



The Association between Obesity and Depression: The Mediating Roles of Perceived Overweight, Body Image Dissatisfaction, and Weight-based Rejection Sensitivity

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Background: The rising prevalence of overweight in Taiwan has raised concerns about its psychological impact, particularly depression. Research suggests that perceived overweight, body image dissatisfaction, and weight-based rejection sensitivity may mediate this relationship. However, limited studies have explored these mechanisms in Taiwanese populations. **Aim:** To examine whether perceived overweight, body-image dissatisfaction, and weight-based rejection sensitivity mediate the association between body mass index (BMI) and depressive symptoms in Taiwanese adults. **Methods:** In this cross-sectional survey, 607 participants (291 university students, 316 community residents) completed measures of BMI, perceived overweight, body-image dissatisfaction, weight-based rejection sensitivity, and depressive symptoms. Parallel and serial mediation analyses with 5000-sample bootstrap were conducted, controlling for gender, age, and earliest overweight age. **Results:** BMI was indirectly associated with depressive symptoms through perceived weight ($\beta = 0.12$, $P = 0.022$). Perceived weight further predicted depression through body image dissatisfaction ($\beta = 0.22$, $P < 0.001$) and rejection sensitivity ($\beta = 0.12$, $P < 0.001$). BMI also contributed to greater body image dissatisfaction ($\beta = 0.08$, $P < 0.001$) and rejection sensitivity ($\beta = 0.07$, $P < 0.001$) through heavier perceived weight, leading to more depressive symptoms. **Conclusion:** Depressive symptoms associated with higher BMI are largely driven by individuals' perception of being overweight and the resulting body dissatisfaction and anticipated weight stigma, rather than weight itself. Interventions should, therefore, target weight perception, promote positive body image, and reduce weight-related stigma to mitigate depression risk.

Key words: Body image dissatisfaction, depression, obesity, perceived overweight, rejection sensitivity

INTRODUCTION

Obesity is associated with an increased risk of many noncommunicable diseases, imposing a significant burden on global health.¹ Longitudinal meta-analyses have demonstrated that obesity significantly elevates the risk of developing depression.² Depression, one of the leading causes of disabilities,³ significantly impacts global public health.⁴ The comorbidity of obesity and depression is associated with an increased risk of chronic noncommunicable diseases,⁵ reduced quality of life and physical activity, higher mortality risk, and increased economic costs to society.⁶ Given the high prevalence of obesity⁶ and its negative health implications,

especially when coupled with depression, understanding how obesity contributes to depression has become a critical issue.

Previous review studies⁷ suggested that body image dissatisfaction consistently mediates the relationship between obesity and depression. Indeed, research has demonstrated that body image dissatisfaction mediates the effect of obesity on depression among adults seeking weight loss in the United States,⁸ Hispanic and Asian adolescents,⁹ and middle-aged women.¹⁰ Another aspect of body image – perceived overweight – may also serve as a key mediator between obesity and depression. Studies have found

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a significant mediating effect of perceived overweight on the relationship between body mass index (BMI) and depression in Icelandic adolescents¹¹ and middle-aged Brazilians.¹²

Albano *et al.*¹³ proposed a model emphasizing interpersonal sensitivity in individuals with obesity, suggesting they may experience social rejection due to their appearance. This leads to increased sensitivity to negative social feedback, greater interpersonal stress, and heightened negative emotions. Their study found that individuals with obesity experienced teasing, bullying, interpersonal stress, and a poorer quality of social life more frequently than those of normal weight. However, the study did not analyze the specific negative emotions resulting from interpersonal stress or test the proposed model's pathways. McClure Brenchley and Quinn¹⁴ addressed weight-based rejection sensitivity, finding it linked to increased depressive symptoms over time. Given its potential importance, further research is needed to confirm its mediating role.

A meta-analysis¹⁵ revealed that perceived overweight, rather than objective weight, has a stronger association with depressive symptoms. This underscores the need to expand current research to explore additional variables influencing the perceived overweight–depression relationship. Existing research in this area remains limited, particularly regarding potential mediators. The association between perceived overweight and mental health may be influenced by unhealthy weight control behaviors,¹⁵ such as heightened emphasis on body weight and shape or body image dissatisfaction.¹⁶ Body image dissatisfaction stems from perceived discrepancies between an individual's actual body size and societal ideals.¹⁷ Typically, individuals must first develop a perception of their body size before comparing it to cultural ideals, leading to body image dissatisfaction.

