

Sex Differences in Perceived Weight-Based Employment Discrimination When Weight Discrimination is Illegal

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Abstract The reported study explores sex differences in both overt and subtle forms of perceived weight discrimination in employment using original data from a telephone survey of 1,010 randomly selected residents of Michigan, the only U.S. state with a law prohibiting weight discrimination. Sex differences in the experience of overt forms of weight discrimination (e.g., refusing to hire a person) that have been consistently found in other work and non-work settings were not found in this unique legal context. However, overweight women reported experiencing subtle forms of weight discrimination (e.g., verbal harassment, exclusion from social activities) to a significantly greater extent than men. Implications for employers' discharge of their responsibilities and for policy makers' consideration of greater legal protection against weight discrimination are discussed.

Keywords Weight discrimination · Employer responsibilities

Rising obesity levels and an increasing focus on the potential contribution of employee weight to employers' health care costs has raised concerns that overweight job applicants and employees may experience unfair employment discrimination (Alvarez and Soltis 2006; Roehling et al. 2007). Anecdotal evidence (e.g., Zimmerman et al. 2005), including reported legal cases (e.g., *State Division of Human Rights v. Xerox Corporation* 1985), indicates that some employers are adopting policies and practices aimed at prohibiting or discouraging overweight applicants because of concerns about weight-related health costs, and the results of numerous empirical

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studies provide consistent evidence of weight discrimination throughout the various stages of the employment process, from hiring to termination (Judge and Cable 2011; Puhl and Heuer 2009; Roehling 1999; Sartore and Cunningham 2007). Of particular concern is the differential impact of weight-based employment discrimination on women. It has been widely observed that overweight women experience greater discrimination than overweight men in both employment and non-work settings (e.g., Conley and Glauber 2007; Fikkan and Rothblum 2012), an observation that is supported by research conducted in field settings involving diverse samples of workers (e.g., Judge and Cable 2011; Maranto and Stenoien 2000; Morris 2006), and a recent meta-analysis of relevant laboratory studies (Roehling et al. 2013).

An employers' consideration of job applicants' and employees' weight may involve not only weight discrimination, but also a form of illegal sex discrimination (Schallenkamp et al. 2012), sometimes referred to as a form of "sex plus" discrimination (*Mark v. National Communications Association*, 1999). This occurs if an employer applies stricter weight standards to women than to men. For example, in *Gerdom v. Continental Airlines, Inc.* (1982) the court found that the employers weight restriction program involved illegal disparate treatment sex discrimination because it was designed to only apply to females, and "it was not merely slenderness, but the slenderness of female employees which the employer considered critical" (p. 609). Illegal disparate treatment discrimination was also found in *Frank v. United Airlines* (2000) based on the uncontroverted evidence that the employer's weight policy chose weight maximums for women that generally corresponded to the medium frame category of MetLife's Height and Weight Tables, while choosing more generous weight maximums for men that generally corresponded to MetLife's large frame category. The court concluded: "Because of this consistent difference in treatment of women and men, we conclude that United's weight policy between 1980 and 1994 was facially discriminatory" (p. 854).

Almost 10 years ago, a summary of the empirical research demonstrating significant sex differences in the experience of weight discrimination in employment settings led to the conclusion that "the disparate treatment of women in employment settings based on weight is not merely a theoretical possibility, it is a practical likelihood" (Roehling 2002, p. 186). That conclusion, and the equal opportunity in employment principle (Rawls 1993; Rowan 2000), led to the proposition that employers have an ethical responsibility "to take reasonable steps to prevent foreseeable weight-based disparate treatment of female job applicants and employees" (Roehling 2002, p. 186).

The present study contributes to the weight discrimination in employment literature in two significant ways. First, we explore whether legal context is a potential boundary condition that limits the generalizability of the consistently reported finding that women experience greater weight-based employment discrimination than men (Fikkan and Rothblum 2012). Is the previous, consistent finding that women experience greater weight-based discrimination than men replicated in a field study conducted in a legal jurisdiction that explicitly prohibits weight discrimination? Or, is there evidence that such a legal context may suppress expression of weight bias, reducing or eliminating sex differences in the experience of weight-based employment discrimination? If so, in settings providing significant legal protection against weight discrimination (e.g., legal jurisdictions explicitly prohibiting weight discrimination, workforces covered by collective bargaining agreements), the weight-based disparate treatment of women may not be a "practical likelihood." We investigate these questions by attempting to replicate previous findings regarding sex differences in weight-based employment discrimination in a field setting using survey data and a representative sample of adults from the only U.S. state that has a law explicitly prohibiting weight discrimination in employment, Michigan.

