The Impact of Weight Stigma on Caloric Consumption

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The present study assessed the influence of exposure to weight stigma on energy intake in both overweight and normal-weight adult women. Seventy-three women (mean age: 31.71 ± 12.72 years), both overweight (*n* = 34) and normal weight (*n* = 39), were randomly assigned to view one of two videos depicting either weight stigmatizing material or neutral material, after which they consumed snacks *ad libitum*. Pre- and post-video measures included blood pressure, attitudes toward overweight individuals, and positive and negative affect. Participants' body weight was measured, as was the number of kilocalories consumed following video exposure. Overweight women who watched the stigmatizing video ate more than three times as many kilocalories as overweight women who watched the neutral video (302.82 vs. 89.00 kcal), and significantly more calories than the normal-weight individuals who watched either the stigmatizing or the neutral video. A two-by-two analysis of covariance revealed that even after adjusting for relevant covariates, there was a significant interaction between video type and weight status in that when overweight, individuals consumed significantly more calories if they were in the stigmatizing condition vs. the neutral condition ($F(1,65) = 4.37$, $P = 0.04$, $\eta^2 = 0.03$). These findings suggest that among overweight women, exposure to weight stigmatizing material may lead to increased caloric consumption. This directly challenges the notion that pressure to lose weight in the form of weight stigma will have a positive, motivating effect on overweight individuals.

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INTRODUCTION

More than two-thirds of Americans over the age of 20 are now overweight and over one-third are obese (1). Yet, despite the fact that the majority of Americans are now overweight, a substantial body of literature has documented weight bias among health-care professionals, teachers, potential employers, family members of obese individuals, and the media (2–7). In fact, the prevalence of perceived weight discrimination has increased by 66% since 1995 (8), and is now on par with rates of racial discrimination, especially toward obese women, who are targeted most frequently (9).

Driving such discrimination and bias are the stereotypes that depict overweight individuals as sloppy, lazy, unmotivated, and less competent, and posit that overweight individuals are solely to blame for their weight status (4). The media is a particularly powerful source of both weight-based stereotypes and negative portrayals of obese individuals. In fact, overweight individuals remain among the last acceptable targets of derogatory humor in both television and film (2). When compared to thin television characters, overweight characters are more likely to be the targets of ridicule and humor, are commonly seen engaging in stereotypical eating behaviors, and are rarely depicted in romantic relationships (5,10). Weight bias in the media is not subtle, and instances of derogatory weight-based humor in television and film can be both verbal and direct (6). For example, a study of 18 popular prime-time television shows revealed a strong positive correlation between a female character's weight and the frequency of derisive comments made toward her by others (11). Audience laughter was also positively correlated with the character's weight, and laughter (both live and canned) was highest when negative comments were directed to the overweight female characters.

Taken together, these findings demonstrate both the prevalence of weight bias in the media and its social acceptability. According to the latest Nielsen census data, the average American now watches over 150 h of television in a given month. The pervasiveness of weight bias coupled with such high rates of television viewing implies that the public is exposed to significant weight bias.

Weight stigma is responsible for a range of negative psychological consequences for those who are targeted. Research demonstrates that individuals who have experienced weight-based stigmatization have increased risk of depression, low self-esteem, anxiety, poor body image, suicidality, and disordered eating (2,4,12). Importantly, many of these studies control for BMI, indicating that it is the stigmatizing experience

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itself, rather than body weight, that is contributing to adverse psychological outcomes.

A number of studies have also demonstrated that weight stigma is associated with unhealthy eating behaviors, such as eating in secret, refusing to diet, loss of control during eating, and binge-eating (12–14) as well as lower motivation to exercise and avoidance of physical activity (15,16), even after controlling for variables such as BMI and body dissatisfaction. Some research suggests that individuals who internalize weight bias and negative stereotypes are more likely to engage in binge-eating and are more likely to report coping with stigma by refusing to diet and consuming more food (17). Thus, weight stigma may augment eating pathology and overeating, and at the same time, attenuate the desire to exercise. Furthermore, a recent study demonstrated that weight stigmatization was associated with greater caloric intake, higher program attrition, lower energy expenditure, less exercise, and less weight loss in a sample of treatment-seeking adults participating in a behavioral weight loss program (18). Thus, it appears that weight stigmatization may increase unhealthy behaviors that contribute to obesity.

