

**THE EFFECTS OF PERPETRATOR SEX AND WEIGHT ON
PUNISHMENT FOR TRANSGRESSIONS**

An Undergraduate Research Scholars Thesis

by

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ABSTRACT

The effects of perpetrator sex and weight on punishment for transgressions. (May 2014)

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Overweight and obese individuals are often considered the last acceptable victims of discrimination. The current study assessed potential legal ramifications of weight discrimination by asking participants to evaluate purported criminal offenders of different body weights. In a between-subject design, undergraduate participants considered various crime scenarios accompanied by pictures of the purported perpetrators. Perpetrators varied in terms of weight (normal weight vs. overweight) and sex (males vs. females). Participants rated the severity of the crimes and assigned a jail sentence and/or fine to each perpetrator to assess the effect of the weight of the perpetrator in a simulated “criminal trial” setting. Controlling for individual differences in disgust sensitivity, a planned contrast test found that females with high BMI were assigned greater sentences than low BMI females, low BMI males, and high BMI males, respectively. The interaction between perpetrator sex and perpetrator BMI was marginally statistically significant. These findings suggest that a perpetrator’s sex and weight may influence the punishment they are thought to observe, with overweight females targeted for particularly harsh punishments.

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CHAPTER I

INTRODUCTION

According to the Centers for Disease Control and Prevention, over one-third of U.S. adults are obese and the medical costs associated with obesity consumed an estimated \$147 billion in 2008 alone (“Overweight and Obesity,” 2012). The serious physical health risk associated with obesity is unusual in that it also carries with it a stigma not associated with most other medical issues. Anti-fat bias (i.e. discrimination against overweight and obese individuals) has been found in healthcare professionals, teachers, potential employers, romantic partners, and family members of overweight and obese individuals (Puhl & Kelly, 2001). Not only can carrying extra weight pose a serious risk to physical health, but the bias and discrimination experienced by overweight or obese individuals can also carry with it emotionally damaging effects (Andreyeva, Puhl, & Borwnell, 2008). This discrimination may also prevent obese and overweight individuals from becoming healthier. In a study of 318 physicians, 23% did not recommend any treatment to their obese patients and 47% found it inconvenient to counsel patients about weight loss (Price, Desmond, Krol, Snyder, & O’Connell, 1987).

Whereas previous research found evidence of medical, professional, and educational discrimination based on weight, the current study explored the possibility of weight bias in perceptions of ethics and accountability for criminal acts. It has been long accepted that more attractive individuals fare better when judged in simulated jury tasks (Efran, 1974; Landy & Aronson, 1969), but weight may play its own unique role in affecting judgments. Recent research found an effect of weight and gender of ‘defendants’ upon ‘jurors’ perceptions of guilt

and responsibility, such that men were significantly more likely to find obese women guilty of a crime than they were to find lean women guilty of the same crime (Schvey, Puhl, Levandoski, & Brownell, 2013).

A gender gap in the application of the anti-fat bias has been observed in several studies, with women often paying a higher price for increased weight. In social, occupational, and medical spheres, Dutton and colleagues (2014) found that women reported experiencing significantly more discrimination than men because of their weight. Specifically, a review from Roehling (1999) found a trend across studies that with increased weight, women were more negatively evaluated than their male peers in the workplace and received lower salaries as their weight increased.

Gender differences exist not only in the recipients of discrimination, but also in the participants (“judges”) and the quality of their responses and judgments. As previously noted in the study by Schvey and colleagues (2013), men’s decisions were significantly impacted by the weight of the person they were judging, but women’s responses were not. An intricate relationship seems to exist between gender and weight discrimination, as judgment based on weight is not merely a factor of salience or internal criticism; whereas women are more critical of their own body image, they also judge the body image of others less harshly than men do (Muth & Cash, 2006).

