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Weight Self-Stigma and Disordered Eating Behaviors in Iranian Women: The Mediating Roles of Self-Efficacy and Guilt

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Abstract

Objective: This study aimed to investigate the concurrent relationships between weight self-stigma and disordered eating behaviors, mediated by weight- and body-related shame and guilt, fear of negative appearance evaluation, and eating self-efficacy, among women with overweight and obesity.

Materials and Methods: This study was a cross-sectional study. The sample consisted of 228 Iranian women, aged 18-70 years, with overweight and obesity (BMI≥ 25), who were purposively selected. Participants responded to online demographic questions and research measurement tools (Dutch Eating Behavior Questionnaire, Weight Self-Stigma Questionnaire, Weight- and Body-Related Shame and Guilt Scale, Weight Efficacy Lifestyle-Short Form, Fear of Negative Appearance Evaluation Scale). Statistical methods of descriptive statistics, Pearson correlation matrix, structural equation modeling and bootstrapping mediation analysis were used to analyze the data, through SPSS 23 and AMOS 23.

Results: The results showed that weight self-stigma had significant paths to all research variables in a structural model ($P< 0.05$). Furthermore, mediation analysis showed that eating self-efficacy mediated the relationships between weight self-stigma and emotional ($P< 0.001$), external ($P< 0.001$), and restrained eating behaviors ($P< 0.002$). Additionally, weight and body-related guilt mediated the relationship between weight self-stigma and restrained eating behavior ($P< 0.001$). Totally, the research model explained 14.9% of the variance of emotional and external eating behaviors, and 36.2% of the variance of restrained eating behavior.

Conclusion: The findings highlight the importance of considering weight self-stigma in obesity research. Additionally, improving eating self-efficacy and addressing guilt through psychological interventions are crucial for managing eating behaviors in this population.

Keywords: Eating Disorders, Emotions, Obesity, Self Efficacy

QR Code:

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Introduction

Weight stigma is a significant public health concern, involving negative stereotypes about individuals with overweight and obesity. Research has shown that weight stigma correlates with physical and mental health problems, including disordered eating behaviors, decreased physical activity, and physiological stress (1). The meta-analysis studies revealed a significant impact of weight stigma on psychological health, with a moderate to high effect size that is comparable to the stigma experienced by other groups (2,3).

Internalized stigma refers to the awareness of negative social stereotypes about an individual's social identity, acceptance, application, and self-devaluation (3). Internalized weight stigma or weight self-stigma is a psychological process of self-devaluation based on body weight, resulting from identification with a group experiencing weight stigma (4-6). Research shows the overlap of internalized weight stigma with general self-esteem and body image concepts (7). According to the absence of a unified conceptual term for this phenomenon, “weight self-stigma” is used in this study (8-10).

On the one hand, weight self-stigma is linked to physiological problems like metabolic syndrome and physical pain (11,12), as well as psychological distress, fear of negative evaluation, shame, guilt, lower self-efficacy, and decreased quality of life (13-17). On the other hand, while improving eating behaviors is a key goal in obesity treatment, weight self-stigma can contribute to disordered eating patterns, including disinhibited eating, binge eating, and emotional eating (9,10,18-20). As a result, weight stigma negatively influences physical, cognitive, emotional, and behavioral aspects of psychological health.

Empirical research explores the mechanisms linking weight self-stigma to eating disturbances. Studies in weight loss treatment and bariatric surgery contexts have identified several mediating factors, such as self-hatred, self-reassurance, fear of negative appearance evaluation, food addiction, psychological distress, experiential avoidance, body dissatisfaction, body shame, appearance anxiety, internal shame, self-compassion, disinhibited eating, and subjective hunger (14,18,19,21-25).

In addition, theoretical models explain the associations between weight self-stigma and disordered eating behaviors (4,26). The weight-inclusive model highlights how weight stigma, appearance monitoring, and body shame are associated with reduced physical and psychological well-being (26). According to this model, the research investigates that self-compassion, internal shame, weight- and body-related shame and guilt, and body image flexibility mediate the relationship between weight self-stigma, eating behaviors, and health-related stress (25,27,28). Moreover, the "why try" model of self-stigma emphasizes how self-stigma influences goal-directed behavior and health outcomes through self-efficacy and self-esteem (3,29). Thus, both models provide insight into the psychological and behavioral consequences of weight stigma.