Second, the reported study also extends the weight discrimination literature by examining the extent to which there are sex differences in the *specific forms* of weight-based employment

discrimination that are reported by workers. Specifically, are women more likely to experience subtle, interpersonal forms of weight-based employment discrimination? This investigation contributes to the understanding of the importance of distinguishing between overt or “formal discrimination” (e.g., denying someone a job or promotion based on their sex) and subtler “interpersonal” forms of discrimination (e.g., excluding a person from social interactions because of their sex; King et al. 2011; Singletary and Hebl 2009; Snyder et al. 2010). The results provide employers more specific information about the risk of the weight-based disparate treatment of women in their workplaces, and the specific actions that employers may be ethically obligated to take in light of those risks.

In addition to contributing to the weight discrimination literature and further informing employers concerned about meeting ethical responsibilities, the reported results also have potentially important policy implications. The vast majority of the employees in the United States, and in most industrialized countries, have relatively little or no legal protection against weight-based employment discrimination. While several municipalities have local ordinances prohibiting weight discrimination in employment (e.g., San Francisco, Santa Cruz, Madison Wisconsin), as noted earlier, there are no federal laws explicitly prohibiting weight discrimination, and only Michigan has such a state law. Anti-disability discrimination laws, such as the Americans with Disabilities Act, may provide protection against weight discrimination for individual’s whose weight constitutes a “covered disability” within the meaning of the law in question. However, the circumstance in which an individual’s weight are considered a covered disability are rare (Schallenkamp et al. 2012), and as a result, anti-disability discrimination legislation provides very little protection against the forms of weight discrimination that empirical evidence demonstrates exists in the workplace (Roehling 1999).

The current lack of legal protection has contributed to the growing concern about the unfair treatment of overweight employees, leading to calls for legislation providing greater legal protection against weight-based employment discrimination in the U.S. (e.g., Horner 2005; Morris 2010; Puhl et al. 2008) and some European countries (e.g., Hale 2010). In advocating such legislation it has been argued that because of the connection between sex and weight bias, a law making weight discrimination in employment illegal is necessary to effectively address sex discrimination in the workplace (Griffin 2007; Kubilis 2008). Again, although the present study cannot conclusively establish the causal impact of Michigan’s law on sex differences in the experience of weight discrimination, it provides unique and informative empirical evidence bearing on the validity of that argument.

The remainder of this article is organized in five sections. We begin by briefly discussing the *perceived* discrimination construct, including its relationship to “actual discrimination” and its importance as a distinct subject of study. After a brief discussion of definitional issues, the second section reviews relevant research and formally states the research questions that guided our investigation. The third section describes Michigan’s unique state law prohibiting weight-based employment discrimination. The fourth section describes the phone survey of a representative sample of Michigan adults that provides the data used in our investigation, and reports its results. We conclude by discussing the study’s findings and implications for employers and policy makers.

The Nature and Importance of Perceived Discrimination

Perceived discrimination involves both a perception that one is treated differently based on membership in a group (e.g., race, weight), and the belief that the differential treatment was unfair or unjust (Major et al. 2002). Thus, perceived discrimination involves an attribution to

discrimination, and that attribution may or may not correspond with the objective reality, or “actual discrimination.” Individuals may accurately perceive discrimination when it occurs, they may perceive discrimination when it does not actually occur, or they may fail to perceive discrimination that actually occurs (Harris et al. 2004). Further, there may be differences in sensitivity to environmental cues that make some groups or individuals more likely to make attributions to discrimination than others (Crocker et al. 1998; Operario and Fiske 2001). Nonetheless, a strong, positive correlation between perceived discrimination and actual discrimination is supported by both logic (Hirsh and Lyons 2010) and empirical evidence (e.g., Hampton and Heywood 1993; Leeming and Baruch 1998; Turner and Turner 1975).

