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WEIGHT-BASED REJECTION SENSITIVITY, SOCIAL PHYSIQUE ANXIETY, AND MARITAL ATTITUDES IN INDIVIDUALS WITH ADIPOSITY

Amaras Azam[*1], Fatima Kamran[2]

[*1,2]*Institute of Applied Psychology (IAP), University of the Punjab*

[*1]amarasazam09@gmail.com

Corresponding Author: *
Amaras Azam

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ABSTRACT

*This study aimed to investigate the relationship between weight-based rejection sensitivity, social physique anxiety, and marital attitude in individuals with adiposity. The relative contributions of demographic and clinical factors were also assessed. Using a correlational research design and purposive sampling, 98 individuals with adiposity were recruited, as determined by G*Power. The study hypothesized significant relationships among the key variables and proposed that weight-based rejection sensitivity would mediate the relationship between social physique anxiety and marital attitude. Additionally, it was hypothesized that sociodemographic factors would predict marital attitudes. Participants were assessed using a demographic information sheet, clinical information sheet, Weight-Based Rejection Sensitivity Scale, Social Physique Anxiety Scale, and Marital Attitude Scale. Data collection took place in healthcare facilities specializing in obesity and through online platforms. The findings revealed that both social physique anxiety and weight-based rejection sensitivity significantly predicted marital attitudes, with social physique anxiety having a stronger negative impact. Mediation analysis showed that social physique anxiety heightened sensitivity to weight-based rejection, leading to more negative marital attitudes. Furthermore, participants with higher incomes reported greater weight-based rejection sensitivity than those with lower incomes.*

Keywords: *Weighted-Based Rejection Sensitivity, Social Physique Anxiety, Marital Attitudes, Adiposity.*

INTRODUCTION

Adiposity, also referred to as morbid obesity, represents an extreme manifestation of obesity. Obesity is diagnosed when the Body Mass Index (BMI) is 30 or higher. A BMI of 40 or higher is utilised to diagnose obesity or severe obesity. A body mass index (BMI) of 25 to less than 30 is classified as overweight. The weight range of 18.5 to under 25 is considered healthy. The term "adiposity," denoting body fat, is derived from the root "adipo," meaning "fat." The predominant lipids in the body, such as triglycerides and free cholesterol, are stored in adipose tissue and adipocytes. Adipose tissue and adipocytes are functionally active in both immunological and endocrine contexts (Bays et al., 2013). The accumulation of adipose tissue, leading to excessive adiposity or body fatness, is a primary risk associated with overweight and obesity (Cornier et al., 2011). The phrases "overweight," "obesity," and "adiposity" refer to the abnormal or excessive buildup of body fat that can adversely affect individuals' health and well-being (World Health Organisation, 2024).

Adiposity-Based Chronic Disease (ABCD) is a novel diagnostic designation for obesity. ABCD emphasises that "obesity" is not merely a term

but a chronic disease rooted in specific physiological mechanisms. This term seeks to mitigate the adverse emotions and ambiguity frequently associated with the term "obesity." To enhance patient care utilising ABCD, it proposes: (1) integrating lifestyle modifications as a fundamental aspect of promoting holistic health, rather than merely an initial measure; (2) establishing uniform strategies to facilitate weight reduction and address concerns associated with body fat; (3) evaluating patient care within a comprehensive framework, emphasising prevention and tailoring recommendations to diverse cultures and backgrounds; and (4) formulating evidence-based strategies to ensure patients receive appropriate care and support consistently (Mechanick et al., 2017).

Weight gain may result from health issues, diseases, or chronic ailments that an individual may encounter. Cushing's disease, polycystic ovarian syndrome, and arthritis, which limits mobility, are among the conditions that might induce weight gain. Occasionally, underlying medical issues may facilitate weight growth. Hypothyroidism is a condition characterised by insufficient hormone production by the thyroid gland. Cushing's syndrome is another uncommon illness characterised by an overproduction of steroid hormones (NHS, 2023).

Obesity is frequently linked to considerable psychosocial challenges. Individuals with obesity frequently experience melancholy, diminished self-esteem, compromised quality of life, and adverse body image. This emotional disturbance can influence the pursuit of treatment and may also affect treatment outcomes (Sarwer & Polonsky, 2016).

A significant challenge for individuals confronting weight difficulties is the adverse cultural perceptions of fat, known as weight prejudice. Such prejudices frequently portray obese individuals as unappealing, indolent, and lacking self-discipline. Such beliefs are widespread among peers, in workplaces, among families, and even among healthcare practitioners. Such biases may lead to discriminatory practices that affect an individual's career prospects, self-worth, and the standard of medical care they receive (Vafiadis, 2021).