Despite increasing evidence linking weight bias to overeating, to our knowledge, no studies have explored this link using actual food intake data. Since questionnaire methods are oftentimes nonconcordant with actual behavior, and underreporting of energy intake is common (19), it is beneficial to examine the effect of weight stigma on *actual*, rather than reported intake.

Therefore, the specific aims of this study were to determine whether exposure to a stigmatizing video (vs. a neutral video) influenced caloric consumption, mood, and blood pressure among both overweight and normal-weight women.

We hypothesized that overweight women exposed to the stigmatizing video would consume the greatest number of kilocalories, have elevated blood pressure and endorse increased negative affect and fat phobia following the video, when compared to the other groups.

METHODS AND PROCEDURES

Participants

Overweight and normal-weight women were recruited for the study from a university and the surrounding community (city population: 124,000). The study was advertised as research exploring "the effects of video clips on mood, blood pressure, and other health indices." Participants were recruited via flyers and online advertisements (e.g., craigslist.com) targeting both overweight and normal-weight women. To meet inclusion criteria, participants were required to be female, at least 18 years of age and have no medical complications that might affect energy consumption (e.g., pregnancy). In total, 102 individuals contacted the researchers about participating. Participants were excluded for the following reasons: Male ($N = 4$), did not attend scheduled appointment ($N = 12$), declined participation upon hearing study description or because of scheduling conflicts ($N = 9$), medical reasons ($N = 3$), and reported a 24-h fast before study initiation ($N = 1$). The final sample consisted of 73 women.

This study focused exclusively on women as previous research has demonstrated that women may be more vulnerable to weight stigma than men (3,9) and women tend to report eating in response to negative affect more frequently than men (20,21).

Procedure

Participants were admitted individually to the laboratory between the hours of 2:30 and 4:30 PM, and were asked to refrain from eating 3 h before study initiation. Participants were told this was to ensure accuracy of blood pressure measurement; however, the true purpose was to standardize hunger among participants. Following informed consent, participants were randomized to either the stigmatizing video or the neutral video condition, both of which were 10 min long. This created four study groups: Group 1: Overweight participants who viewed the stigmatizing video (Overweight/Stigma, $n = 17$), group 2: Normal-weight individuals who watched the stigmatizing video (Normal Weight/Stigma, $n = 20$), group 3: Overweight individuals who viewed the neutral video (Overweight/Neutral, $n = 17$), and group 4: Normal weight individuals who watched the neutral video (Normal Weight/Neutral, $n = 19$). The stigmatizing video consisted of brief clips from popular television and movies that depict overweight and obese women and evoke negative weight-based stereotypes (e.g., clumsy, loud, and lazy). The types of scenes depicted in the video include teasing in the workplace, pratfalls involving obese individuals, and interpersonal instances of weight bias, and reflect some of the most common weight-based stereotypes that have been reported in the literature (2,4,22). The video had been pretested in a prior study investigating the effects of stigmatizing material on antifat attitudes in women (21). The control video consisted of a series of clips depicting neutral scenes (e.g., insurance commercials) and had similarly been pretested.

Following randomization, participants' blood pressure was measured and questionnaires assessing demographics, positive and negative affect, "fat phobia," depression, susceptibility to hunger, disinhibition, and restraint were administered. Prior research examining racial stigmatization has documented an increase in blood pressure following exposure to discriminatory material (23). Thus, blood pressure was assessed to detect possible physiological changes following the exposure to stigmatizing stimuli.