In addition to serving as an indicator or proxy for actual discrimination, the study of perceived discrimination is important in its own right. Perceived discrimination predicts key workplace outcomes such as organizational commitment, job satisfaction, work tension, organizational citizenship behavior, and turnover intentions (Blau et al. 2003; Ensher et al. 2001; Lovato, and Khoo 1994; Sanchez and Brock 1996). Perceived discrimination has also been shown to influence career-related decisions, including individuals’ decisions to participate in the labor market (e.g., Goldsmith et al. 2004; Westaby and Braithwaite 2003). Finally, a large and growing body of research indicates that the perception that one has been the victim of discrimination can have significant adverse psychological and physical health outcomes for employees (Lau and Stotzer 2011; Pascoe and Smart Richman 2009; Puhl and Heuer 2010; Tsenkova et al. 2011). For example, Schafer and Ferraro’s (2011) 10 years longitudinal study of 2103 men and women in the U.S. found that perceived weight discrimination significantly increased the health risks of obesity. In summary, given the many potential significant consequences for the well-being of individuals that are associated with feelings of being discriminated against, in addition to actual discrimination, perceived discrimination is an important concern for individual job applicants and employees, employers, and society at large (Demuijnck 2009; Giacalone and Promislo 2010).

Literature Review and Research Questions

Definitions of Overweight and Obesity

The terms overweight and obesity are used somewhat interchangeably in the broader literature addressing issues related to body weight (Friedman and Brownell 1995). Among empirical studies investigating weight discrimination in the workplace, various definitions and measures of obesity have been used (Roehling 1999). In this article, the term *overweight* is used to refer to all forms of excess body weight and fat. This definition of overweight includes all forms of obesity and levels of weight that exceed normative or ideal weight standards, even though the level may not meet commonly applied threshold standards for obesity. The qualified term *merely overweight* is used to refer to individuals whose weight exceeds common standards for “normal” or “ideal” weight but is less than the threshold level for being considered “obese.” In examining the relationship between body weight and perceived weight discrimination the reported study uses weight categories based on the body mass index and standards for “underweight,” “normal weight,” “overweight” and “obese” established by the National Institute of Health (discussed further in the Methods section, below). It should be noted that the Michigan law providing protection against discrimination in employment simply prohibits discrimination based on “weight,” and it does not specify a threshold weight level at which the legal protection takes effect, nor does

it otherwise reference the BMI or other normative body weight standards (such as “ideal weight” tables).

Sex Differences in the Experience of Weight Discrimination

It has been frequently observed that overweight women are evaluated more negatively and suffer greater negative consequences than overweight men in Western societies (e.g., Fikkan and Rothblum 2005; Puhl and Brownell 2001), and research investigating weight discrimination in employment strongly supports this observation. In multiple domains (e.g., employment, education settings, health care, romantic relationships, portrayals in the media), overweight women consistently fare worse than their male counterparts (Fikkan and Rothblum 2012). In the employment domain the greater negative bias against female job applicants and employees have been consistently demonstrated in both field and experimental settings. For example, Judge and Cable’s (2011) study of American workers’ wages in a field setting found that for women in the below average weight and above average weight categories, gaining 25 lb produces a predicted decrease in annual salary of more than \$13,000. In sharp contrast, for American men in the same weight categories, gaining 25 lb produces a predicted *increase* in annual salary of more than \$7,500. A recent meta-analysis of experimental studies investigating weight discrimination in simulated employment settings demonstrates that, across multiple studies, when other potential confounding influences are carefully controlled (e.g., qualifications, behavior of the overweight individual), female overweight job applicants and employees are evaluated more negatively than their male counterparts (Roehling et al. 2013). These are but two examples of the many studies supporting the recent conclusion that there is “substantial and consistent evidence that women suffer disproportionately from weight bias.” (Fikkan and Rothblum 2012, p. 587).

In light of the evidence from carefully controlled experimental settings demonstrating that overweight women are, “in fact,” evaluated more negatively, and non-perceptual data from field settings indicating that overweight women suffer greater negative consequences than overweight men, it is not surprising that studies of perceived weight discrimination find that women report experiencing significantly more weight-based discrimination than men (e.g., Puhl et al. 2008). Of most direct relevance to the present study, using a national U.S. sample of adults with work experience, Roehling et al. (2007) found that women were 16 times more likely than men to report experiencing weight-related employment discrimination.

Suppression of Prejudice and Promoting Job-Relatedness of Employer Practices

The fact that a decision maker or other person possesses a prejudice does not, of course, mean that the prejudice will necessarily be expressed as discriminatory behavior in all situations. Crandall and Eshleman’s (2003) Justification-Suppression Model suggests individuals wishing to express a genuine prejudice seek “justifications” (psychological rationalizations and/or environmental circumstances) that afford them an opportunity to express their prejudice without internal or external punishment. With regard to weight discrimination, such justifications might include the ability to attribute one’s negative treatment of overweight employees to pressure applied by others (e.g., a boss, customers), or the outwardly rational interest in saving the organization added health care costs perceived to be associated with overweight workers.