Weight-based rejection sensitivity is a form of anticipated stigma,¹⁴ where individuals expect rejection due to their size or fear experiencing stigmatization in social interactions. Stigma theory¹⁸ posits that the impact of a stigmatized identity depends on an individual's cognitive appraisal and reaction. If individuals strongly perceive themselves as overweight, they may internalize this identity, becoming more sensitive to prejudice and discrimination.¹⁹

According to the “Nutrition and Health Survey in Taiwan, 2017–2020,”²⁰ the prevalence of overweight and obesity in Taiwanese adults is approximately 50%. Despite this rising trend,²⁰ few studies have examined the association between obesity, psychological factors, and depression. Among the elderly, obesity and depression have been found to be negatively correlated,²¹ whereas no significant correlation was found in adults seeking weight loss surgery.²² Peer bullying has been identified as a mediator between BMI and depression in children and adolescents,²³ but few studies have explored these

relationships among obese adults through a psychological mechanism perspective.

Therefore, this study aimed to examine how psychological factors – body image dissatisfaction, perceived overweight, and weight-based rejection sensitivity – mediate the relationship between obesity and depressive symptoms in Taiwanese adults. This study also sought to elucidate potential relationships among these variables and investigate psychological mechanisms underlying obesity-related depression. The study proposed the following hypotheses:

1. BMI is positively correlated with perceived weight and depressive symptoms, whereas perceived weight, weight-based rejection sensitivity, body image dissatisfaction, and depressive symptoms are positively correlated
2. Perceived weight mediates the relationship between BMI and depressive symptoms
3. Body image dissatisfaction and weight-based rejection sensitivity, respectively, mediate the relationship between perceived weight and depressive symptoms
4. Higher BMI leads to stronger perceptions of being overweight, which in turn increases body dissatisfaction (BD) and rejection sensitivity, thereby elevating depressive symptoms.

MATERIALS AND METHODS

Ethical approval statement

The study was conducted in accordance with the Declaration of Helsinki and approved by the Research Ethics Committee of the Department of Psychology at Chung Yuan Christian University (approval No.: REC110051701; approval date: May 17, 2021). Written informed consent was obtained from all participants before they began the survey.

Settings and design

This was a cross-sectional study conducted in Taiwan. Recruitment and data collection were carried out online. The study targeted two groups: University students from a private university in northern Taiwan and community residents. Participants completed an electronic questionnaire through an online survey link. On the first page, study instructions were provided, and clicking the “Continue” button indicated informed consent. University students were recruited during or after class and were offered class credit as an incentive. Community residents were invited through social media and were offered a chance to win a convenience store gift card.

Participants

A total of 655 individuals began the survey; after screening, 607 cases were retained (291 students, 316 community

residents; 196 men, 411 women). Inclusion criteria were age 18–65 years and ability to complete an online Chinese questionnaire. Exclusion criteria were age >65 years (3 excluded), a history of diagnosed emotional disorder or severe mental illness (41 excluded), and duplicate responses (4 excluded).

Measures

The following self-report instruments were administered online:

1. Sociodemographic questionnaire: We designed a self-reported sociodemographic questionnaire to collect data on gender, age, weight, height, medical history, and the age of first overweight onset. BMI was calculated using the formula: Weight (kg)/height² (m²). Based on Taiwanese standards,²⁴ BMI was categorized as follows: Underweight (<18.5), healthy weight (18.5 ≤ BMI <24), overweight (24 ≤ BMI <27), and obese (≥27). The age of first being overweight is categorized as “preschool,” “lower grades of elementary school,” “upper grades of elementary school,” “junior high school,” “high school,” “after adulthood,” and “never,” forming a seven-point scale. For analysis, these categories were reverse-coded from 6 to 0, where 6 represented preschool and 0 represented never being overweight.
2. Beck Depression Inventory-II, Chinese version (BDI-II): The Chinese version of BDI-II²⁵ was employed to assess depressive symptoms over the past 2 weeks. The higher the total score on the scale, the more severe the depressive symptoms. In this study, the BDI-II exhibited excellent internal consistency ($\alpha = 0.93$).
3. Multidimensional body-self relations questionnaire – Self-classified weight subscale (MBSRQ-SCW): The SCW subscale of the Chinese version of MBSRQ²⁶ was utilized to measure perceived weight. This subscale consists of 2 items that assess subjects’ perception and classification of their own weight, using a five-point scale (1 = “very underweight” to 5 = “very overweight”). The total score is calculated by averaging the scores of the two items. In our study, this subscale demonstrated strong internal consistency ($\alpha = 0.89$).
4. Eating Disorder Inventory (EDI) – BD subscale: The BD subscale from the Chinese version of EDI²⁷ was adopted to measure dissatisfaction with body image. The scale score is the sum of all item scores. Higher scores indicate greater BD. Responses are rated on a six-point scale (0 = “never” to 5 = “always”). In our study, the subscale exhibited strong internal consistency ($\alpha = 0.89$).
5. Weight-based Rejection Sensitivity Scale (WBRSS): The WBRSS¹⁴ is a 16-item scale measuring sensitivity