Participants then watched the video. Following the video, blood pressure was measured again. Participants were then given a second set of questionnaires and provided with three bowls of calorie-dense snack foods, which they were invited to consume freely. The snacks were 300 g of plain M&Ms, 300 g of Jelly Belly Jellybeans, and 86 g of SunChips. These foods were chosen because they are all highly palatable and contribute three diverse tastes. Participants were told that the snacks were provided because they had come in to the laboratory fasting. Participants were then left alone in the room to complete the post-video questionnaires and eat the snacks *ad libitum*. At the study conclusion, participants' height and weight was measured and they were debriefed and compensated. The snack bowls were then weighed and number of grams consumed was recorded and converted into kilocalories. This study was approved by the Yale University Human Subjects Committee and all procedures were in accordance with its ethical standards.

Measures

A *Medical condition phone screen* was administered to exclude participants with conditions that may affect energy intake.

A *Demographic Information Questionnaire* assessed age, race, and ethnicity, educational background, and occupation.

Total caloric intake was calculated based on the nutrition information on the packaging of the three snack foods. A food scale was used to weigh the snacks (300 g of M&M's, 300 g of JellyBelly Jellybeans, and 86 g of SunChips) both before and after the participants were allowed access to them. Total number of kilocalories consumed was calculated.

The *Three-Factor Eating Questionnaire* (TFEQ) (24,25) is a 51-item self-report questionnaire that assesses restraint, disinhibition, and susceptibility to hunger. The restraint subscale is calculated from 21 items and assesses both cognitive and behavioral dietary restriction. The disinhibition subscale is derived from 16 items and measures the tendency to overeat, and the susceptibility to hunger subscale is derived from 14 items. Scores ≥14 represent the clinical range for restraint, scores ≥12 indicate the clinical range for disinhibition, and scores ≥11 signify a

clinical range of susceptibility to hunger (24). The TFEQ has been shown to be a valid and reliable instrument (24) with internal consistency coefficients ranging from 0.70 to 0.90 (26). The TFEQ was administered before the video clip. The reliability of the total measure in the present sample was $\alpha = 0.90$, and the reliability of the restraint, disinhibition, and hunger subscales were 0.77, 0.84, and 0.85, respectively.

The *Beck Depression Inventory* (BDI) (27) consists of 21 items that assess depressive symptoms (e.g., *I feel utterly worthless*) on a scale from 0 to 3. Higher scores reflect more severe levels of depression, with a BDI score of ≥20 indicating moderate to severe depression. The BDI has demonstrated high internal consistency in both psychiatric, as well as community samples (mean coefficient = 0.87) (27,28). The BDI has also shown strong test–retest reliability, and high construct validity (27). The BDI was administered before the video clip and the reliability of this measure in the present sample was $\alpha = 0.92$.

The *Fat Phobia Scale* (shortened form) was adapted from the original *Fat Phobia Scale* (29). The shortened version of the *Fat Phobia Scale* lists 14 pairs of adjectives that may be used to describe overweight or obese individuals (e.g., *attractive/unattractive, lazy/industrious*). Participants are asked to indicate how well each adjective describes overweight people on a 5-point likert scale. The *Fat Phobia Scale* has exhibited strong reliability, as well as concurrent validity with the original version (29). Total scores range from 1 to 5; a score of 5 represents the greatest amount of fat phobia. The *Fat Phobia Scale* was administered to participants both before and following the video clips. The reliability of this measure in the present sample was $\alpha = 0.89$.

The *Positive Affect Negative Affect Schedule (PANAS)* (30) is a 20-item scale that measures participants' positive and negative affect along a number of dimensions. Participants are asked to indicate to what extent they feel a certain way (e.g., *alert, enthusiastic, distressed, scared*) on a 5-point likert scale. Both the positive affect and negative affect subscales range from 10 to 50. The PANAS is highly internally consistent and has strong convergent and discriminant validity (30). The PANAS may be used as a trait version or may be used to assess state affect (when prefaced with "right now" or "in this moment"). The PANAS was administered to assess affect both before, and after, the video clips, and thus, the "state" instructions were employed. Cronbach's α of the total measure in the present sample was 0.80; α's = 0.90 and 0.80, for the positive and negative subscales, respectively.