Laws that make certain forms of discrimination illegal may suppress the expression of prejudice by increasing perceptions of accountability, influencing actors’ assessments of the

personal costs of acting on prejudices, signaling societal norms, and over time, shaping individuals' internalized values and standards of conduct (King and Ahmad 2010; King et al. 2006). Indeed, a primary assumption of fair employment legislation is that it will suppress the expression of prejudice in the workplace when decision makers consider members of a group protected by the legislation, and as result, reduce employment discrimination against those groups.

The Influence of Legal Context on Sex Differences in Perceived Weight Discrimination

As noted earlier, because overweight women are consistently evaluated more harshly than overweight men it has been argued that legal protection against weight discrimination in employment will reduce the extent to which women are subject to disparate treatment based on their sex (e.g., Griffin 2007; Kubilis 2008). This suggests that such a law will mitigate or eliminate the previously demonstrated sex differences in the prevalence of perceived weight-based employment discrimination (e.g. Fikkan and Rothblum 2012; Puhl et al. 2008; Roehling et al. 2007). However, a law prohibiting weight discrimination in employment may simply reduce weight discrimination in each group but preserve the well documented finding that women experience more weight-based discrimination than men. Finally, such a law may not be effective, failing to change the prevalence of weight discrimination among men or women.

Our investigation of the influence of Michigan's unique legal context on sex differences was guided by two research questions. The first focuses on differences in the frequency with which men and women in Michigan report experience weight-based employment discrimination of any kind:

Research Question 1 To what extent are there sex differences in the prevalence of perceived weight-based employment discrimination in a state with a law that explicitly prohibits this form of employment discrimination?

Our second research question focuses on potential differences in the specific nature of the weight-based employment discrimination that is experienced by women and men when weight discrimination is prohibited by law. There is theoretical and empirical support for distinguishing between "formal discrimination" and more "interpersonal discrimination" (Dovidio and Hebl 2005; King et al. 2006). *Formal discrimination* involves more overt expressions of bias that, when they relate to a legally protected personal characteristic (e.g., race, age, or sex) is typically illegal (Singletary and Hebl 2009). Examples include denying a person a job or promotion because of their race, age, or sex.

Interpersonal discrimination involves more subtle or covert discrimination that is typically not illegal, and may involve verbal or nonverbal behaviors. Examples include excluding a person from social interactions in the workplace, being pressured to lose weight by a co-worker, or other behavior that is insensitive, rude or inconsiderate of a person's identity (King et al. 2011; Singletary and Hebl 2009; Snyder et al. 2010). It should be noted that while interpersonal discrimination is typically not illegal, depending on the perpetrator and the basis for the discrimination (whether it relates to a legally protected characteristic), the accumulated effect of interpersonal forms of discrimination may become the basis for a legal claim (e.g., a hostile environment claim).

Overtly discriminatory behaviors toward job applicants and employees who are members of legally protected groups (e.g., race, sex, religion, age) have drastically reduced since the passage of the Civil Rights Act of 1964 and other U.S. fair employment laws (King and Ahmad 2010). However, there are at least two reasons to expect that legal protections against

employment discrimination will be less effective in constraining more subtle, interpersonal forms of employment discrimination. First, interpersonal discrimination is more difficult to identify and assess (Dipboye and Colella 2005), and as a result it is less likely than overt forms of discrimination to be identified as “discrimination” that must or should be addressed. Second, current U.S. fair employment laws do not effectively address more subtle forms of employment discrimination; many subtle forms of interpersonal discrimination are simply not covered by existing laws (Griffin 2007; Tolsen 2007).

Research suggests that women may be more likely than men to experience verbal harassment, rudeness, and other forms of interpersonal discrimination in general (e.g., King 2006), and in particular, with regard to interpersonal discrimination linked to weight (Hansson et al. 2010). Thus, if as expected, the Michigan law is less effective in addressing interpersonal forms of weight-based discrimination than covert forms, we may find no sex differences in reported overt forms of weight discrimination, but significant sex differences in reported interpersonal forms of weight discrimination. Previous research investigating perceived weight discrimination in employment settings has focused on direct or formal acts of weight-based employment discrimination, and has given little or no attention to more subtle interpersonal forms of discrimination. Both in response to the call for research investigating both overt and subtle forms of discrimination “to help provide a clearer understanding of weight employment discrimination in the workplace” (Puhl and Heuer 2009, p. 943), and to further explore the potential influence of Michigan’s law on reducing sex differences in the experience of weight-based employment discrimination, we also investigated the following research question:

Research Question 2 Among individuals who report having experienced weight-based employment discrimination, are there sex differences in the specific forms of weight-based employment discrimination they report experiencing? Specifically, are women more likely to report interpersonal forms of weight-based employment discrimination (e.g., harassment, exclusion from socializing) than men?