to weight-related rejection. Each item consists of two subquestions: (1) Anxiety about potential rejection in a given interpersonal scenario. (2) Expectation of rejection in the same situation. Responses are rated on a six-point Likert scale (1 = very unconcerned/unlikely, 6 = very concerned/likely), with total scores reflecting overall weight-related rejection sensitivity. The scale has demonstrated strong reliability and validity.¹⁴ We translated the scale into Chinese, and in our sample, it demonstrated excellent internal consistency ($\alpha = 0.96$).

Statistical analysis used

All statistical analyses were conducted using Jamovi 2.5.²⁸ Descriptive statistics (means, standard deviations, and percentages) were calculated, and correlation tests were conducted to examine the relationships among the study variables. Regression mediation analysis with bootstrapping (5000 iterations) was used to test: (1) the mediating effect of perceived weight on BMI and depressive symptoms, and (2) the mediating effects of body image dissatisfaction and weight-based rejection sensitivity on perceived weight and depressive symptoms. In addition, the paths and model fit of the proposed theoretical model were evaluated.

RESULTS

The sociodemographic characteristics of the participants are presented in Table 1. The study included a total of 607 participants (196 males, 411 females). The majority of participants were single (82.0%) and held an undergraduate degree (70.0%). Regarding BMI classification, 58% of participants had a normal body weight (BMI = 18.5–23.99). The means and standard deviations of the study variables are summarized in Table 2.

Correlations among study variables

Table 2 also shows the results of the correlation analysis for each study variable in the entire sample. BMI was significantly and positively correlated with perceived weight, weight-based rejection sensitivity, and body image dissatisfaction. No significant correlation was found between BMI and depressive symptoms. Perceived weight was positively correlated with weight-based rejection sensitivity, body image dissatisfaction, and depressive symptoms. Weight-based rejection sensitivity was positively correlated with both body image dissatisfaction and depressive symptoms. Body image dissatisfaction was significantly and positively correlated with depressive symptoms.

Mediating effect of perceived weight between body mass index and depressive symptoms

The results of the mediation analysis are shown in Table 3. The indirect effect of BMI on depressive symptoms through perceived weight was estimated to be 0.34 ($\beta = 0.14$, $z = 2.78$,

Table 1: Sociodemographic characteristics of study participants

Variables	<i>n</i> (%)
Gender	
Female	411 (68)
Male	196 (32)
Age (years)	
18–29	412 (68)
30–39	81 (13)
40–49	69 (11)
50–59	33 (5)
60–65	12 (2)
Education	
Junior high school	3 (< 1)
Senior high school	93 (15)
Undergraduate	425 (70)
Graduate	86 (14)
Marital status	
Single	496 (82)
Married	100 (16)
Divorced	7 (1)
Widowed	4 (1)
Body sizes	
Underweight (<18.5)	79 (13)
Normal (18.5–23.99)	353 (58)
Overweight (24–26.99)	92 (15)
Obesity (≥ 27)	83 (14)

$P = 0.005$). Controlling for gender, age, and earliest overweight age (model 2), the indirect effect of perceived weight was estimated to be 0.31 ($\beta = 0.12$, $z = 2.3$, $P = 0.022$).

Mediating effect of weight-based rejection sensitivity between perceived weight and depressive symptoms

The results of the mediation analysis are shown in Table 4. The indirect effect of perceived weight on depressive symptoms through the mediation of weight-based rejection sensitivity was significant, with an estimated value of 1.75 ($\beta = 0.15$, $z = 6.91$, $P < 0.001$). Controlling for gender, age, and earliest overweight age (model 2), the estimated value of the indirect effect of weight-based rejection sensitivity was 1.41 ($\beta = 0.12$, $z = 5.6$, $P < 0.001$).

