two (*t= 63.71, p<.01*). There was also a significant difference between the two groups of women in all three subscales of attitudes towards self. There was a significant difference in High Standards (*t= 19.48, p<.01*) with single women scoring higher (*M= 12.78*) than married women (*M= 8.23*). There was a significant difference in Self-Critical subscale of Attitudes Towards Self (*t= 39.40, p<.01*) with single women scoring higher (*M= 11.19*) than married women (*M= 8.00*). There was a significant difference in Generalization (*t= 15.03, p<.01*) with married women scoring higher (*M= 13.77*) than single women (*M=*

Table I: Pearson's Correlation among Variables and Collinearity Statistics

Variables	1	2	3	4	5	6	7	8	9
1. Age	-	-.13	.09	-.10	.12	.03	.09	.04	.03
2. Employment Status	-	-	.03	.78**	-.76**	-.64**	-.73**	-.56**	-.22**
3. Education	-	-	-	.04	.08	.03	-.03	-.28**	.26**
4. Marital Status	-	-	-	-	-.98**	-.81**	-.94**	-.73**	-.34**
5. Perceived Weight Stigma	-	-	-	-	-	.82**	.97**	.75**	.37**
6. ATS- High Standards	-	-	-	-	-	-	.79**	.87**	.27**
7. ATS- Self-Criticism	-	-	-	-	-	-	-	.80**	.37**
8. ATS- Generalization	-	-	-	-	-	-	-	-	.28**
9. Open Minded-Thinking	-	-	-	-	-	-	-	-	-

Table II: Independent Sample t-test showing differences in Study Variables on basis of Marital Status

	Single (*n*=114)		**Married** (*n*=86)				95% CI		
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*	*LL*	*UL*	*Cohen's d*
Perceived Weight Stigma	49.59	1.50	34.71	1.79	63.71	.00	14.42	15.34	.24
Attitudes Towards Self	37.7	3.70	27.23	1.32	25.19	.00	9.69	11.34	
High Standards	12.78	1.84	8.23	1.32	19.48	.00	4.09	5.01	.11
Self-Criticism	11.19	.75	8.00	.00	39.40	.00	3.03	3.35	.11
Generalization	13.77	1.71	11.00	.00	15.03	.00	2.41	3.14	.12
Open-Minded Thinking	70.98	6.49	67.01	4.00	4.99	.00	2.40	5.54	.05

*Note.*CI=Confidence Interval; *LL*= Lower Limit; *UL*= Upper Limit.

11.00). Results also show that there is a significant difference between single and married women in Open-Minded Thinking (*t= 4.99, p<.01*) with single women scoring higher (*M= 70.98*) than married women (*M= 67.01*).

Then Independent Samples t-test was used to further analyze and determine the significance of the difference between employed and unemployed women in terms of perceived weight stigma, attitudes towards self and cognitive sophistication as shown in Table III.

Results show that there is a significant difference between employed and unemployed women in all three variables. Employed women obtained higher scores in perceived weight stigma (*M=47.47*) than unemployed women *(M=35.57),* and there was a significant difference between the two (*t= 16.34, p<.05*). There was also a significant difference between the two groups of women in all three subscales of attitudes towards self. There was a significant difference in High Standards (*t= 11.58, p<.01*) with employed women scoring higher (*M= 12.15*) than unemployed women (*M= 8.47*). There was a significant difference in Self-Critical subscale of Attitudes Towards Self (*t= 14.87, p<.01*) with employed women scoring higher (*M= 10.73*) than unemployed women (*M= 8.19*). There was a significant difference in Generalization (*t= 9.61, p<.01*) with unemployed women scoring higher (*M= 13.38*) than employed women (*M= 11.17*).

Results also show that there is a significant difference between employed and unemployed women in Open-Minded Thinking (*t= 3.22, p<.01*) with employed women scoring higher (*M= 70.26*) than unemployed women (*M= 67.53*). Finally Regression Analysis was conducted to examine whether cognitive sophistication is a moderator variable for the perceived weight stigma and attitudes towards self of the women under study. The results are shown in table IV.

Table IV: Regression Analysis for moderation effect of cognitive sophistication on perceived weight stigma and attitudes towards self

Predictor	**Attitudes Towards Self**	
Variables	B	R square
Step I		.76***
Marital Status	-.88***	
Employment Status	.01	
Step II		.00
Cognitive Sophistication	.03	
Step III		.03***
Perceived Weight Stigma	.12***	
Step IV		.00
PWS x CS	.01	
Total R square	.21	

Note. *Control variables included marital status and employment status
*p<.05. **p<.01. ***p<.001.

