

The Physical and Mental Repercussions of Weight Stigma

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ABSTRACT

Weight stigma, or sizeism, is prejudice and discrimination against an individual based on their weight. Sizeism must be addressed due to its extreme severity and misconceptions. Body dysmorphic disorder, depression, anxiety, eating disorders, and other mental disorders stem from weight stigma. Two extensive studies uncovered the prominence of body shaming. First, an experiment called “The Impact of Weight Stigma on Caloric Consumption” by Natasha Schvey et al. involved 73 women of varying weights who were randomly assigned to either a control group (exposed to regular advertisements) or an experimental group (exposed to fat-shaming content). Both groups were given access to snack bowls and participants were provided with questionnaires. The women in the overweight/stigma group consumed three times more calories than the normal weight/neutral group. Additionally, women in the overweight/neutral group consumed the least amount of calories among all groups. The second experiment, labeled “Unpacking the psychological weight of weight stigma: A rejection-expectation pathway” by Blodorn et al., required 84 females and 78 males to give a speech while either audio or video recording. There was a positive correlation between BMI and rejection expectations among women in the experimental group. Incorporating such findings into legislation in the workforce, measures in schools, and social movements will promote society’s betterment. Psychologists may also be able to use this information to understand how sizeism translates to defense mechanisms, mental disorders, and self-efficacy, and how it has become prevalent due to the just-world phenomenon.

Topic Introduction

People worldwide are amenable to unconsciously judging an individual based on their appearance. Weight and body size have been employed ubiquitously to stereotype populations worldwide, dragging society into an illimitable cycle of weight stigma and sizeism. Weight stigma is the bias against an individual based on the sole factor of their body; sizeism is discrimination enforced on the basis of one’s weight or size. While the true consequences of body shaming have been commonly neglected, a study in the U.K. by the Mental Health Foundation reported that 20% of adults have experienced sizeism in the last year and 34% felt extreme sadness pertaining to such stigma. Additionally, 13% of adults admitted to suicidal thoughts stemming from weight stigma, and 21% of adults said advertisements led them to severe apprehension regarding their bodies (Body image report - Executive Summary, 2023). Contrary to the pervasive belief that body shaming “helps people become healthier,” the reality remains that it presents calamitous outcomes. Weight stigma has been proven to greatly increase an individual’s risk of substance abuse and the likelihood of suicide. The derivation of the issue is the lack of knowledge pertaining to its impacts. While many forms of discrimination are illegal, sizeism is not. Michigan is the only state that formally bans weight discrimination in the workforce, leaving those of higher weight vulnerable to injustice (Siegel, 2021). Stigma is derived from the credence that those with a larger body are weak and without discipline. Victims often shy away from seeking help, claiming that physicians bully and blame them for overeating (people who are overweight are seldom diagnosed with anorexia or bulimia and

face reimbursement issues as a result of this stigma). Sadly, body size is a main source of humor in the entertainment industry, explaining why the anxiety associated with sizeism is extensive and worldwide. Social media, perception, cultural factors, health issues, gender, and sexuality are also keen contributors to this universal enigma. For instance, Western cultures present the norm that smaller bodies are better, and television demonstrates that those with smaller bodies receive more benefits, contributing to increased sizeism and more personal consequences associated with weight stigma. Conversely, poorer countries have a much higher poverty rate and being of a higher weight is preferred rather than starving and losing a lot of weight. Furthermore, women and gay people have been key targets of body shaming (Abrams, 2022).

Significance

Sizeism, or weight stigma is an external pressure regarding someone's weight that greatly affects their mental wellbeing. It is imperative to study and conduct research on sizeism because of a prejudice that has been held for centuries. Attractiveness bias has been present for centuries and it remains crucial that its consequences are known because they hold extreme severity. Sizeism has especially been an underlying characteristic in Americans' individualistic culture and has provided a pathway to numerous deaths due to mental illness. Moreover, weight-based bullying has been classified as the most common form of bullying. The rationale behind discrimination arises from myths centered around sizeism and the consensus that its results are superficial; in actuality, it is a significant source of mental disorders: general anxiety disorder, body dysmorphic disorder, severe eating disorders, and anxiety, to name a few. Research and evidence can hopefully help more become aware and make a conscious effort to undo the bias.