Mediating effect of body image dissatisfaction between perceived weight and depressive symptoms

The results of the mediation analysis are shown in Table 5. Perceived weight could also indirectly affect the depressive symptoms through body image dissatisfaction, with an estimated value of 2.65 ($\beta = 0.22$, $z = 7.86$, $P < 0.001$), indicating that this mediating effect was significant. Controlling for gender, age, and earliest overweight age (model 2), the estimated value of the indirect effect of body image dissatisfaction was 2.63 ($\beta = 0.22$, $z = 7.29$, $P < 0.001$), indicating that body image dissatisfaction had a significant mediating effect.

Path analysis and model fit

We conducted a path analysis according to the theoretical model, using the bootstrapping method (5000 iterations) to examine path coefficients and mediation effects. The initial model showed poor fit; therefore, modifications were made according to the modification indices. The results of the modified model are shown in Table 6, and the path diagram is

Table 2: Description and correlations of clinical characteristics of participants ($n=607$)

	Mean (SD)	BMI	PW	WRS	BD	BDI	Gender	Age	EO
BMI	22.49 (4.19)	–							
PW	3.26 (0.87)	0.78***	–						
WRS	74.01 (32.17)	0.28***	0.34***	–					
BD	23.84 (10.12)	0.36***	0.55***	0.45***	–				
BDI	12.10 (10.37)	0.01	0.08*	0.41***	0.33***	–			
Gender	0.32 (0.47)	0.24***	–0.06	–0.02	–0.32***	–0.04	–		
Age	28.17 (11.55)	0.25***	0.18***	–0.06	–0.12**	–0.19***	0.12**	–	
EO	1.44 (1.95)	0.40***	0.43***	0.30***	0.29***	0.12**	0.04	–0.13**	–

* $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$. BMI=Body mass index, PW=Perceived weight, WRS=Weight-based rejection sensitivity, BD=Body image dissatisfaction, BDI=Depressive symptoms, EO=Earliest overweight age (overweight exposure time)

Table 3: Summary of mediation analysis of perceived weight on body mass index and depressive symptoms (n=607)

	Model 1					Model 2				
	Estimate	β	SE	z	P	Estimate	β	SE	z	P
Indirect effect										
BMI→PW→BDI	0.34	0.14	0.12	2.78	0.005	0.31	0.12	0.13	2.3	0.022
Path										
BMI→PW	0.16	0.78	0.01	30.35	<0.001	0.16	0.76	0.01	28.43	<0.001
PW→BDI	2.13	0.18	0.76	2.79	0.005	1.91	0.16	0.83	2.3	0.021
Direct effect										
BMI→BDI	-0.31	-0.13	0.16	-1.96	0.051	-0.23	-0.09	0.18	-1.29	0.196
Total effect										
BMI→BDI	0.03	0.01	0.1	0.34	0.736	0.08	0.03	0.12	0.68	0.496

In model 2, gender, age and earliest overweight age (overweight exposure time) were statistically controlled. BMI=Body mass index, PW=Perceived weight, BDI=Depressive symptoms, SE=Standard error

Table 4: Summary of mediation analysis of weight-based rejection sensitivity on perceived weight and depressive symptoms (n=607)

	Model 1					Model 2				
	Estimate	β	SE	z	P	Estimate	β	SE	z	P
Indirect effect										
PW→WRS→BDI	1.75	0.15	0.25	6.91	<0.001	1.41	0.12	0.25	5.6	<0.001
Path										
PW→WRS	12.51	0.34	1.41	8.86	<0.001	10.61	0.29	1.6	6.64	<0.001
WRS→BDI	0.14	0.43	0.01	11.03	<0.001	0.13	0.41	0.01	10.44	<0.001
Direct effect										
PW→BDI	-0.77	-0.06	0.47	-1.65	0.098	-0.31	-0.03	0.52	-0.6	0.551
Total effect										
PW→BDI	0.97	-0.08	0.48	2.02	0.044	1.1	0.09	0.54	2.02	0.043

In model 2, gender, age and earliest overweight age (overweight exposure time) were statistically controlled. PW=Perceived weight, WRS=Weight-based rejection sensitivity, BDI=Depressive symptoms, SE=Standard error

shown in Figure 1. $\chi^2(4) = 18.106$ ($P = 0.001$), comparative fit index = 0.989, Tucker–Lewis Index = 0.942, Root Mean Square Error of Approximation = 0.076, standardized root mean square residual = 0.019, indicating that the observed data and the theoretical model had an acceptable fit.