Table III: Independent Sample t-test showing differences in Study Variables on basis of Employment Status

	Employed (*n*=114)		**Unemployed** (*n*=86)				95% CI		
Variables	*M*	*SD*	*M*	*SD*	*t*	*p*	*LL*	*UL*	*Cohen's d*
Perceived Weight Stigma	47.47	5.41	35.57	3.99	16.34	.02	10.47	13.34	.24
Attitudes Towards Self	36.26	5.00	27.83	3.05	12.99	.00	7.14	9.7	
High Standards	12.15	2.34	8.47	1.77	11.58	.00	3.05	4.30	.11
Self-Criticism	10.73	1.31	8.19	.82	14.87	.00	2.20	2.88	.11
Generalization	13.38	1.85	11.17	.82	9.61	.00	1.76	2.66	.12
Open-Minded Thinking	70.26	6.87	67.53	2.81	3.22	.00	1.06	4.40	.05

*Note.*CI=Confidence Interval; *LL*= Lower Limit; *UL*= Upper Limit.

Table IV showed that the results for regression analysis for attitudes towards self as criterion variable. Overall, the model explained 21% variance in attitudes towards self. Marital status and employment status of block 1 explained 76% variance in attitudes towards self, $F(2,197)= 315.62$, $p<.01$.

In block 2, when cognitive sophistication was added to the model, regression explained 0.1% variance in attitudes towards self, F change (1,196)= .69, p>.05). When perceived weight stigma was added to the model in block 3, regression explained variance of 1% in attitudes towards self, F change (1,112)= 2.7, p<.05). When interaction terms perceived weight stigma and cognitive sophistication was added in the block 4, regression explained 3.1% variance in attitudes towards self, F change (1,195) = 29.76, p<.01. The interaction between perceived weight stigma and cognitive sophistication was non-significant. Thus, the results indicated that cognitive sophistication did not moderate the relationship between perceived weight stigma and attitudes towards self unlike stated in the hypothesis.

DISCUSSION

The first hypothesis—that perceived weight stigma would significantly relate to attitudes toward the self—was supported. Higher stigma was associated with increased self-criticism, high personal standards, and overgeneralization, with self-criticism being the most prominent. These results are consistent with existing literature showing that fat individuals often face psychological harm due to societal discrimination and internalized stigma.[15,16,17,18] Negative stereotypes, such as being seen as lazy or unhealthy, contribute to self-blame and reinforce harmful behaviors like extreme dieting.[19,20] Such stigma, when experienced across personal and professional environments, often leads individuals to adopt the same negative views others hold about them, deepening self-critical attitudes.[21]

Fat individuals also endure traumatic experiences, such as systemic barriers and overt discrimination, which contribute to the belief that their bodies are the root cause of these challenges, rather than recognizing societal fatphobia as the true issue.[22,23]

The second hypothesis proposed that cognitive sophistication would weaken the link between weight stigma and self-attitudes. However, results showed no significant moderating effect. Although cognitive sophistication reflects an ability to think flexibly and challenge biased thinking, it did not protect participants from the negative effects of stigma. This supports critical perspectives which argue that addressing societal fatphobia is essential for meaningful therapeutic progress—individual cognitive skills alone are insufficient.[24,25]

The third hypothesis—that working and non-working women differ in perceived stigma, cognitive sophistication, and self-attitudes—was also supported. Working women experienced greater weight stigma and more negative attitudes toward the self, likely due to higher exposure to societal appearance standards and workplace discrimination.[26,27] Fat individuals are often seen as less competent and less employable, which increases their vulnerability to stigma. Interestingly, working women scored higher in cognitive sophistication, possibly due to education or work experience.

Further, single women reported higher stigma and more negative self-attitudes compared to married women. In a culture that idealizes thinness, single fat women may feel greater pressure to conform to beauty norms.[28,29] Stigma women also reported more perceived stigma, often compounded by ageism and weight-based discrimination in healthcare settings, where fat individuals are more likely to be denied basic medical care.[30,31]

CONCLUSION

The findings indicate that perceived weight stigma is positively associated with adverse self-attitudes and that this association intensifies with advancing age. Moreover, single and unemployed women demonstrated higher levels of perceived stigma and more negative self-perceptions. In contrast, cognitive sophistication did not emerge

as a significant moderator in the relationship between stigma and self-attitude.

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