However, the majority of obesity studies about weight stigma are conducted in Western countries, with a lower amount in the Middle East region (30,31). Given the influence of cultural and social factors on obesity stigma and Iran’s high obesity prevalence (35.09%) (32), this study aimed to examine the hypothesized model among Iranian women with overweight and obesity, investigating the associations between weight self-stigma and disordered eating behaviors directly and indirectly through weight- and body-related shame and guilt, eating self-efficacy, and fear of negative appearance evaluation.

Material and Methods

Participants and Procedure

This cross-sectional study involved 228 Iranian women with overweight and obesity, aged 18 to 70 years, recruited through an online survey conducted between November 2020 and

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July 2021. The sampling method was purposive. The survey link was distributed on social media platforms, including Twitter and WhatsApp, with individuals who had verified identities, and participants were encouraged to share it further. The survey emphasized participant anonymity, data confidentiality, and the voluntary nature of participation, with informed consent obtained through a two-choice question (I agree, I do not agree).

If they consented to participate in the research, then they could answer further research questions. Participants provided demographic data, including age, height (m), and weight (kg) for BMI calculation, education, marital, and employment status.

Measures

Weight Self-Stigma Questionnaire (WSSQ): It is a 12-item self-report questionnaire that evaluates self-stigma related to having overweight or obesity (6). Responses are rated on a 5-point Likert scale (completely disagree= 1 to completely agree= 5). Higher scores indicate higher levels of weight self-stigma. It has two subscales: self-devaluation and fear of enacted stigma. The original version of the questionnaire has good construct validity and overall internal consistency (α= 0.88), along with the self-devaluation (α= 0.81) and the fear of enacted stigma (α= 0.87) subscales (6). In the present study, this tool's internal consistency (Cronbach's α) was 0.83 for the total score, 0.79 for the self-devaluation, and 0.85 for the fear of enacted stigma subscales, respectively.

Weight- and Body-Related Shame and Guilt Scale (WEB-SG): This 12-item scale measures the degree of shame and guilt related to weight and body among individuals with obesity in two distinct subscales (33). The items are rated on a 5-point Likert scale (never = 0 to always= 4). Higher scores on each subscale indicate higher weight- and body-related shame and guilt levels. This scale has high internal consistency for the shame (α= 0.92) and the guilt subscales (α= 0.87). Additionally, the test-retest reliability over 6 months and validity were good (33). In this study, internal consistency was good for the shame (α= 0.87) and the guilt (α= 0.83) subscales.

Weight Efficacy Lifestyle-Short Form (WEL-SF): This is a 8-item self-report scale measure (34). The items were rated on a 10-point Likert scale (not confident at all= 0 to very confident= 10). Higher scores indicated higher confidence in controlling overeating. The internal consistency (α= 0.92), concurrent validity, and clinical validity of this questionnaire were reported to be high (35). In this study, the internal consistency of this questionnaire was good (α= 0.84).

Fear of Negative Appearance Evaluation Scale (FNAES): This 6-item self-report scale measures the individuals' fears about negative evaluations of their physical appearance by others (36). The items were rated on a 5-point Likert scale (not at all= 1 to extremely= 5). The internal consistency (α= 0.94) and construct validity for this scale were reported as high (36). In this study, the internal consistency (α= 0.93) of this questionnaire was high.

Dutch Eating Behavior Questionnaire (DEBQ): This 33-item self-report questionnaire has 33 items (37). It has three subscales, including (1) restrained eating, which measures the restriction of eating behavior and includes 10 items; (2) emotional eating, which assesses eating in response to emotional disturbances and includes 13 items; and (3) external eating, which evaluates eating as a reaction to external stimuli related to food and includes 10 items. Ratings for the responses were given using a 5-point Likert scale. Higher scores indicated higher restrained and emotional and external eating. Notably, only item 21 (about restrained eating) were reverse-coded. The restrained, emotional, and external eating subscales have good internal consistency (α = 0.95, α= 0.94, and α= 0.80) and good convergent and divergent validities (37). In this study, the internal consistency of the restrained, emotional, and external eating subscales (α= 0.87, α= 0.91, and α= 0.67) was good.