Obesity and physical weight can affect marriage relationships. The stigma around obesity can hinder the ability to attract, date, and sustain a marriage relationship. Individuals with obesity frequently enter into unions with other obese partners and typically marry at a later age. Nevertheless, there is no definitive evidence indicating that individuals with greater body weight experience more successful marriages. However, these marriages may encounter difficulties, particularly for women (Sobal & Hanson, 2011).

Rejection sensitivity is an exaggerated reaction to anticipation characterised by a dread of rejection, heightened perception, and actual rejection. Individuals who encounter rejection exhibit heightened sensitivity to it, hence anticipating rejection meticulously in all relationships. As a result, individuals often overreact to ambiguous behaviour or rejection, perceiving it as a direct affront (Downey & Feldman, 1996). Individuals who are overweight or obese often experience adverse interpersonal treatment, including weight-related teasing, disparaging remarks from family and friends, romantic rejection, inferior service in retail, dining, and medical environments, as well as workplace discrimination. Research indicates that this devaluation adversely impacts its targets, resulting in psychological, social, and bodily suffering (Brenchley & Quinn, 2016).

A particular form of anxiety is termed “social physique anxiety,” characterised by the concern individuals feel when they perceive that others are evaluating their physique in social contexts. Individuals may develop an obsessive fixation on their appearance, have diminished self-esteem, or harbour false expectations regarding their body image (Staff, 2013).

“Marital attitudes” denotes an individual's expectations and perspectives towards marriages in general and their prospective married relationship (UĞUR, 2016). Essentially, attitudes towards marriage pertain to teenagers' perceptions and aspirations regarding marriage (Wood, Avellar, & Goesling, 2008).

The Marital Horizon Theory (MHT) provides a significant paradigm for comprehending how persons with adiposity manage their perceptions of marriage, especially when affected by weight-based rejection sensitivity and social body anxiety. Carroll et al. (2007) contend that MHT

posits that the perceptions of young adults towards marriage significantly impact their developmental outcomes and trajectories, influencing the changes that occur in their adult routines and habits.

Objectives

- To examine the extent to which weight-based rejection sensitivity and social physique anxiety influence marital attitudes in individuals with adiposity.
- To determine the mediating role of weight-based rejection sensitivity in the relationship between social physique anxiety and marital attitude in individuals with adiposity.
- To evaluate how sociodemographic factors, including age, gender, and education, contribute to differences in levels of marital attitude among individuals with adiposity experiencing rejection sensitivity and social physique anxiety.

Hypotheses

- There is likely to be a relationship between weight-based rejection sensitivity, social physique anxiety and marital attitude in individuals with adiposity.
- Sociodemographic are likely to predict marital attitude in individuals with adiposity.
- Weight based rejection sensitivity is likely to mediate between social physique anxiety and marital attitude.
- Social physique Anxiety is likely to predict marital attitude in individuals with adiposity.

Method

A correlational research design was used to examine the relationships between rejection sensitivity, social physique anxiety, and marital attitude in individuals with adiposity.

Sample and Sampling Strategy

A non-probability purposive sampling technique was used to recruit a sample of 100 individuals with adiposity, as estimated by G*Power. Participants were recruited from obesity-focused healthcare facilities, weight loss clinics, and a bariatric care center in Lahore. Additionally, online platforms and social media were utilized to reach a broader audience

Inclusion Criteria

Participants included in the study were individuals with a BMI of 35-40, who had attained at least a graduate-level education. Only unmarried individuals were selected for participation.

Exclusion Criteria

The study excluded bodybuilders due to their potentially high BMI, individuals with terminal conditions such as end-stage renal disease (ESRD) or advanced cancer, and individuals with skin conditions, including vitiligo, eczema, and psoriasis.

Assessment Measures

A self-constructed demographic sheet was administered in addition to other research tools to gain information about respondents. Demographic information sheet included gender, age, years of formal education, marital status, employment status, household income, number of dependents, familial background (rural/urban), family system (joint/nuclear), and others. Clinical information sheet included blood group, height, weight, and drug allergies

Weight-based Rejection Sensitivity Scale (McClure Brenchley & Quinn, 2016)

Weight-based rejection sensitivity (W-RS) was created to address shortcomings in existing evaluations of weight stigma and may clarify individual responses to stigma, as well as predict situations in which weight stigmatisation is more likely to affect an individual. The W-RS consists of 16 items, each divided into two components: anxiety and expectation. Responses are assessed on a scale from 1 (very unconcerned) to 6 (very apprehensive) for anxiety, and from 1 (quite unlikely) to 6 (highly likely) for expectancy.