Legal Context: Michigan’s Fair Employment Law

Michigan’s Elliot-Larsen Civil Rights Act parallels the U.S. federal Civil Rights Act of 1991 in prohibiting employment discrimination, with one major difference. In addition to including religion, race, color, national origin, and sex, the Michigan law also includes age, height, weight, familial status, and marital status as protected characteristics. Thus, since the Michigan law was passed in 1978, discrimination in employment based on an applicant’s or employee’s weight has been explicitly prohibited in the state of Michigan. It remains the only state in the U.S. that has a law making weight a protected characteristic, and thereby, prohibiting weight-based employment discrimination.

Under the Elliot-Larsen Civil Rights Act an applicant’s or employee’s weight cannot be legally used in making an employment decision (e.g., hiring, promoting, disciplining, pay determination, termination) unless the employer can meet its burden of establishing that consideration of the applicant’s/employee’s weight is “reasonably necessary to the normal operation of the business” (Michigan Compiled Laws, Section 37.2208). The law does not specify a weight level (e.g., overweight, obese, morbidly obese) at which legal protection against weight discrimination is provided. Rather, the law simply provides that whenever a weight standard is used by an employer in making hiring or other employment decisions, the use of the weight standard will involve illegal discrimination *unless* the employer can

establish its use of the weight standard in question is “reasonably necessary to the normal operation of the business.” Thus, whether an employer uses a subjective weight standard (e.g., “We don’t hire overweight people”) or objective standards (e.g., based on “ideal weight” tables, or a body mass index score), the use of the weight standard is illegal discrimination if the employer cannot meet its burden of proof. It has been observed that there have been relatively few reported court cases involving weight discrimination in Michigan (Kubilis 2008; Morris 2010), and our independent search of reported cases using the LEXIS data base identified only 29 reported cases in the over 30 years history of the law. Of greater relevance to the present study, our review of research reported in diverse literatures failed to identify any empirical research investigating the prevalence of weight-based employment discrimination in Michigan.

Method and Results

Overview of the Method

The study involves a telephone survey of a stratified random sample of 1,010 adult Michigan residents. The Institute for Public Policy and Social Research (IPPSR) regularly conducts a *State of Michigan Survey* that, in addition to core background items (e.g., demographics, employment status, earnings), addresses a range of economic and social issues. We contracted with IPPSR to include additional items allowing us to address the above research questions in their *State of Michigan Survey* for 2008. Phone interviews were conducted by IPPSR in the spring of 2008. The average phone interview lasted 25.7 min; however, only a small fraction of the interview time was devoted to the questions added for the purposes of this study. The specific questions used to assess focal variables are described below. We would note that while the present study provides unique empirical evidence that contributes to the weight discrimination literature in the ways we have already indicated, the study’s design limits our ability to make causal inferences, and as a result, the study is best viewed as exploratory in nature.

Sample

The response rate for the phone survey was 36.5 %. This response rate is taken into account in sampling strategy that is designed to yield a sample of respondents that is representative of the adult population of Michigan each time the *State of Michigan Survey* is administered. Respondents had the option to decline to answer any question, and while no respondent refused to answer either the height or weight questions that were used in calculating respondents’ BMI, not all respondents answered all questions that were relevant to our study. As a result, of the 1010 individuals who were interviewed, the sample used in the present analyses consists of 906 individuals. Fifty-two percent of the respondents were female, 73 % percent were White, and 13.2 % were African American. Their average age was 45.9 years old. Using the BMI measure described immediately below, 38 % of the respondents fell within the normal weight category, 36.4 % overweight, 13.7 % obese, and 11.2 % very obese.