Study 1

Research Methods

The experiment "The Impact of Weight Stigma on Caloric Consumption" by Natasha A. Schvey, Rebecca M. Puhl, and Kelly D. Brownell, involved a random sample of 73 women of varying weights and races randomly assigned to a control or experimental group. The control group watched regular commercials and the experimental group watched fat-shaming commercials that portrayed individuals who were overweight in a derogatory light. Participants were instructed to come to the experiment without eating. Snack bowls were laid out for both groups and the experimenters measured the caloric intake after both groups watched the videos. The study was completed from 2:30 p.m. to 4:30 p.m.; the videos themselves were each 10 minutes long. Before the experiment was conducted, blood pressure was measured and participants had to answer questions about their race, depression, fatphobia, and hunger. When they were given the second set of questions, they were also given the bowls of snacks; they were told they were given the snacks just because they had not eaten at all that day. In the end, their height, weight, and kilocalories (converted from the snacks) were measured, and debriefing was completed (A. Schvey et al., 2011).

An experiment would work best for this topic of the impact of weight stigma because its results would allow one to infer that weight stigma is the cause of negative psychological impacts and increases caloric consumption. In reality, there were four groups: the first consisted of overweight women who were watching the fat-shaming videos; the second was the overweight women watching the regular videos; the third was the normal-weight women watching the fat-shaming videos; and the fourth was the normal-weight women watching the regular videos. The independent variable was the type of video shown (stigma-related or neutral); the dependent variable was the amount of calories consumed. Possible confounding variables were an individual's appetite or previous encounters with stigma. Additionally, there was no certain operational definition; the only

component was whether the experimental group (stigma videos) would consume more calories than the control group (neutral videos) there may have been a prediction of the amount of calories they would perceive would be consumed (A. Schvey et al., 2011).

Multiple measures were conducted in accordance with the experimental procedure. A medical condition phone screen was utilized to ensure that all the participants in the study did not have any interfering health conditions. Participants were also requested to answer a couple of questionnaires, such as a demographic information questionnaire (information related to race, age, education, and occupation), the three-factor eating questionnaire (51 questions measuring restraint, disinhibition, and susceptibility to hunger), and the Beck Depression Inventory (21 questions with a scale from 0 to 3 to evaluate symptoms in relation to depression). Additionally, certain questionnaires were administered before and after the videos. Participants had to answer the Fat Phobia Scale (14 pairs of adjectives to describe overweight or obese individuals) and the Positive Affect Negative Affect Schedule (20 questions to evaluate how the individuals felt on a 5-point Likert scale). Each participant's caloric intake out of 300g of M&Ms, 300g of Jellybeans, and 86g of Sun Chips was measured. Furthermore, the experimenters also took note of each participant's BMI and blood pressure (A. Schvey et al., 2011).

Limitations to Research

The most prominent limitation of this research study is that it was performed solely on females and there was no perspective on how sizeism influences males. This restricts generalizability as the findings cannot apply to how weight stigma affects all individuals as there are multiple men who face repercussions as a result of sizeism; this study does not touch upon how sociocultural factors affect the caloric consumption of males. The study simply involved participants who were overweight or of normal weight; it failed to take into consideration the response to the stigma of individuals who are underweight, as many of them are often victims of dangerous disorders such as anorexia. If the experiment did include participants who were underweight, it may have provided insight into the causes behind certain eating disorders. Such a limitation also prohibits generalizability to the public because it does not take into account all individuals. Moreover, food preferences were not taken into account, resulting in the presence of a confounding variable as it could have led more people to eat because they liked the food, while others may have felt the pressure from the weight stigma and experienced extreme hunger, yet did not eat due to dislike of the snack options. This means that the experimenters could not always deduce that the amount of food eaten was only derived from the stigma in the video rather than their preferences. When participants' blood pressure was initially measured, they had just climbed a flight of stairs, introducing the possibility of the data being skewed. Finally, the overweight/stigma group had a higher average BMI when compared to the overweight/neutral group, despite being randomly assigned.