Gender is not the only individual difference variable that contributes to variation in anti-fat attitudes that presently permeates American culture. Individual differences in disgust sensitivity are also relevant. Obese people have been rated as more disgusting than other social groups,

included drug addicts, politicians, women, and homosexuals (Vartanian, 2010). One prominent model of disgust identified three different domains of disgust, namely pathogen disgust, sexual disgust, and moral disgust (Tyber, Liberman, & Griskevicius, 2009); of these, pathogen disgust appears to be related most strongly to a negative evaluation of obese individuals (Lieberman, Tybur & Latner, 2010; Park, Schaller, & Crandall 2006). Older research evaluating anti-fat bias as a function of an “ideology of blame” also suggested a relationship between moral disgust and anti-fat bias (Crandall, 1994). The current study therefore included a measure of and statistically controlled for individual differences in disgust sensitivity, to assess the extent to which perpetrator weight and sex influenced judgments of guilt above and beyond the contributions of the judges’ sensitivity to disgust.

In the current study, we examined an ethical component of anti-fat bias by testing whether or not individuals suffer more in a situation of moral judgment (i.e., as perpetrators in a hypothetical criminal sentencing) with an increase in weight or differences in sex. Specifically, we hypothesized that the crimes of women with higher Body Mass Index (BMI) would be judged harsher and that these women would receive severer punishments than lower BMI women, low BMI men, and high BMI men. We further expected these differences to manifest particularly among male judges. With better understanding of the underlying causes of discrimination, as well as how it may function differently for men and women, more constructive actions may be taken to prevent this discrimination and its negative effects.

CHAPTER II

METHODS

Participants

291 adults participated in the study. All participants, drawn from the Psychology Subject Pool, were enrolled in undergraduate psychology courses and received credit toward a course requirement for their participation. In a between-subjects design they were randomly assigned to answer one of four digital questionnaires.

Procedure

All participants completed the three domain disgust scale (Tybur, Liberman, & Griskevicius, 2009), the behavior inhibition system and behavioral activation system scale (Carver & White, 1994), anti-fat attitudes (Crandall, 1994), and trait self-control (Tangney, Baumeister, & Boone, 2004) questionnaires before completing the experiment. They were then presented with 16 criminal scenarios and a corresponding picture of the ‘defendant’ and asked to judge the severity of the crime committed and assign what they deemed an appropriate jail sentence length and/or a fine amount. **Please see Figure 1.**

Each participant received one of four sets of defendant pictures — either lower or higher weight females or lower or higher weight males. All purported defendants were Caucasian. Online mug shots were altered using ModiFace’s virtual weight loss software, Weight Mirror, to simulate weight gain or loss. When lowering the defendant’s weight, we aimed for an estimated BMI of 18.5 and when increasing the weight of the defendant, we aimed for an estimated BMI of 26.0.

Responses were analyzed to determine whether or not the differences in weight or gender would affect participant's reactions and judgments to the same criminal scenarios.

Figure 1.



Sample of alleged perpetrator images used in questionnaires. Participants were given 16 crime scenarios accompanied by pictures of either low BMI women (Top left), high BMI women (Top right), low BMI men (Bottom left), or high BMI men (Bottom right).