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Statistical analysis

We used SPSS version 23 for part of the data analysis. Descriptive Statistics, including minimum, maximum, mean, standard deviation, skewness, and kurtosis of variables, were calculated and reported in Table 1 and Table 2. In addition, the Pearson correlation matrix was computed to evaluate the relationships between study variables (Table 3). Moreover, Amos version 24 was used for structural equation modeling analysis. The bootstrapping method with 2000 resampling to construct a 95% confidence interval (CI) was used for mediation analysis of variables in the research model. If CI does not include zero indicates a significant indirect effect. Moreover, In order to use the structural equation modeling (SEM) method, it is necessary to check its assumptions that are reported below.

Observed variables (indicators)

In structural equation modeling, before running the hypothesized model, it is necessary to select appropriate indicators (observed variables) to measure the latent variables. In this research, for the latent variables with subscales, the subscales were considered as indicators (i.e., WSSQ and Emotional-External eating). For the variables that did not have a subscale (i.e., WEB-S, WEB-G, WEL-SF, FNAES, Restrained eating), the item parceling method (38) was used to select the indicators for each of them. In this method, the items were divided into three groups based on the factor loading values.

Testing assumptions of SEM and confirmatory factor analysis of the measurement model

Following the guidelines (39), to test the assumptions of structural equation modeling method, a sample of 228 individuals was selected, which was considered sufficient for conducting this method. Skewness and kurtosis for each observed variable were calculated to assess the univariate normality. (39,40).

Additionally, the Maximum Likelihood Estimation (MLE) method employed in this study requires both univariate and multivariate normality, and assessing multivariate normality practically poses challenges. Nonetheless, some strategies have been proposed to examine it. In this study, the multivariate normality assumption was examined by calculating the relative multivariate kurtosis index, which yielded a value of 1.421 for the hypothetical model. According to literature, a value less than 3 for this index indicates the fulfillment of the multivariate normality assumption (40). Furthermore, in the assessment of multicollinearity, the correlation matrix among the observed variables indicated correlation coefficients were below 0.85, suggesting the absence of multicollinearity among them (39).

Moreover, it should be mentioned, the goodness-of-fit of the hypothesized measurement and structural models was evaluated by conventional goodness-of-fit indices and their cutoff values (40). They include the chi-square (χ^2), the chi-square (χ^2)/degrees of freedom (df), the Tucker-Lewis Index (TLI), the Comparative Fit Index (CFI), the Incremental Fit Index (IFI), the Normed Fit Index (NFI), and the Root Mean Square Error of Approximation (RMSEA). In addition, we examined the goodness-of-fit of the hypothesized measurement model. Its fit indices are presented in Table 4. The results indicated an acceptable fit for this model. Therefore, the observed variables can be indicators of the latent variables.

Ethical considerations

Ethical approval was obtained by the Islamic Azad University Ethics Committee, Karaj Branch, Iran (ethical code: IR.IAU.K.REC. 1398.082).

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Results

Descriptive statistics

First, the demographic information of the participants and the descriptive statistics of the research variables are presented in Table 1 and Table 2. Further, the Pearson correlation matrix of the research variables was calculated (Table 3).

According to the results, weight self-stigma has the strongest significant correlation coefficient with the fear of negative appearance evaluation and the minimum significant correlation coefficient with external eating behavior.