Results

Women who were overweight and watched the stigmatizing content consumed three times as many snacks when compared to the amount of food consumed by women of normal weight exposed to neutral content. This study depicted a significant relationship between exposure to weight-based stigma and caloric consumption among overweight women (while taking BMI and emotional factors into consideration). Contrary to popular belief, women who were overweight and watched the regular video consumed the least amount of calories among all groups, meaning that people of higher weight do not necessarily consume more calories. Surprisingly, there was no pervasive impact on positive affect, fatphobia, or blood pressure. There was a minute subsidence of fat phobia scores in all groups over the course of the experiment. The overweight group presented with stigmatizing clips had the highest baseline fat phobia scores as well as the highest post-video fat phobia scores. To analyze outliers, variables were converted to standardized scores. There proved to be four outliers for the

caloric consumption variable, all of which were overweight women; three of those watched the degrading videos. Post-hoc tests illustrated that in the neutral groups, the overweight individuals had higher baseline depression and higher baseline blood pressure than the normal-weight group. The overweight group that watched the stigma clips had a noticeably higher baseline pulse than the normal weight/neutral group. Moreover, the two normal weight groups had similar means for the measured BMI (A. Schvey et al., 2011).

Study 2

Research Methods

In the experimental study “Unpacking the psychological weight of weight stigma: A rejection-expectation pathway” by Alison Blodorn, Brenda Major, Jeffrey Hunger, and Carol Miller, the guiding hypothesis was that the negative impacts of weight stigma would lead to higher expectations of social rejection. Males and females of differing weights were told to talk about why they would make a good partner; one group was told they would just be heard and the other was told they would be seen in a video recording. The study consisted of 162 college students, 84 females and 78 males, aged 18 to 29. 22 of the participants claimed to be in a serious relationship. 1.9% of the participants were labeled as underweight, 48.4% were average weight, 24.2% were overweight, and 24.8% were obese. The entrants were informed that some of the others involved in the experiment were randomly selected as evaluators (there were no actual evaluators) who would be provided with a picture, demographic information, and information regarding their potential interests. Some of the recording participants were directed to create a videotape, and others were told to send their speech using an audiotape. They were allocated three minutes to prepare their speech after predicting their likelihood of rejection. Then, they gave their 5-minute speech accordingly (Blodorn et al., 2016).

The advantage of conducting an experimental study to prove this hypothesis is that they can determine that stigma increases people’s expectations of rejection in a controlled and regulated environment. The independent variable was the type of recording participants were told they would have to do (audio or video). Similarly, the dependent variable was the participant’s expectation of rejection. Possible confounding variables include previous rejection and the entrant’s self-esteem (Blodorn et al., 2016).

Measures relative to the conduct of this experiment include the Rosenberg Self-Esteem Scale, which appraised the impact of a weight-based threat on the expectation of rejection in terms of consciousness, self-esteem, and other factors. A larger BMI was negatively correlated with lower trait self-esteem. Their BMI was evaluated along with the participants’ perceived weight (they also reported it on a scale with 1 being extremely underweight and 7 being overweight). BMI was also calculated following the experiment. The experimenters assessed the participants’ rejection expectations by utilizing a 7-point scale, with 7 indicating extreme fear of being rejected; a similar scale indicated self-consciousness, anxiety, and discomfort. A Stroop test was used to take into account executive functioning; the participants were told to recognize the color of the words of the same or different color that appeared on the screen with speed. Participants also completed the social self-esteem and appearance self-esteem evaluations: they had to rate the truth of the presented sentences out of 5 (meaning extremely true), both of which were highly correlated based on weight. Furthermore, the speeches were coded; the coders (5 females and 3 males unknown to the circumstances) explained their attraction to the speakers upon listening to 1-minute clips. They also examined how self-conscious and anxious they perceived the speakers to be. Another measure was the Linguistic Inquiry and Word Count program, which aided in determining verbal signals that they were stressed. After the tests and being weighed upon permission for the BMI, a debriefing was conducted (Blodorn et al., 2016).