Social Physique Anxiety Scale (Hart et al., 1989)

The Social Physique worry Scale (SPAS) is a psychological instrument designed to evaluate an individual's worry and discomfort over perceived judgements of their physique by others in social situations. The scale typically consists of 12 items that evaluate emotions of discomfort or anxiety in situations where one may be scrutinised and maybe judged over their appearance. The scale employs a Likert-type response format, enabling participants to indicate their degree of agreement

or disagreement with each subject. The response options range from "not at all characteristic of me" to "extremely characteristic of me." Heightened scores on the Social Physique Anxiety Scale indicate a greater level of concern and discomfort around body image in social situations.

Marital Attitude Scale (Braaten & Rosén 1998)

The Marital Attitude Scale (MAS) is a 23-item tool designed to evaluate individuals' subjective views on heterosexual marriage. The MAS was designed to assess the views of both married and unmarried adults, unlike previous scales. It has demonstrated strong psychometric properties, including high internal consistency. MAS scores demonstrate a moderate correlation with alternative marital attitude evaluations and can consistently differentiate based on certain personality traits.

Procedure

Prior permission from all relevant weight loss clinics and bariatric centers was sought and after the permission participants were approached during their visit. Upon approaching, participants were briefed about the purpose of the study and was provided a participant information sheet. Upon their agreement, they were given consent form to be signed. After that the questionnaires were administered. Participants were ensured complete confidentiality of the information that they will provide. Moreover, they were given liberty to withdraw from the research whenever they want.

Result

After the completion of data collection, the data was entered in SPSS version 23.00 for further analysis. In order to ensure the assumption of normality, comprehensive data screening was done to look for linearity and identify presence of outliers, missing cases, or cases irregularity. Number of responses, mean, standard deviation, actual/potential ranges, alpha reliability coefficient, skewness, and values of all study constructs for individuals with adiposity were completed.

Table 1

Psychometric Properties for SPAS, WBRS, and MAS

Scales	k	M	SD	Ranges		Cronbach's α	Skewness	Kurtosis
				Actual	Potential			
Social Physique Anxiety Scale	12	44.45	9.51	18-60	12-60	.871	-.233	-.69
Weight Based Rejection Sensitivity Scale	16	311.82	109.70	99-564	16-576	.935	.051	-.82
Marital Attitude Scale	23	29.24	13.01	4-55	0-69	.921	-.329	-1.11

Note: α= reliability coefficient; k= no. of items in scales and subscales; M= mean;
SD= standard deviation

Table 1 shows descriptive and reliability estimates of the scales used for individuals with adiposity; estimates were determined for Social Physique Anxiety, Weight Based Rejection Sensitivity, and Marital Attitude Scale. The participants, on average, show a relatively high level of social physique anxiety, and there is moderate variability in anxiety levels across individuals. Participants exhibit a moderate to high sensitivity to weight-based rejection. The high standard deviation indicates considerable variability in how participants perceive and react to potential weight-based rejection. The average score on marital attitude suggests that participants generally have a neutral to somewhat positive attitude toward marriage. The substantial standard deviation reflects a wide range of

attitudes towards marriage among the sample. The table also shows that the skewness value of the study constructs is within the range of +2 to -2 which is an indication that the data of all variables are normally distributed (Bryne, 2010).

Table 2

Descriptive Statistics and Correlation for Study Variables

Variable	M	SD	1	2	3	4
1. Age	24.88	1.87	_			
2. Social Physique Anxiety	44.45	9.50	.065	_		
3. Weight Based Rejection Sensitivity	311.82	109.70	-.090	.629	_	
4. Marital Attitude	29.24	13.01	-.220	-.620	-.573	_

Note: *p<.05; **p<.01, ***p<.001

Table 2 shows that age is significantly negatively correlated with marital attitude indicating that positive marital attitude tends to decrease with age. With the increase of age, individuals with adiposity tend to have more negative marital attitude.

Social Physique Anxiety is positively correlated with weight-based rejection sensitivity and negatively correlated with marital attitude which reflects higher level of social physique anxiety is associated with higher level of weight-based rejection sensitivity. Additionally, social physique anxiety is significantly negatively correlated with marital attitude suggesting that higher social physique anxiety is associated with more negative marital attitudes.