BMI was calculated from height and weight which were both measured by the experimenter at the conclusion of the study using a stadiometer and digital scale.

Blood pressure was assessed using an automatic blood pressure cuff.

Statistical analysis

All analyses were conducted using SPSS for Windows, 17.0 (SPSS, Chicago, IL). All tests were two-tailed; P values ≤0.05 were considered significant. ANOVA's were conducted to assess baseline differences and to evaluate the success of randomization on balancing key variables between groups. All significant differences were followed up with Bonferroni Hochberg *post-hoc* tests.

To maximize statistical power, planned contrasts were performed to evaluate a priori hypotheses about group differences following the videos. These contrasts tested whether overweight participants who watched the stigmatizing video experienced increased negative affect, fat phobia, and blood pressure, and decreased positive affect following the video when compared to the other groups. A 2 × 2 analysis of covariance was used to test the main effects of weight status and video type, as well as the interaction between weight status and video type on caloric consumption while controlling for key covariates.

RESULTS

Sample characteristics

Seventy-four women (mean age 31.71 ± 12.72 years) completed the study. The sample was divided into both overweight (BMI ≥25, $n = 34$) and normal-weight women (18.5 ≤ BMI ≤ 24.9, $n = 40$). The mean BMI of the overweight women was 31.63 ± 6.17, whereas the mean BMI of the normal-weight women was 21.34 ± 1.89. The demographic distribution was 50% white, 27% African American, 14% Asian American, 8% Hispanic, and 1% Native American. One individual in the Normal Weight/Neutral condition revealed she had not eaten anything in the past 24 h due to lack of food security; therefore, her data were excluded from analyses. Another individual from the Normal Weight/Neutral group had a BMI (18.3) that categorized her as underweight. Analyses did not differ when this individual was removed, thus her data are included (see **Table 1** for baseline descriptive statistics of relevant variables).

To assess for outliers, relevant variables were converted to standardized scores. Standardized scores ≥±2.5 were considered outliers (31). Conversion to standardized scores revealed that in the caloric consumption variable, there were four univariate outliers (three in the Overweight/Stigma group, and one in the Overweight/Neutral group) who consumed far more calories than the rest of their respective group. These outliers were transformed according to the convention outlined by Tabachnick and Fidell (31). Their raw scores on caloric consumption were transformed to the next highest score from their respective group plus one unit to bring them closer to the distribution. All subsequent analyses of caloric consumption employ these four outliers' transformed data.

Baseline differences between groups

Between-group differences in baseline variables were assessed to determine relevant variables to control for in subsequent analyses. Significant differences between the four groups were found in BMI, age, depression, disinhibition, systolic blood pressure, diastolic blood pressure, and pulse (see **Table 1**). None of the other variables were found to be significantly different among the groups.

Bonferroni *post-hoc* tests revealed that participants in the Overweight/Neutral group reported greater baseline depression than the Normal Weight/Neutral group ($P = 0.036$), and higher baseline blood pressure than both normal weight groups ($P < 0.01$). The Overweight/Stigma group had significantly higher baseline pulse than the Normal Weight/Neutral group ($P = 0.01$). *Post-hoc* tests did not reveal any other significant baseline differences between groups (see **Table 1**).

Although the groups were randomly assigned and stratified by BMI (two groups were overweight (BMI ≥25 kg/m^2) and two groups were normal weight (BMI <25 kg/m^2)), the Overweight/Stigma group had a higher mean BMI than the Overweight/Neutral group ($P < 0.01$) (see **Table 1**). The two normal weight groups did not differ in mean BMI.

Correlation analyses

Correlations between independent and dependent variables of interest were calculated for overweight and normal weight participants. The full bivariate correlation matrix is available upon request.