Limitations to Research

This study lacked the presence of limitations and was planned and executed efficiently. However, a possible limitation is that many of the results were determined by how the participants rated their own emotions. This may be immensely subjective and can depend on other factors - the quality of their day, future deadlines, and more. They may also have answered untruthfully and based on the social desirability effect (participants may have felt obliged to make themselves seem more likable rather than portraying their true emotions). Even though participants were weighed, none were told that their weight would be a criterion for being selected. If researchers had told that to participants (right before they debriefed to limit negative impacts), they might have gained insight into how blatant stigma impacts individuals (Blodorn et al., 2016).

Results

Women who were overweight and gave their speech knowing they would be visible to a potential interest had greater blood pressure reactivity, increased stress, and lower executive control. The attraction ratings were significantly higher among women. Any inferred correlation applied only to females; males demonstrated no substantial relationship based on the circumstances. The connections elaborated on will only be representative of findings among females. Body mass index was found to positively correlate with their expectation of rejection when the women were asked to record a video of themselves. The BMI presented no correlation to the rejection expectation when simply asked to provide an audio recording. Oppositely, women with a lower BMI had a greater fear of rejection when they had to record an audio. BMI was strongly related to interference in their Stroop test (greater BMI yielded lower executive function) only when asked for a video recording. Video conditions meant that a higher BMI led an individual to present lower self-esteem and more self-consciousness. Additionally, a moderated mediation analysis with Hayes' Process Macro 8 model was used to further study how weight stigma led to rejection expectations among women, BMI foretold the dependent measures relative to rejection expectations. Higher self-esteem depicted lower stress; females with a higher BMI reported more stress. To elaborate on the speech coding tests, a higher BMI predicted higher anxiety (in video recording situations). Surprisingly, there were no evident signs of verbal disfluency (Blodorn et al., 2016).

Comparison

The two studies depicted striking resemblances. Prominently, both involved four groups: an overweight group with a weight-related threat, an overweight group lacking a weight-based threat, a normal-weight group exposed to a weight-related threat, and a normal-weight group without an evident body-shaming threat. The experiments, while not dependent on BMI, took account of the participants' BMI to provide insight into how sizeism impacts weight gain. Questionnaires were a common measure for both studies; the questions explained the mental processes in response to weight stigma. Questionnaires were acquired before and after the experiment to determine the direct impacts of weight stigma. As far as results were concerned, both depicted that individuals of higher weight who experienced sizeism or the risk of sizeism faced negative repercussions (negative feelings about themselves, much greater calorie intake, expectation of rejection, etc.).

Concerning differences, the study on social rejection measured an emotional aspect of weight-based stigma, while the study on caloric consumption used a more physical approach to determine how sizeism affects an individual's calorie intake and health conditions. Moreover, the social rejection study did consist of male and underweight participants, meaning that it would have greater generalizability. The social rejection study portrayed that those with lower BMI have increased confidence when they understand that they are seen, and the caloric consumption study did not provide much insight into those with lower BMI other than a comparison.

Contrastingly, the caloric consumption experiment used more baseline findings to progress the study and provide more insight. It also contained outliers absent in the rejection experiment.

Application

Such research may be the driving force behind the passage of legislation to eliminate body-size bias. This would mean that the workforce would no longer be permitted to discriminate against an individual or provide them with reduced opportunities based on their weight. This would reduce the injustice marked in society and hopefully compensate for the reduced self-esteem in individuals of greater weight as a result of less equality and reduced opportunities. This would also help reduce mental disorders such as body dysmorphic disorder or eating disorders, as those populations no longer feel like society is acting out based on their looks. Additionally, since it has been proven that the highest form of bullying is derived from sizeism, understanding the utter consequences of the prejudice will allow schools to enforce more policies and increase involvement to ensure students grow up in a more trusted environment beginning in their childhood. Childhood is a critical period for a person to understand how the world around them functions. Schools' involvement, such as constant reinforcement of equality practices, information courses against stigmatization, stricter punishment, and regulations against bullying, allow students to feel safer and not be targeted based on their weight. Furthermore, people tend to stand stronger as a group rather than alone, making the scientifically proven effects of sizeism more known may also lead to social actions to attain equality. Celebrities may promote messages of justice; even people who are deemed "conventionally thin" may stand up against sizeism. Such a message's impact would be huge in evoking empathy in the public to make a conscious effort and understand that there are real people behind bodies truly impacted by the humiliation.