As shown in Table 6, controlling for gender, age, and earliest overweight age, the standardized path coefficient of BMI to perceived weight was 0.78 ($P < 0.001$). The standardized path coefficients of perceived weight to weight-based rejection sensitivity and body image dissatisfaction were 0.29 ($P < 0.001$) and 0.54 ($P < 0.001$), respectively. The standardized path coefficients of weight-based rejection sensitivity and body image dissatisfaction to depressive symptoms were 0.33 ($P < 0.001$) and 0.2 ($P < 0.001$), respectively. In terms of mediation effects, the standardized effect sizes of these multiple indirect effects were

0.07 ($P < 0.001$) and 0.08 ($P < 0.001$), indicating that BMI indirectly influenced depressive symptoms through perceived weight, which simultaneously contributed to increased BD and weight-based rejection sensitivity.

DISCUSSION

The present study revealed a positive correlation between BMI and perceived weight, yet no direct association with depressive symptoms. In contrast, perceived weight, body image dissatisfaction, weight-based rejection sensitivity, and depressive symptoms were all positively intercorrelated. These findings are largely congruent with previous research.^{14,15,29,30} However, the absence of a direct relationship between BMI and depressive symptoms contradicts the results of some recent large-scale studies¹² or meta-analyses.¹⁵ Nevertheless, it aligns

Table 5: Summary of mediation analysis of body image dissatisfaction on perceived weight and depressive symptoms ($n=607$)

	Model 1					Model 2				
	Estimate	β	SE	z	P	Estimate	β	SE	z	P
Indirect effect										
PW→BD→BDI	2.65	0.22	0.34	7.86	<0.001	2.63	0.22	0.36	7.29	<0.001
Path										
PW→BD	6.34	0.55	0.4	16.02	<0.001	6.29	0.54	0.42	15.09	<0.001
BD→BDI	0.42	0.41	0.05	9.01	<0.001	0.42	0.41	0.05	8.33	<0.001
Direct effect										
PW→BDI	-1.68	-0.14	0.54	-3.31	0.002	-1.53	-0.13	0.6	-2.53	0.011
Total effect										
PW→BDI	0.97	0.08	0.48	2.02	0.044	1.1	0.09	0.54	2.02	0.043

In model 2, gender, age and earliest overweight age (overweight exposure time) were statistically controlled. BMI=Body mass index, PW=Perceived weight, WRS=Weight-based rejection sensitivity, BD=Body image dissatisfaction, BDI=Depressive symptoms, SE=Standard error

Table 6: Summary of path analysis of the mediating effects of perceived weight, weight-based rejection sensitivity and body image dissatisfaction on body mass index and depressive symptoms ($n=607$)

	β	SE	z	P
Indirect effect				
BMI→PW→WRS→BDI	0.07	0.02	4.8	<0.001
BMI→PW→BD→BDI	0.08	0.02	4.3	<0.001
Path				
BMI→PW	0.78	0.05	14.78	<0.001
PW→WRS	0.29	0.04	6.57	<0.001
PW→BD	0.54	0.03	15.86	<0.001
WRS→BDI	0.33	0.05	6.27	<0.001
BD→BDI	0.2	0.04	4.65	<0.001
WRS↔BD	0.33	0.03	8.27	<0.001

In every path, gender, age and earliest overweight age (overweight exposure time) were statistically controlled. BMI=Body mass index, PW=Perceived weight, WRS=Weight-based rejection sensitivity, BD=Body image dissatisfaction, BDI=Depressive symptoms, SE=Standard error

with findings from local studies on Taiwanese adolescents.^{23,31} This discrepancy may stem from population heterogeneity,³² as not all individuals with obesity develop depressive symptoms. It is plausible that some individuals are buffered by protective psychosocial or demographic factors,³³ or that the association is subtle and only detectable in large-scale samples.³⁴

Our results further indicated that, after controlling for gender, age, and age of overweight onset, BMI indirectly influenced depressive symptoms through the mediation of perceived weight. This finding, consistent with prior research,^{11,12} suggests that Taiwanese adults may have internalized negative societal stereotypes surrounding obesity, cf.³⁵

Consequently, as objective weight increases, individuals are more likely to perceive themselves as overweight, potentially triggering “social identity threats.”³⁶ These threats may lead individuals to fear social rejection, thereby compromising core psychological needs such as belongingness and acceptance,³⁷ ultimately harming their mental health.

Furthermore, this study demonstrated that perceived weight influenced depressive symptoms through body image dissatisfaction and weight-based rejection sensitivity. These findings expand upon prior research linking perceived overweight to depression,¹⁵ by providing empirical support for these two specific psychosocial mechanisms. In essence, it illuminates *how* the perception of being overweight translates into psychological distress.