Table 1 Baseline descriptive statistics

	Overweight Stigma[a] (*n* = 17)		Normal Weight Stigma[a] (*n* = 20)		Overweight Neutral[b] (*n* = 17)		Normal Weight Neutral[b] (*n* = 19)			
Measure	M	s.d.	M	s.d.	M	s.d.	M	s.d.	*F*	η^2
BMI	34.96	6.56	21.46	2.01	28.29	3.44	21.21	1.81	52.31**	0.69
Age	36.18	12.65	28.45	14.02	36.35	15.05	27.00	4.63	2.99*	0.12
Beck Depression Inventory (total)	10.24	10.11	10.10	8.71	14.06	11.18	5.58	5.05	2.71*	0.11
Three-Factor Eating Questionnaire										
Restraint	9.76	3.82	10.60	4.96	9.94	4.56	10.47	3.73	0.16	0.01
Disinhibition	11.65	4.34	8.05	4.43	11.12	4.51	8.42	4.62	3.06*	0.12
Susceptibility to hunger	8.18	4.71	6.05	4.24	8.29	3.46	6.92	4.12	2.35	0.09
Positive Affect Negative Affect Schedule										
Positive affect subscale (pre)	32.53	10.66	24.90	7.68	27.35	9.64	28.95	6.73	2.45	0.10
Negative affect subscale (pre)	13.88	4.36	13.90	3.97	16.76	5.92	13.63	4.84	1.67	0.07
Fat Phobia (pre)	2.92	0.71	2.52	0.78	2.44	0.61	2.55	0.69	1.59	0.06
Systolic blood pressure (pre)	118.19	9.12	109.20	13.15	129.00	21.21	106.79	10.66	8.96**	0.28
Diastolic blood pressure (pre)	79.06	8.16	72.40	7.25	82.29	12.09	72.11	8.83	5.41**	0.19
Pulse (pre)	82.75	13.14	73.95	14.40	78.53	17.30	67.26	9.57	4.07*	0.15

[a]Stigma = Individuals exposed to the stigmatizing video. [b]Neutral = individuals exposed to the neutral video.
*P value < 0.05; **P value < 0.01.

Impact of video and weight status on blood pressure and mood

Paired samples *t*-tests revealed that all groups except for the Overweight/Stigma group experienced *decreased* negative affect following the video, though only the change observed in the Overweight/Neutral group reached significance ($t(16) = 2.82$ $P = 0.012$). The Overweight/Stigma group, however, experienced an *increase* in negative affect following the video (though this change failed to reach significance). Planned contrasts revealed that the Overweight/Stigma group endorsed a significantly greater increase in negative affect following the video than the Overweight/Neutral group ($t(69) = 2.11$, $P = 0.039$) (see **Figure 1**).

There were no significant differences between any of the groups in change in positive affect, change in systolic or diastolic blood pressure, change in pulse, or change in fat phobia scores from pre-video to post-video.

Impact of video and weight status on total kilocalories consumed

The primary outcome variable was the total number of kilocalories consumed. The Overweight/Stigma group consumed 302.82 ± 69.41 kcal, the Overweight/Neutral group consumed 89.00 ± 21.10 kcal, the Normal Weight/Stigma group consumed 170.40 ± 21.09 and the Normal Weight/Neutral group consumed 144.68 ± 28.77 kcal (see **Figure 2**). The Overweight/Stigma group consumed more than three times as many calories as the Overweight/Neutral group, and significantly more calories than either normal weight group. The Overweight/Neutral group consumed the fewest number of calories, though this value was not significantly different from either normal weight group (see **Figure 2**).

To determine the effect of weight status and video type on number of calories consumed while controlling for relevant covariates, a 2 × 2 analysis of covariance was performed. Since age differed significantly between groups (see **Table 1**), it was entered as a covariate. Additionally, restraint was entered as a covariate as previous studies have found correlations between restraint and energy intake (32). Depression was also included as a covariate as depression has been linked with overeating in women in previous studies (33,34), and depression differed significantly between groups (see **Table 1**).