Weight-based rejection sensitivity is significantly negatively correlated with marital attitude. This indicates that higher weight-based rejection sensitivity is associated with more negative marital attitudes.

Table 3

Regression Coefficients of Social Physique Anxiety and Weight Based Rejection Sensitivity on Marital Attitude in Individuals with Adiposity

Variable	Model 1			Model 2		
	B	β	SE	B	β	SE
Constant	66.79***		5.12	65.95***		4.94
Social Physique Anxiety	-.84***	-.61	0.11	-.57***	-.42	0.14
Weight Based Rejection Sensitivity				-.05**	-.29	0.01
R^2	.37				.43	
ΔR^2					.05***	

Note. N= 93. *p<.05; **p<.01, ***p<.001

Regression Analysis in Table describes the role of social physique anxiety and weight-based rejection sensitivity in predicting marital attitude in individuals with adiposity and the results show that social physique anxiety explains 37% of variance F (1,92) = 55.46, p< .001 in marital attitude. Moreover, weight-based rejection sensitivity explains 43% of variance F(2,91) = 33.91, p<0.001 in marital attitude. Findings indicate that social physique anxiety and weight-based rejection sensitivity are significant predictors of marital attitude in individuals with adiposity.

Table 4

Indirect Effect of Social Physique Anxiety on Marital Attitude through Mediator (Weight Based Rejection Sensitivity) Mediator Analysis via Andrew Hayes Process in Individuals with Adiposity

Variable	Outcome Variable	B	p	95%CI	
				LL	UL

Social Physique Anxiety					
Total Effect					
Social Physique Anxiety	Marital Attitude	-.84	.000	-.10	-.61
Direct Effect					
Social Physique Anxiety	Marital Attitude	-.57	.000	-.86	-.29
Social Physique Anxiety	WBRS	7.61	.000	5.77	9.45
WBRS	Marital Attitude	-.03	.005	-.05	-.01
Indirect Effect					
Social Physique Anxiety	Marital Attitude through WBRS	-.26	<.05	-.46	-.07

Note. B= Unstandardized Coefficient; CI= Confidence Interval; UL= Upper Limit; LL= Lower Limit; WBRS= Weight Based Rejection Sensitivity

To identify the mediating role of weight-based rejection sensitivity between social physique anxiety and marital attitude, regression analysis for mediation was carried out by using the bootstrap procedure by Preacher and Hayes. Results in the table 4 showed the direct and indirect effects of social physique anxiety and weight-based rejection sensitivity on marital attitude while exploring the role of weight-based rejection sensitivity as a mediator. Direct effect revealed social physique anxiety to be a significant predictor of weight-based rejection sensitivity and a direct path between weight-based rejection sensitivity and marital attitude was also found to be significant. Furthermore, indirect effect of social physique anxiety was also significant when weight-based rejection sensitivity was introduced as a mediator. It is concluded that social physique anxiety through weight-based rejection sensitivity explains 42% of the variance in marital attitude.

Discussion

This study aimed to investigate the influence of social body anxiety and rejection sensitivity on marital attitudes among individuals affected by obesity. Also, the research had set the objective of examining how there could be variations in terms of marital attitudes amongst diverse individuals with different sociodemographic factors such as age, gender, and educational attainment etc., in regard to obesity. The original research reported a strong negative relationship between age and marital attitude. This is an indication that the perception towards marriage will be poorer as humans grow old and more obese. This finding is confirmed by recent studies demonstrating that age-related body fat gains can worsen body image concerns, which can impact marital satisfaction and relationship dynamics. As an example, Shen et al. (2023) discovered that older people who were more obese expressed more severe concerns about their bodies that may adversely affect how they see their spouses and their general satisfaction with the relationship.

Moreover, the negative correlation between social physique anxiety and marital attitude and positive correlation between social physique anxiety and weight-based rejection sensitivity were identified. These findings show that more poor marital attitude and greater weight-based rejection sensitivity are associated with greater levels of social body anxiety. This can be correlated with a recent study conducted by Zartaloudi et al. in 2021, which proved that social body anxiety was a common experience among individuals reporting higher rates of anxiety concerning the fear of rejection because of their weight which leads to increased stress and low self-esteem. In turn, this can be a contributor to a self-feedback loop that creates a negative cycle of marital attitudes and relationship satisfaction becoming worse because of the dangers of rejection.