Synthesizing these findings, our comprehensive model revealed that BMI influenced depressive symptoms through a serial mediation pathway: a higher perceived weight fostered greater body image dissatisfaction and heightened weight-based rejection sensitivity, which in turn predicted more severe depressive symptoms. This underscores that the critical factor linking overweight to depression is not the objective physical state (BMI) itself, but rather the subjective *perception* and identification of being overweight. As Robinson, Haynes³⁸ proposed, individuals’ identification with their weight status may shape both their self-perception (e.g., internalization of weight stigma) and their anticipation of others’ views (e.g., fear of social rejection). Awareness of one’s overweight status has been associated with poorer mental health, maladaptive eating behaviors or weight control strategies which can paradoxically lead to further weight gain.³⁸ These insights challenge the utility of public health policies that solely emphasize weight awareness, as such approaches may inadvertently exacerbate the psychological issues that hinder effective weight management.³⁹

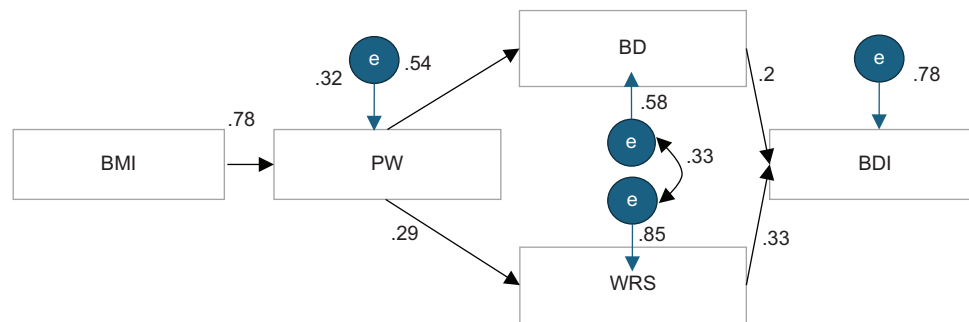


Figure 1: Path diagram of the mediating effects of perceived weight, weight-based rejection sensitivity and body image dissatisfaction on body mass index and depressive symptoms ($n = 607$). BMI = Body mass index, PW = Perceived weight, WRS = Weight-based rejection sensitivity, BD = Body image dissatisfaction, BDI = Depressive symptoms

Finally, while our theoretical model positioned body image dissatisfaction and weight-based rejection sensitivity as parallel outcomes of social identity threat, their significant positive correlation suggested a more intricate relationship. Some scholars posit that body image dissatisfaction may moderate or mediate the impact of social identity threat,⁴⁰ and extensive research shows that a positive body image can be a protective factor that buffers against such threats.³⁹ Conversely, a recent meta-analysis proposed that weight-based rejection sensitivity (or anticipation of stigma) may reinforce an individuals' belief in negative stereotypes, perpetuating the effects of social identity threat.⁴⁰ Thus, the precise, potentially bidirectional, interplay between these constructs warrants further investigation.

Several limitations should be noted when interpreting these results. First, although this study controlled for the age of first overweight onset, this variable relied on self-report and predefined age categories rather than the actual duration of overweight exposure, which may have introduced bias. Second, the cross-sectional design limits our ability to draw causal inferences. Future research should employ longitudinal designs to delineate the causal pathways between overweight and depression across different developmental stages. Third, the relatively modest sample size, primarily comprising university students and community residents, may restrict the generalizability of the findings. Future studies would benefit from including larger, more diverse samples, particularly adolescents and older adults. Finally, this study focused primarily on emotional distress related to perceived overweight. However, previous research suggests that individuals with overweight may also engage in maladaptive eating behaviors or weight control strategies in response to negative emotions, potentially contributing to a self-perpetuating cycle of weight gain.³⁸ Future research should adopt a broader theoretical framework to explore additional behavioral and cognitive pathways linking overweight to depression.

CONCLUSION

This study underscores the central role of perceived overweight in shaping depressive symptoms. Body image dissatisfaction and weight-based rejection sensitivity emerged as key mediators. These findings suggest a need to rethink weight-focused public health strategies, favoring a holistic, stigma-free approach that prioritizes mental well-being and body image. Future studies should further explore the interplay between weight perception, stigma, and psychological health to guide more effective intervention.

Data availability statement

The data that support the findings of this study are available from the corresponding author (J.F.L.) upon reasonable request.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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