Item parceling of research observed variables and confirmatory factor analysis of them showed a good range of factor loadings. For the

Table 1. Sociodemographic characteristics of the participants

Characteristic	M	SD
Age	38.65	11.06
BMI	28.9	4.8
Variable	**Range**	**(f%) f**
Education	Diploma or below	(10.1%) 23
	Associate	(6.6%) 15
	Undergraduate	(38.2%) 87
	Masters	(25.9%) 59
	Ph.D.	(19.3%) 44
Marital status	Single	(36%) 82
	Married	(55.7%) 127
	Separated	(8.3%) 19
Job status	Employed	(48.7%) 111
	Unemployed	(51.3%) 117
BMI (kg/m^2)	25<BMI≤29.9	(56.5%)129
	30<BMI≤34.9	(29.9%) 68
	35<BMI≤39.9	(8.8%) 20
	>40	(4.8%) 11

Note: BMI = Body Mass Index

Table 2. Descriptive Statistics of Research Variables

Variable	Min	Max	M	SD	SK	K
WSS	16	55	35.14	7.97	-0.019	-0.417
Self-devaluation (subscale)	9	30	19.62	4.77	-0.128	0.799
Fear of enacted stigma (subscale)	6	30	15.51	5.03	0.400	-0.094
W-B Guilt	0	24	11.97	5.56	-0.096	-0.514
W-B shame	0	24	7.50	6.04	0.626	-0.0407
ESE	0	80	35.12	17.88	0.162	-0.521
FNAE	6	30	15.75	6.57	0.382	-0.732
Emotional eating	0	48	26.09	10.39	-0.177	-0.416
Restrained eating	3	39	19.98	6.42	-0.059	-0.226
External eating	8	33	21.18	5.07	-0.124	-0.373

Note: Min = Minimum, Max = Maximum, M = Mean, SD = Standard Deviation, SK = Skewness, K = Kurtosis, WSS = weight self-stigma, W-B Guilt = weight- and body-related guilt, W-B shame = weight- and body-related shame, ESE = eating self-efficacy, FNAE = fear of negative appearance evaluation

Table 3. Correlation Coefficient Matrix of Research Variables (n=228)

	Measures	1	2	3	4	5	6	7	8
1	**WSS**	1							
2	**W-B Guilt**	0.608**	1						
3	**W-B Shame**	0.653**	0.586**	1					
4	**ESE**	-0.437**	-0.230**	-0.209**	1				
5	**FNAE**	0.675**	0.594**	0.725**	-0.211**	1			
6	**Emotional eating**	0.481**	0.368**	0.370**	-0.625**	0.360**	1		
7	**Restrained eating**	0.019	0.293**	0.077	0.248**	0.126*	-0.071	1	
8	**External eating**	0.384**	0.218**	0.184**	-0.498**	0.300**	0.551**	-0.254**	1

Note: **P-value<. 01, * P-value <.05, WSS = weight self-stigma, W-B Guilt = weigh- and body-related guilt, W-B shame = weight- and body-related shame, ESE = eating self-efficacy, FNAE = Fear of Negative Appearance Evaluation

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WEB-Shame, it resulted in three indicator parcels (Parcel 1: items 4 and 12; Parcel 2: items 2 and 10; Parcel 3: items 7 and 6). For the WEB-Guilt, it resulted in three indicator parcels (Parcel 1: items 9 and 5; Parcel 2: items 8 and 11; Parcel 3: items 1 and 3). WEL-SF item parceling results in three indicators (Parcel 1: items 7, 8, and 4; Parcel 2: items 5, 2, and 6; Parcel 3: items 1 and 3). For the FNAES, it resulted in three indicator parcels (Parcel 1: items 4 and 5; Parcel 2: items 2 and 3; Parcel 3: items 1 and 6). Considering that, the restrained eating subscale showed a negative correlation with the other two subscales of DEBQ, it was considered a separate variable in the hypothetical model. For the restrained eating, item parceling results in three indicators (Parcel 1: items 14, 26, and 22; Parcel 2: items 17, 11, and 19; Parcel 3: items 4, 7, and 13). It should be noted that item 29 was not included due to the low factor loading. Confirmatory factor analysis of parcels is presented in Figure 1.

Examination of the hypothesized single measurement model

Afterwards, the hypothesized structural model was tested. Figure 1 shows the hypothesized structural model with the standardized path coefficients. All goodness-of-fit indices indicate an appropriate measure for the hypothetical model (Table 4). As seen in Figure 1, some paths were not significant.