Despite randomization, the two overweight groups differed in mean BMI, thus BMI was centered and entered as a covariate in the final analyses. Since the groups were randomly assigned, and the difference in BMI between the two overweight groups was due to chance, ANCOVA remained an appropriate method of analysis, despite the violation to one of its assumptions (35). Furthermore, it was expected that the violation would attenuate the impact of the independent variable (group) on the dependent variable (kcal consumed) (35). However, the findings suggest the analysis was robust to this violation, as ANCOVAs conducted both with and without BMI as a covariate produced the same results. Thus, age, restraint, depression, and BMI were all entered as covariates into the final model (see **Table 2**).

The ANCOVA revealed a significant main effect of video type on caloric consumption, in that those in the stigmatizing condition, collapsed across weight status, consumed more calories than those in the neutral condition ($F(1,65) = 7.89$, $P = 0.007$, $\eta^2 = 0.05$). There was no main effect of weight status on caloric consumption ($F(1,65) = 0.786$, $P = 0.38$, $\eta^2 = 0.004$), and age was the only significant covariate in the model ($F(1,65) = 7.12$, $P = 0.01$, $\eta^2 = 0.04$) though age did not interact significantly with

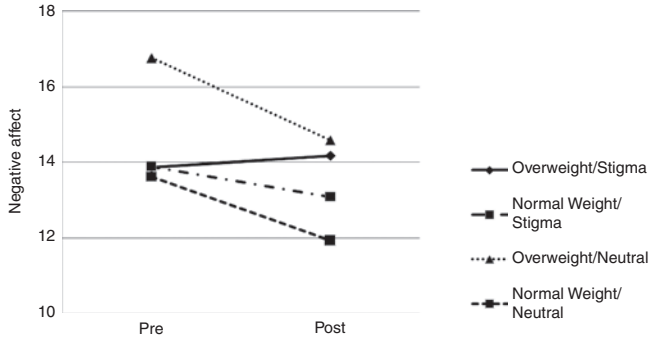

Figure 1 Change in negative affect from pre-video to post-video.

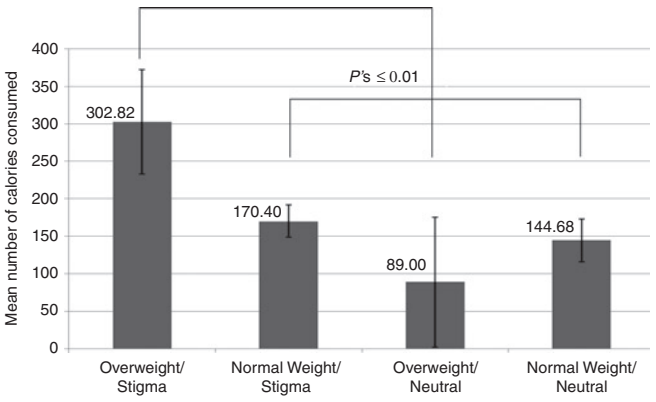

Figure 2 Total calories consumed by group (unadjusted means).

Table 2 Analysis of covariance assessing caloric consumption

	F	*P*	η^2
BMI centered	0.019	0.890	0.00
Age	7.115	0.010	0.04
Restraint	0.246	0.621	0.00
Depression	0.119	0.731	0.00
Weight status[a]	0.786	0.379	0.01
Video type[b]	7.886	0.007	0.05
Weight status × video type[c]	4.366	0.041	0.03

Adjusted $R^2 = 0.162$.
[a]Main effect of weight status (overweight: BMI ≥25; normal weight: BMI ≤24.9). [b]Main effect of video type (stigma video; neutral video). [c]Interaction of weight status by video type.

either video condition nor weight status on caloric consumption. In accordance with our hypothesis, there was a significant weight status by video type interaction; when in the stigmatizing condition, individuals consumed significantly more calories if they were overweight ($F(1,65) = 4.37$, $P = 0.041$, $\eta^2 = 0.03$).

DISCUSSION

This study found a significant relationship between exposure to weight-based stigma and energy consumption among overweight women above and beyond the effects of BMI and other relevant covariates (see **Table 2**). Overweight women who watched a video consisting of negative weight-based stereotypes consumed more than three times the calories of overweight women who watched an emotionally neutral video, and significantly more calories than the normal weight groups. Overweight women who watched the neutral video consumed the fewest number of calories of any group (see **Figure 2**).