Measures

Body mass index (BMI) scores were calculated for each respondent using their self-reported height and weight. BMI is a widely used measure of body fat that is calculated by dividing

the respondent's weight in kilograms by their height in meters squared (Pool 2001). Because we are interested in identifying specific weight points at which weight discrimination becomes significantly more prevalent, the relationship between BMI and weight-related perceived employment discrimination was investigated using a set of dummy coded variables based on the cut-points defined by the Heart, Lung, and Blood Institute of the National Institutes of Health. The initial categories included: underweight BMI < 18.5; normal weight (BMI 18.5 to 24.9), overweight (BMI 25 to 29.9), obese I (BMI 30 to 34.9), obese II (BMI 35 to 39.9), and obese III (BMI of 40 or higher). Due to the extremely small number of cases in the obese III category, and consistent with prior research (e.g., Carr and Friedman 2005), we combined the latter two categories to create a "very obese" category (BMI > 35).

Weight-related perceived employment discrimination was a dichotomous variable assessing whether the respondent reported ever experiencing weight discrimination in the workplace or when applying for work. If a participant answered "yes," they were then asked a series of questions regarding the nature of the weight-based discrimination they experienced (e.g., "Were you denied a job interview or not hired because of your weight?", "Were you harassed at work by a co-worker because of your weight?").

Sex was coded as either male (0) or female (1).

Several demographic and socioeconomic variables are controlled because of their potential association with both obesity and one's likelihood of reporting discrimination (Kessler et al. 1999). They include: *age* (continuous variable), *educational status* (we measured the highest grade completed, and it was coded from 1=nothing beyond grade school to 18=graduate degree beyond masters), and *race* (White=0, non-White=1).

Results

Perceived weight discrimination in employment was found among 3.6 % of the total sample. The prevalence was somewhat greater among men (3.8 %) than among women (3.5 %), however that difference was not significant ($\chi^2=.076, p>.05$).

Table 1 presents the percent of individuals who reported experiencing weight-based employment discrimination by respondent weight level and sex. There is significant variation

Table 1 Prevalence of perceived weight-based employment discrimination by total sample and sex

Sub-samples	Percent perceiving weight discrimination (n =total # in category)
Very obese (BMI 35+)	21.6 ($n=103$)
Women	14.5*
Men	32.5
Obese (BMI 30. to 34.9)	2.5 ($n=124$)
Women	0.0
Men	2.6
Overweight (BMI 25 to 29.9)	2.2 ($n=330$)
Women	3.9*
Men	0.6
Normal weight (BMI 19 to 24.9)	0.9 ($n=347$)
Women	1.1
Men	0.6
Total Sample	3.6 ($n=906$)

*Chi-square test indicates that the percent for women are significantly different from the percent for men, $p<.05$.

in reported discrimination across weight categories for both women (very obese=14.5 %, normal weight=1.1 %) and men (very obese=32.5 %, normal weight=0.6 %). There is a dramatic difference between sex among very obese respondents, with 14.5 % of very obese women reporting weight-based employment discrimination, and a surprisingly larger 32.5 % of the very obese men. Surprisingly, *none* of the women in the obese I category in the present study ($n=41$) reported experiencing weight-based employment discrimination.

Logistic regression analysis was conducted to further investigate the predictors of weight-related perceived employment discrimination in Michigan. Age, education, race (White versus non-White), sex, and categorical weight variables were regressed on the dichotomous weight-related perceived employment discrimination variable resulting in the findings summarized in Table 2. Due to missing data for some of the respondents, the number of respondents included in the logistic regression was 877. Age was related to perceptions of weight-based discrimination, with older respondents being somewhat more likely to report weight discrimination. More educated respondents were significantly less likely to report experiencing weight discrimination. A significant relationship was also found for the very obese weight variable, indicating that very obese respondents were 38 times more likely than normal weight respondents to report weight-related employment discrimination. However, contrary to findings based on national samples (Roehling et al. 2007), none of the other weight variables, nor respondent sex, were significant predictors of perceived weight discrimination in our Michigan sample.

Table 3 reports our findings regarding the specific nature of the weight-based employment discrimination that was experienced. The percents reported are based on only those respondents who reported experiencing weight-based employment discrimination (e.g., 33.3 % of the women who reported experiencing weight discrimination in employment indicated that they had been denied a job interview or were not hired because of their weight). The vast majority of the respondents who experienced weight discrimination identified multiple ways in which they were discriminated against based on their weight (e.g., denied a promotion *and* harassed by co-workers *and* harassed by supervisor because of their weight). In 8 of the 10 types of weight-based discrimination shown in Table 3, there were significant sex differences in the percent of respondents indicating they had experienced the specific type of weight discrimination. Most notably, women were much more likely to report the more subtle forms of weight discrimination such as exclusion from socializing, harassment by a supervisor, or harassment by a boss because of their weight.