Examination of the modified structural model

In this section, non-significant paths were removed from the model, and then the goodness-of-fit of the modified structural model was tested (Figure 2).

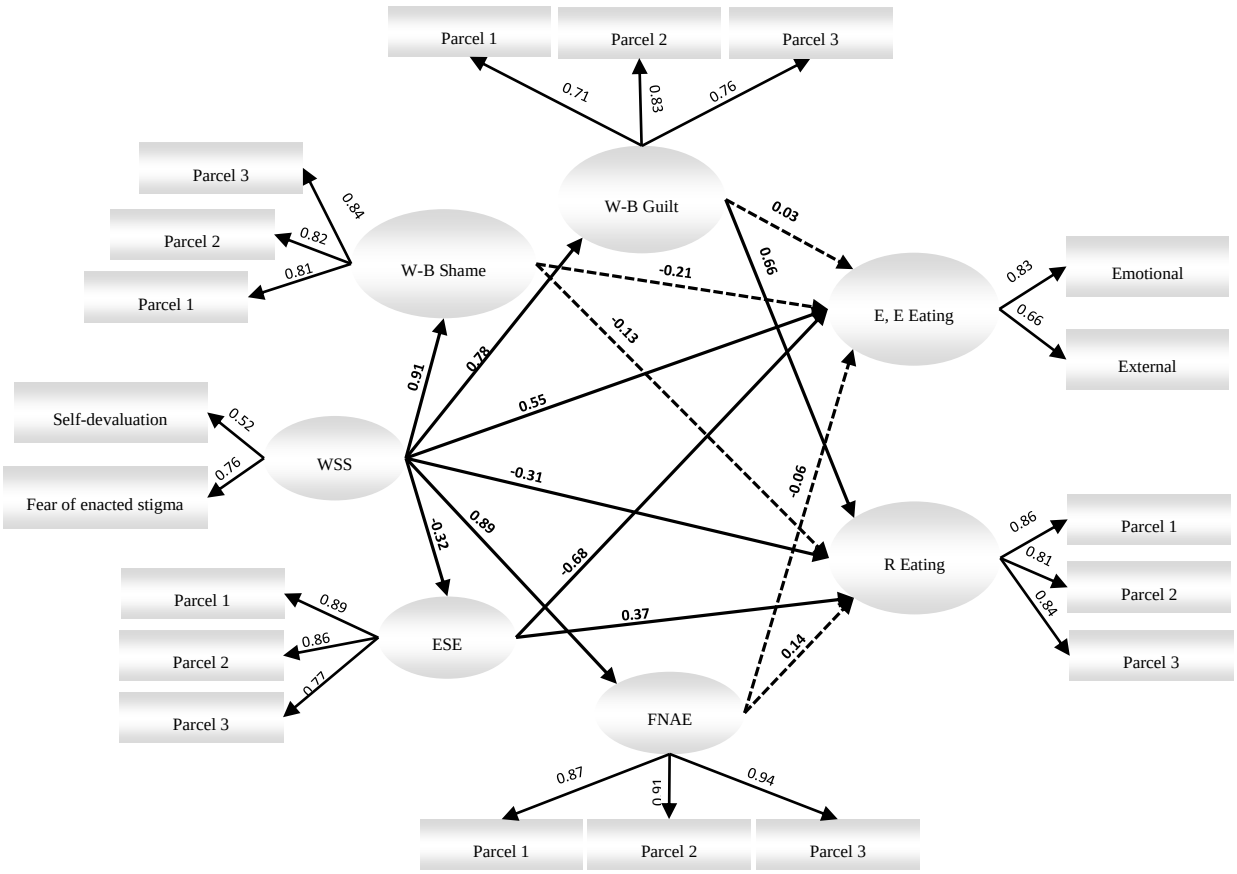

Figure 1. Hypothesized structural research model with standard path coefficients and factor loadings

Note: WSS = weight self-stigma; W-B shame = weight- and body- related shame; W-B Guilt = weight- and body- related guilt; ESE = eating self-efficacy; FNAE = fear of negative appearance evaluation; E, E Eating = external and emotional eating behaviors; R eating = restrained eating behavior.