The videos had no impact on change in positive affect, fat phobia, or blood pressure among the four groups. The lack of impact of the video on blood pressure may be accounted for by methodological issues. Baseline blood pressure was assessed at the beginning of the study immediately after participants had walked up a flight of stairs to enter the laboratory, which may have attenuated the impact of the videos on blood pressure. Fat phobia scores decreased slightly among all four groups from pre-video to post, though not significantly so, perhaps due to demand characteristics. Interestingly, the Overweight/Stigma group presented with the highest baseline Fat Phobia scores as well as the highest post-video Fat Phobia scores compared to any other group, though these differences were nonsignificant.

More work is needed to clarify possible explanations for the increased caloric consumption observed among the Overweight/Stigma group. One explanation could be attributed to the difference in BMI among the overweight groups; perhaps the most overweight individuals (who happened to be in the stigma group) consumed the most calories. However, this explanation seems unlikely given that the two overweight groups still differed significantly in their caloric intake after holding BMI constant.

Some researchers have proposed that individuals engage in overeating as a means of escaping self-awareness and aversive affect (known as Escape Theory (35)). However, as negative affect did not increase significantly from pre-video to post-video in the Overweight/Stigma group, Escape Theory may not fully account for the results.

There are several limitations to the present study. Food preferences of participants were not assessed and it is possible that some individuals may have disliked the foods provided. Participants were not timed while they completed the post-video questionnaires. As such, analyses did not take into account the amount of time that participants were exposed to the foods. Hunger was not assessed at the time of study initiation to prevent suspicion that food intake was being measured. Though all participants fasted for 3 h prior, it is possible that the overweight participants felt hungrier than their normal weight peers. However, research shows there may be no reason to expect this difference (36). Though the content of the stigmatizing video reflected clear examples of weight bias commonly reported in the literature (2,4,22), participants were not asked if they found the video to be stigmatizing. Further research is necessary to elucidate the exact mechanism responsible for the increased caloric consumption observed in the Overweight/Stigma group, especially in light of the fact that neither negative affect nor blood pressure increased significantly among this group. Since participants completed questionnaires regarding mood and affect while consuming the snack foods, it is possible that certain questionnaires may have exacerbated or attenuated the desire to eat. However, since this portion of the study was

standardized across all four conditions, it is more likely that the differences observed in consumption can be attributed to the video. The study included only women; additional research is needed to determine whether the present findings can be replicated in larger and more diverse samples. The cross-sectional nature of this study prevents assessment of the impact of weight-stigmatization on food intake over time.

Our findings extend beyond previous studies employing self-report by measuring actual energy intake. Our findings show that exposure to weight stigmatizing material led to dramatically greater caloric consumption among overweight individuals. These findings corroborate recent research indicating that weight stigmatization may increase vulnerability to overeating (12,13,17). Longitudinal research is required to clarify the relationship between long-term exposure to weight stigma and potential weight gain.

In light of the present findings, efforts to reduce the prevalence and acceptability of weight bias in the media are warranted. Campaigns to increase public awareness of weight bias in the media may be useful, as would efforts to develop guidelines to ensure that all persons, regardless of their body weight, are portrayed without bias. It will be especially important to portray obese persons in ways that challenge common negative weight-based stereotypes, and to avoid stigmatizing and pejorative portrayals of overweight and obese individuals in television and film.

Our findings have implications for providers working with overweight patients in clinical practice. Healthcare providers should be aware that exposure to weight bias may lead to increased energy intake, and that the media is a particularly pronounced source of weight bias. Addressing the barrage of weight stigmatization that obese individuals face, and discussing appropriate coping strategies, may serve as a useful clinical tool to increase self-esteem, help patients challenge weight-based stereotypes, and potentially reduce maladaptive eating patterns.

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DISCLOSURE

The authors declared no conflict of interest.

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