CHAPTER III

RESULTS

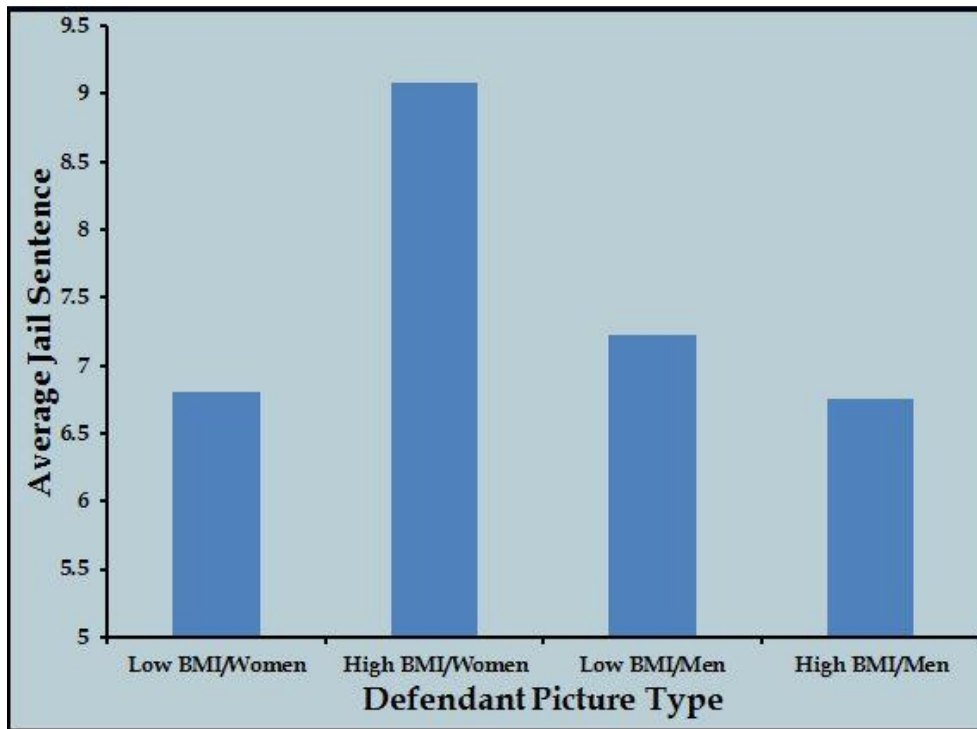
The current sample of participants was highly disgust sensitive ($M = 4.92$ on a 7-point scale from 0 to 6; $SD = 0.93$, $\alpha = .87$). As individuals who are highly disgust sensitive have been found to be harsher in their judgments when evaluating obese individuals (Lieberman, Tybur & Latner, 2010; Park, Schaller, & Crandall 2006), we controlled for disgust sensitivity in all analyses.

Our hypothesis predicted that participants would assign higher jail sentences to high BMI female perpetrators relative to low BMI females, low BMI males, and high BMI males, consistent with previous anti-fat bias research which suggests that women more so than men pay a higher price for higher BMI. We tested this prediction with planned comparisons because our prediction was directional, derived from theory, and specified in advance (Rosenthal, Rosnow, & Rubin, 2000). The planned contrast was significant, as judges assigned females with a high BMI significantly longer sentences ($M = 9.08$, $SD = 9.65$) than females with a low BMI ($M = 6.80$, $SD = 7.35$), males with a low BMI ($M = 7.23$, $SD = 6.61$), or males with a high BMI ($M = 6.76$, $SD = 5.93$), respectively, $t(287) = -2.12$, $p = .035$.

We also used the more conventional perpetrator sex \times perpetrator BMI (High vs. Low) interaction term from a two-way analysis of variance (ANOVA) to test our hypothesis. This interaction was marginally significant, $F(1, 286) = 3.22$, $p = .07$. There was no main effect of participant sex, nor did it interact to predict assignment of jail sentences, $ps > .14$. **Please see Figure 2.**