Relevance

While analyzing the psychological aspect of the impact of weight stigma, many psychology-related terms derive conclusions. For instance, defense mechanisms were prominent, especially in the caloric consumption experiment. Defense mechanisms are defined as tactics that reduce or redirect anxiety by distracting one from reality. Individuals who viewed the degrading content consumed more calories. Excessive or overeating is often a defense mechanism as individuals attempt to distract themselves from body shaming. Frequently, following the period of overeating, people are dragged into a state of guilt, establishing focus on the guilt takes their mind off the weight stigma (in the rejection experiment, they may use eating or even another activity excessively to take their mind off the fact that they think they will continually be rejected). Multiple mental disorders also identify with the idea of weight stigma, both studies describe such a relationship, namely, body dysmorphic disorder. Body dysmorphia is an obsessive-compulsive disorder marked by an individual's obsession with a physical flaw. The calorie intake experiment proves that sizeism often results in higher calorie intake which often leads to weight gain and based on what the stigma can do to someone's mental state, they may be extremely disturbed and upset by the weight gain. Similarly, eating disorders also evidently connect to this topic. Eating disorders are mental disorders defined by abnormal eating patterns. The calorie intake experiment illustrates that increased stigma results in increased eating, which may lead to bulimia (and the excessive guilt would cause them to purge) or binge eating. Some individuals may even be so impacted that they stop eating, eat much less (anorexia), or become excessively fascinated with working out. The rejection experiment demonstrates that people who are overweight think they are more likely to be rejected (which may also cause unhealthy eating behaviors). Another concept proving to be crucial is self-efficacy - one's belief that one can achieve their goals. Believing that society perceives people who are overweight in a particular way may result in them losing self-efficacy and the ability to achieve their goal of losing weight because their environment is constantly stigmatizing or

rejecting them. In order to target the stigma, something that may be essential is to relate this to the just-world phenomenon. People who are obese or overweight are often blamed and treated poorly and those responsible for the prejudice or discrimination defend themselves, claiming that “they deserve to be treated that way because they let themselves get fat.” Accepting this idea would be the first step toward attaining equity. Comprehending such concepts allows us to determine the reality of weight stigma and its impacts, to make a conscious effort to reverse stigma, and to find the reasoning behind the impact of societal norms and why many hold a poor self-concept.

Conclusions

In conclusion, the extent of weight stigma’s effect is more than superficial. It provides a dangerous pathway to mental disease and a permanently dented relationship between an individual and themselves. Populations exposed to demeaning messages corresponding with their size lose the will to provide care for themselves in the form of healthy habits, and they continually belittle themselves into expecting that others will treat them incorrectly. Both studies determined that any form of weight-based threat causes one to engage in negative behavior, whether it is excessively eating unhealthy food or internally demeaning themselves. This blatantly contradicts the belief that body shaming in any form can help an individual.

Personal Discussion

We live in a world where conclusions are derived from us in a split second. People judge us based on our face, weight, religion, and ethnicity. While many forms of segregation have been banned, few measures have been taken to enforce more equality for varying body sizes. I, myself, have been a victim of weight-based stigma and have been called fat by classmates in previous years. I am also aware of how common it is for more attractive people to receive advantages and for healthier individuals to be discriminated against. While many aspects of attractiveness are genetic and uncontrollable, people do somewhat have an impact on their size, and if it is not maintained as per societal standards, they receive shame for it. Moreover, people believe that shaming people for their weight may cause them to become slimmer when that has been disproven many times. It was important for me to ensure that throughout the paper I used the term “individuals who were overweight or of normal-weight” rather than overweight or normal-weight individuals. This was because one’s weight does not define them; there is so much more to them than their size concerns.

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