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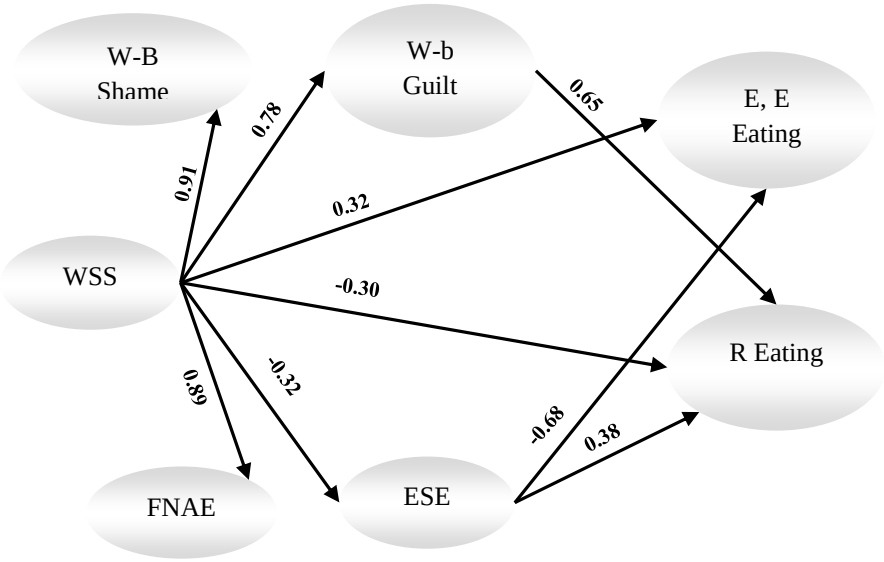

Figure 2. Modified structural model of research with standard path coefficients (To avoid repetition, the measuring part of the model is not shown in the figure)

Note: WSS = weight self-stigma; W-B shame = weight- and body- related shame; W-B Guilt = weight- and body- related guilt; ESE = eating self-efficacy; FNAE = fear of negative appearance evaluation; E, E Eating = external and emotional eating behaviors; R eating = restrained eating behavior.

The results revealed that none of the non-significant paths in the model had a significant modification index; therefore, no additional parameters were added to the model. The goodness-of-fit indices for the modified structural model are reported in Table 4. In addition, the final significant modified model paths with parameters are shown in Table 5. Importantly, the goodness-of-fit indices for the modified model did not change significantly compared to the initial model and still fell within the acceptable range. Consequently, it can be concluded that the final structural model fits well with the data. After modification, all the paths in the proposed research model were statistically significant at the 0.05 level. The parameters related to the paths of the modified structural model are reported in Table 5.

Table 4. Goodness-of-fit indices of measurement, structural and modified research models

Variable	χ^2	CMIN/DF	TLI	CFI	IFI	NFI	RMSEA
Accepted domain		<5	>0.90	>0.90	>0.90	>0.90	<0.08
Measurement model	255.14	1.94	0.941	0.955	0.955	0.912	0.065
Structural model (Hypothetical)	284.18	2.06	0.934	0.947	0.947	0.903	0.068
structural model (Modified)	286.23	2.00	0.938	0.948	0.948	0.902	0.066

Table 5. Modified structural model parameters

Path			Standard Coefficient	Standard Error	T value	Sig.
WSS		**W-B Shame**	0.91	0.019	11.12	0.001
WSS	→	**W-B Guilt**	0.78	0.019	9.19	0.001
WSS	→	**ESE**	-0.32	0.043	-4.16	0.001
WSS	→	**FNAE**	0.89	0.020	11.84	0.001
WSS	→	**E, E Eating**	0.32	0.148	4.81	0.001
WSS	→	**R Eating**	-0.30	0.024	-2.04	0.041
W-B Guilt	→	**R Eating**	0.65	0.113	4.26	0.001
ESE	→	**R Eating**	0.38	0.022	4.93	0.001
ESE	→	**E, E Eating**	-0.68	0.303	-9.10	0.001

Note: WSS = weight self-stigma; W-B Shame = weight- and body-related shame; W-B Guilt = weight and- body- related guilt; ESE = eating self-efficacy; FNAE = fear of negative appearance evaluation; E, E Eating =external and emotional eating behaviors; R eating = restrained eating behavior.