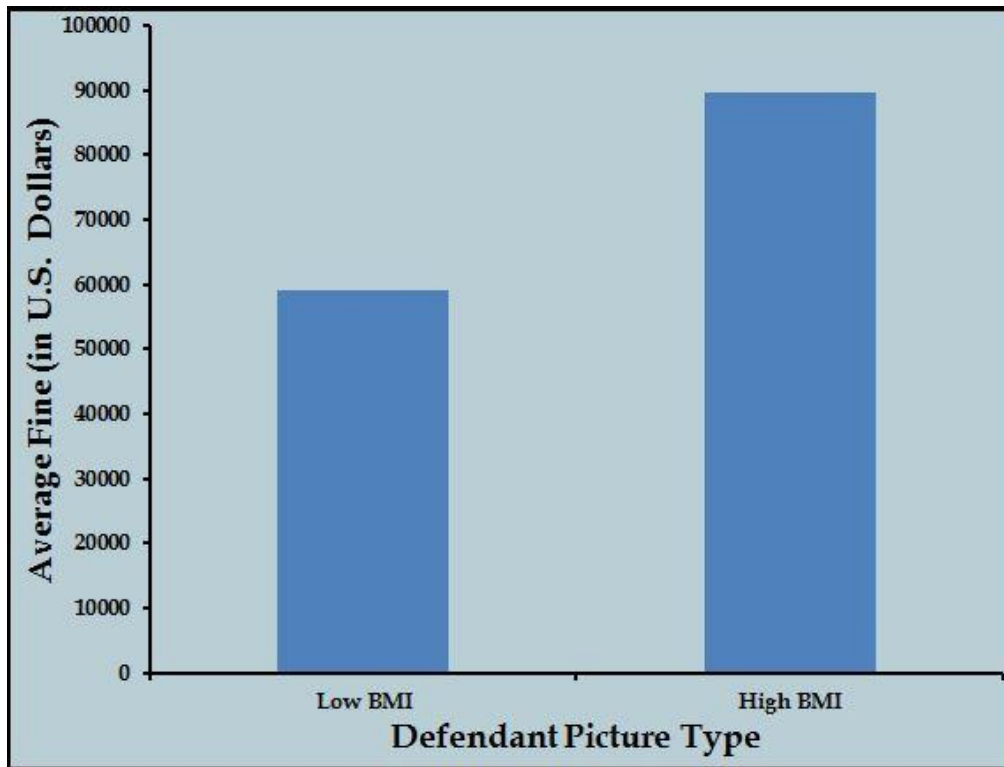
Planned contrasts and two-way ANOVAs on crime severity and fine amounts were non-significant, $ps > .50$. The main effect of perpetrator BMI had an influence on judges' estimated fine amounts, such that high BMI perpetrators ($M = 89700.77$) were assigned greater fines than low BMI perpetrators ($M = 59012.28$), although this effect fell just short of conventional levels of statistical significance, $F(1,275) = 3.44$, $p = .06$. Participant sex did not influence these analyses, $ps > .19$. **Please see Figure 3.**

Figure 2.



Average jail sentences as a function of perpetrator sex and BMI. High BMI women received significantly harsher sentences than the other three groups, $t(287) = -2.12, p = .035$.

Figure 3.



Average fine assignments as a function of perpetrator BMI. High BMI perpetrators received marginally significant larger fines, $F(1,275) = 3.44$, $p = .06$.

CHAPTER IV

DISCUSSION

The current experiment revealed that higher BMI women are judged more harshly as perpetrators in hypothetical criminal sentencing scenarios when compared to low BMI women, low BMI men, and high BMI men. These findings suggest that women may be punished not only for their crimes but also for additional body weight in a trial setting.

As much of the current literature on anti-fat bias has focused on the discrimination towards obese individuals, this current study adds a surprising finding to this body of work. Instead of looking at the difference between normal weight individuals and obese individuals, we only slightly increased and decreased the weight of the alleged perpetrators in our stimulus pictures. A seemingly modest increase in weight for the same woman resulted in almost a three-year increase in jail sentences considered appropriate by participant judges, which is both surprising and alarming given the serious implications for the criminal justice system.

These results, if replicated in real-world settings, may carry lasting implications for women within the criminal justice system. For incarcerated women, weight gain is a serious concern throughout their sentence. Clarke and Waring (2012) found in a two-week period that incarcerated women gain an average of 1.1 pounds each week, with 71 percent of women gaining some weight. If overweight women do indeed face harsher sentences, as the current findings suggest, a vicious cycle may exist in which overweight women receive longer

sentences, leading to more prison-related weight gain and the possibility of negative repercussions in parole sentencing scenarios and increased recidivism rates.

Future research must be conducted to gain a greater understanding of how the observed relationship between perpetrator weight and sex functions in an actual jury setting, and to identify steps to take to deter potentially unjust applications of anti-fat bias in that setting. Also, beyond studying the judgments of undergraduate student participants, an authentic application asking acting judges to complete similar surveys could offer a better understanding of how this phenomenon manifests in the real world. As these findings imply very serious consequences, more research on the function of anti-fat bias within the criminal justice setting is necessary in order to ensure a more just, unbiased system.

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