Table 2 Predictors of weight-based perceived employment discrimination in Michigan

Variable	Odds ratio
Age	0.96*
Education	.66**
Race (non-White=1, White=0)	0.82
Sex (Female=1, Male=0)	1.04
Weight variables	
Very obese (BMI>35)	38.5**
Obese (BMI 30 to 34.9)	4.16
Overweight (BMI 25 to 29.9)	2.96
Underweight (BMI <29.9)	0.00***
Chi Square	78.08**

$N=(n=877)$.

* $p=.01$

** $p<.001$

***Of 13 underweight respondents, none reported experiencing weight discrimination in employment

Table 3 Nature of reported weight-based discrimination by sex

Nature of reported weight-based discrimination	All respondents reporting weight discrimination %	Women reporting weight discrimination %	Men reporting weight discrimination %
Denied a job interview/not hired	60.0 (<i>n</i> =21)	33.3*	88.2
Denied a promotion	65.7 (<i>n</i> =23)	50.0*	82.4
Paid less	27.8 (<i>n</i> =10)	38.9	17.6
Fired/discharged	25.7 (<i>n</i> =9)	38.9	11.8
Disciplined	22.9 (<i>n</i> =8)	38.9*	5.9
Harassed by a supervisor	51.4 (<i>n</i> =18)	83.3*	17.6
Harassed by a co-worker	44.4 (<i>n</i> =16)	68.4*	17.6
Pressured to lose weight by employer	68.8 (<i>n</i> =24)	50.0*	88.2
Pressured to lose weight by co-workers	35.1 (<i>n</i> =13)	10.5*	61.1
Excluded from socializing	34.3 (<i>n</i> =12)	91.7*	8.3

N=36

*Chi-square test indicates that the percent for women are significantly different from the percent for men at $p < .05$

Discussion

This study sought to investigate whether consistently demonstrated sex differences in the experience of weight-based employment discrimination would be replicated in a legal context that explicitly prohibits weight-based employment discrimination. It also sought to examine sex differences in the experience of overt versus subtle forms of weight-based employment discrimination. When considered in light of previous findings in the weight discrimination literature, our results provide the basis for several informed observations that advance the study's goals of contributing to research literature on weight discrimination, providing employers additional guidance, and informing the ongoing policy debate regarding the need for greater legal protection against weight discrimination in employment.

Sex Differences in the Prevalence of Weight-based Employment Discrimination

Previous research using national samples dominated by respondents from the 49 U.S. states that do *not* provide legal protection against weight discrimination have found dramatic sex differences in the prevalence of perceived weight-based employment discrimination (e.g., Roehling et al. 2007), and in perceived weight discrimination more generally (not limited to employment settings; Puhl et al. 2008). Research based on samples that include participants from outside of Michigan has also demonstrated consistent sex differences in more objective (“actual”) assessments of weight-based employment discrimination (e.g., Judge and Cable 2011; Roehling et al. 2013). In sharp contrast to the well established pattern of sex differences found in prior research, focusing on a representative sample of adults from the only U.S. state providing legal protection against weight discrimination in employment, Michigan, there was no significant difference in the percent of men and women reporting weight-based employment discrimination. Further, controlling for other potential influences, logistic regression results found that sex was not a significant predictor of perceived weight-based employment discrimination.

When contrasted with findings based on national samples, a review of the prevalence of perceived weight-based employment discrimination among Michigan residents reported by

sex and weight category (Table 1) reveals a surprisingly low incidence weight-based discrimination among obese and very obese women, the groups generally believed to be the most common victims of weight discrimination in both work and non-work settings. For example, while Roehling et al. (2007) found that 9.6 % of the obese women in their national sample reported experiencing weight-based employment discrimination, none (0.0 %) of the 41 obese women in the present Michigan sample reported experiencing weight-based employment discrimination. The present study's design does not allow us to eliminate all alternative explanations for this surprising finding. It is possible that obese female respondents systematically failed to detect or choose to ignore incidents of weight discrimination. However, there does not appear to be any obvious and compelling reason to expect that these possible alternative explanations operate more strongly in Michigan than in other states where weight discrimination was reported by obese females.