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Examination the mediation effects of model variables

For mediation effect analysis, bootstrapping method was used. If the upper and lower bounds with a 95% confidence interval for the indirect path have the same sign (both positive or both negative), or in other words, the value zero is not between these two bounds, then the indirect path is considered significant ($P< 0.05$). According to the results, the indirect effect of weight self-stigma on emotional, external, and restrained eating behaviors through eating self-efficacy indicating a significant effect ($P< 0.001$, $P< 0.002$). In addition, the indirect effect of weight self-stigma on restrained eating behavior through weight- and body-related guilt was significant ($P< 0.001$). The results indicated that both weight- and body-related guilt and eating self-efficacy are partial mediators in the relationship between weight self-stigma and disordered eating behaviors (Table 6).

Discussion

This study investigated the complex relationships between weight self-stigma and psychological variables in Iranian women with overweight and obesity. These findings contribute to a deeper understanding of the psychological mechanisms underlying disordered eating behaviors, informed by theoretical frameworks and contextualized within a non-Western cultural setting.

The hypothetical structural model indicated that weight self-stigma has significant paths to psychological and behavioral study variables. Specifically, higher weight self-stigma is linked to increased adverse psychological emotions, including greater weight- and body- related shame and guilt, and fear of negative appearance evaluation, while decreased eating self-efficacy. These findings are consistent with previous research. (14,23-29). These findings mean that internalized stereotypes about obesity, such as perceptions of laziness and lack of willpower, lead to adverse psychological outcomes. According to Goffman's symbolic interaction theory, individuals suffering from stigma feel inadequate and experience self-devaluation, negative emotions, and worries about others' judgments (41). The weight-inclusive model also highlights that societal attitudes contribute to body shame and excessive self-monitoring too (26). In addition, the social identity threat model of stigma explains that individuals with overweight or obesity may experience anxiety and stress as involuntary responses when facing negative evaluations about their appearance, reflecting a defensive reaction to threats to their social identity (42). Furthermore, according to social-cognitive theory, weight-stigmatized individuals may view themselves as powerless, undermining their self-efficacy in managing behaviors (43). Relatedly, the stigma process model underscores the importance of self-efficacy and self-esteem in mitigating the effects of internalized stigma on goal-directed behaviors (3). Therefore, in line with theories and research, the weight self-stigma is associated with adverse psychological outcomes.

Furthermore, weight self-stigma directly contributes to increased emotional and external eating behaviors while reducing restrained eating, as supported by prior research (1,2,5,9,10,17).

Table 6. Mediation Effects of the Modified Research Model

Mediational paths			Standard coefficient (effect size)	Bootstrapped 95% CI		Standard error	*P*-value	Sig.
				Upper	Lower			
WSS →	ESE →	E, E Eating	0.217	0.322	0.111	0.054	4.03	0.001
WSS	ESE	R Eating	-0.122	-0.043	-0.195	0.039	-3.08	0.002
WSS	W-B Guilt	R Eating	0.507	0.815	0.197	0.158	3.21	0.001

Note: WSS = weight self-stigma; ESE = eating self-efficacy; E, E Eating =external and emotional eating behaviors; R eating = restrained eating behavior; W-B Guilt = weight- and body-related guilt

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This finding also aligns with self-stigma process models linking stigma to psychological distress and maladaptive coping mechanisms (3,26). Moreover, the cyclic obesity/weight-based stigma (COBWEBS) model conceptualizes obesity as a stressor that triggers disordered eating and elevated cortisol levels, perpetuating weight gain and stigma (44). Similarly, the psychological mediation framework emphasizes the psychological harm of weight stigma through cognitive, emotional, and interpersonal difficulties, leading to diminished well-being (45). In addition, the escape theory explains how individuals use maladaptive eating to avoid confronting distress, while restraint theory highlights the paradox of dietary restriction—failing efforts lead to overeating and perpetuate disordered patterns (46,47). Collectively, these findings illustrate how weight self-stigma disrupts emotional and behavioral regulation, creating a cycle of maladaptive eating behaviors driven by internal distress and external triggers.