Also, significant negative correlations emerged between the measures of weight-based rejection sensitivity and marital attitude, indicating that individuals with higher rejection sensitivity because of their weight tend to also have a more negative attitude toward their marriage. The finding is supported by the study by Himmelstein et al. (2018) which indicates the weight-based rejection sensitivity may be associated with social disengagement and increased conflict in romantic relations, decreasing marital satisfaction. These findings underscores the importance of addressing social body anxiety and weight-based rejection sensitivity in treatment

settings as a method of boosting the relationship outcomes of obese individuals.

Multiple regression analysis was performed to determine the parameters that were related to the marital attitude among those people who had adiposity. The hypothesis was that social physique anxiety and weight-based rejection sensitivity would predict marriage attitudes among adipose people. The findings showed that the variations in marital attitude were dominated by the sociodemographic aspects alone by 14%. Although sociodemographic factors such as exercise tend to reproduce the behaviors of marital attitude to some extent, gender and education are insignificant in affecting relations and attitudes of marriage. In particular, social physique anxiety and weight-based rejection sensitivity levels were correlated with poorer marital attitudes. In a comparable study, Price et al., 2022 discusses the influence of body image issues, such as social physique anxiety and weight-based rejection sensitivity, on the quality of relationships among obese individuals. The researchers concluded that social physique anxiety and weight-based rejection sensitivity were substantively in terms of a negative relationship to satisfaction and negative relational attitudes.

An independent sample t-test was used to test the gender differences in the variables. The outcomes indicated that the difference in weight based rejection sensitivity, social physique anxiety and marital attitude did not show any significant gender difference among persons with adiposity. It is possible to interpret the lack of gender in terms of Marital Horizon Theory (MHT). The Carroll et al., 2007 theory postulates that irrespective of the gender individuals affected by adiposity negotiate their marital attitudes on both an individual and social standards like body image, personal validation and the acceptance of society. The other finding implied that those who consume junk food on a daily basis were much more weight-based rejection sensitive than those who consumed the same food once every five days. This is backed by a research study by Keith et al., 2006 which revealed that socioeconomic conditions also contributed significantly to obesity in terms of eating and physical exercise.

Other results showed that individuals with more income tend to exhibit greater sensitivity towards weight-based rejection when compared to those with lower income since individuals with higher income tend to be more exposed to media and cultural stimuli that encourage thinness and revile fatness thus making them more exposed to rejection based on their weight. Other studies, Qi and Cui (2018), confirm these findings and show that exposure to thin images on social media, particularly upper-SES thin images, worsens female body image and leads to more unhealthy food consumption. This impact is most associated with higher earning populations, which can access more media and cultural pressures to promote thinness and laugh at the overweight.

Conclusions and Implications

In summary, this study illuminates the intricate relationship between social physique anxiety and weight-based rejection sensitivity and marital attitudes in adipose people taking into consideration diverse sociodemographic determinants. The results indicated an inclination of marital attitudes to adopt a negative tone as adipose people grow older. The research paper has highlighted the close relationship between social physique anxiety and weight-based rejection sensitivity, which lead to negative attitudes toward marriage. This points to the importance of managing body image issues in order to improve marital satisfaction. Also, in this study, there was no gender variation in these variables which indicates that both men and women have society and personal standards regarding body image and acceptance that make similar impacts on marital attitudes. Beside, regarding lifestyle choices as an influencing factor on both psychological and relational effects, diet, particularly habits of eating junk food, had a significant effect on weight-based rejection sensitivity. It can be concluded that these aspects emphasize the importance of an integrated approach to treatment in terms of psychological, lifestyle, and sociodemographic variables to increase marital satisfaction rates among adipose individuals.

Even though the study can not determine cause and effect, it can give a glimpse of possible correlations at any given moment. As an example, it is possible that women (or others) who were high in their reported social physique anxiety and greater weight-related rejection sensitivity may have had a more negative marital attitude. The

research can provide important results relevant to people with adiposity and set up a study that can be used in the future based on experimental or long-term stays. It can be valuable research instruments across most domains of health research. When they learn what happens to people with adiposity, researchers can enhance their knowledge regarding the connection between social physique anxiety and weight-based rejection sensitivity and build more studies that will examine these phenomena thoroughly.

Amaras Azam

We do hereby that this work is done by us. This work is completed at the Institute of Applied Psychology, Lahore. Any concern related to the paper would be addressed to Amaras Azam, Institute of Applied Psychology, University of Punjab, Quaid-e-Azam Campus, Lahore

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