Specifically, eating self-efficacy and weight- and body-related guilt were found to significantly mediate the relationship between weight self-stigma and disordered eating behaviors. These findings align with prior research (27,29,48). As noted before, according to social-cognitive theory, internalized stigma undermines eating self-efficacy and can lead to disordered eating behaviors (43). Moreover, it can be inferred from the self-stigma process model that weight self-stigma, through reduced self-efficacy, is associated with disordered eating behaviors (3). Therefore, eating self-efficacy may be the key to breaking the cycle of stigma and disordered eating. In addition, the significant mediating role of weight- and body-related guilt aligns with the theoretical understanding of guilt as a reparative emotion where individuals attempt to "fix" perceived failures through restrained eating (49,50). However, restraint theory suggests that an increased focus on dietary restraint can paradoxically lead to heightened food preoccupation and overeating (20,25,47). Consequently, guilt contributes to both self-regulation attempts and maladaptive eating behaviors, complicating intervention strategies.

Unexpectedly, weight- and body-related shame and fear of negative appearance evaluation did not significantly mediate the relationship between weight self-stigma and disordered eating behaviors. These findings were not consistent with previous research (2,14). The lack of mediation role of body-related shame in the relationship between weight stigma and disordered eating behaviors may stem from socio-cultural factors (such as social support and moral or spiritual values that lead to guilt rather than shame), sample characteristics, and the role of other emotions. General shame, rather than body-specific shame, might also play a role. Additionally, the statistical influence of variables such as self-efficacy and guilt could explain the findings. Similarly, the lack of mediating role of weight-and-body related guilt may be due to socio-cultural factors, sample characteristics, or statistical reasons. Moreover, social support or self- compassion may have acted as protective factors against fear of negative evaluation. Additionally, the normalization and internalization of negative stereotypes by individuals with obesity or overweight may lead them to accept negative evaluations as natural, reducing their concern. Furthermore, "appearance" encompasses body shape, facial beauty, and clothing choices, which may mitigate fears of negative appearance evaluation. Therefore, considering other psychological and social factors in interventions and research is crucial.

Undoubtedly, this study has several limitations. First, the use of self-report questionnaires can be prone to bias. Objective methods and qualitative approaches are required for future studies. Second, the Dutch Eating Behavior Questionnaire (DEBQ) only measures three types of eating behaviors, so future studies should explore other behaviors like binge eating or purging. Third, the cross-sectional design prevents causal conclusions, and longitudinal or experimental methods are needed. This study suggests more about

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Interventions considering and assessing weight self-stigma. Moreover, enhancing eating self-efficacy through several strategies may empower individuals to have healthier behaviors. Simultaneously, self-compassion and emotion-focused therapies that address guilt and shame could reduce the emotional burden of stigma (15,25,43).

Conclusion

This study elucidates the complex relationships between weight self-stigma, mediating psychological constructs, and disordered eating behaviors among women with overweight and obesity. By highlighting the mediator roles of eating self-efficacy and weight- and body-related guilt, it provides insights for designing targeted interventions to mitigate the adverse effects of stigma. These findings emphasize the need for stigma-reducing strategies to promote psychological and physical well-being in this group.

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Conflict of Interest

The authors have no conflicts of interest.

Authors' contributions

N.T.: writing- original draft and analyzing data. M.M. and M.S. supervision and conceptualization, A.N.: collecting the data and Conceptualization, Gh.S.F: Supervision and methodological contributions.

All the authors critically revised the manuscript, agree to be fully accountable for the integrity and accuracy of the study, and read and approved the final manuscript.

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