Of course, a research design that included a measure of perceived weight-based discrimination in Michigan prior to the enactment of their law in 1978 would provide the most unassailable evidence of the law's effect on sex differences in the experience of weight discrimination. As a substitute for a "pre-enactment of the law" measure of weight discrimination, available findings demonstrating consistent sex differences in both perceived and more objective assessments of weight discrimination in samples that include the 49 U.S. states that do not have a law prohibiting weight discrimination provide our "comparison group". With that limitation in mind, we believe that the present results provide significant support for the argument that a law prohibiting weight discrimination in employment would tend to reduce sex differences in the experience of weight discrimination.

Sex Differences in Specific Types of Weight-Based Employment Discrimination

On balance, our findings also support the argument that women are more likely than men to experience verbal harassment, rudeness, and other forms of interpersonal discrimination (e.g., Hansson et al. 2010; King 2006). Most notably, among respondents who experienced weight-based employment discrimination, 91.7 % of the women reported being excluded from socializing at work because of their weight, but only 8.3 % of the men. Women were also much more likely to report weight-related harassment by supervisors and coworkers (see Table 3). Research has shown that women face a higher degree of scrutiny and evaluation based on their appearance and level of attractiveness than do men (Forbes et al. 2007; Travis and Meginnis-Payne 2001). The higher rates of interpersonal forms of discrimination that women experience may reflect the negative social stigma associated with obesity that is more likely to be directed at an obese woman than an obese man. However, because the measure assesses *perceived* discrimination, the higher rates of interpersonal discrimination may also be influenced by sex differences in the propensity to characterize the interpersonal behaviors in question (e.g., exclusion from socializing, harassment by a coworker) as involving "discrimination."

We also found that among respondents experiencing weight-based employment discrimination, men were more likely than women to report being denied a job or denied a promotion due to their weight. There does not appear to be a clear explanation for why men would be more likely to report experiencing these two relatively overt forms of weight-based employment discrimination in a state that prohibits weight discrimination. Perhaps when faced with perceived discrimination, women are less able to discern whether the discrimination was due to their size or their sex. As a result, women may be more likely to attribute some instances of weight discrimination to sex discrimination, thus accounting for lower rates of reported overt forms of discrimination than men.

The significant sex differences in the pattern of results points to the importance of taking into account the specific nature of the weight discrimination when designing, or evaluating the results of research that purports to investigate the moderating role of sex. Results may vary greatly depending on whether the study focuses on interpersonal forms of weight discrimination versus weight discrimination in specific employment decisions (e.g., hiring or promotions decisions). Further, while “global” measures of weight discrimination (e.g., “Have you ever experienced weight-related employment discrimination?”) may be appropriate for some purposes, depending on the specific research question, such measures may obscure significant differences in the relationship between specific forms of weight discrimination and other variables of interests (e.g., hypothesized antecedents or consequences of weight-based employment discrimination).

Finally, our findings suggest that social norms and Michigan’s legislation are more effective suppressors of overt weight-based employment discrimination. King and Ahmad’s (2010) investigation of a different form of discrimination yielded the same pattern of results; laws and norms against religious discrimination appeared more effective in suppressing overt (versus subtle) forms of discrimination against Muslims in non-work settings. Crandall and Eshleman’s (2003) Justification-Suppression Model also points to the need for research investigating contextual factors that may influence the expression of weight bias in employment settings. For example, what is the effect of the weight-related practices being adopted by an increasing number of employers in response to concerns about rising health costs (e.g., employer sponsored weight loss programs, use of body mass index cut-offs in hiring) on the expression of weight discrimination in employment decisions? Do they provide perceived justifications for supervisors or co-workers to express prejudices, leading to increased harassment or other discriminatory behavior toward overweight employees?

Implications for Policy Makers and Employers

Our results both support calls for increased legal protection against weight-based employment discrimination and suggest the limitations of such legislation. The failure to replicate the finding that there is a much higher incidence of perceived weight discrimination among women in the sample from Michigan supports the argument that a law that prohibits weight discrimination will help reduce a form of “sex plus” discrimination, the disparate treatment of women based on weight (Griffin 2007; Kubilis 2008).

Our findings also highlight the limitations of Michigan’s law. Advocates of greater legal protection against weight discrimination in the workplace have pointed to Michigan’s law and argued that such a law is needed to address the types of subtle discrimination that overweight women in particular might experience (Griffin 2007, p. 653). However, although some of the more severe and pervasive forms of interpersonal harassing behavior in the workplace may be illegal, many forms are not (King et al. 2011). For example, the specific type of weight-based employment discrimination most frequently reported by women in the present study, being excluded from socializing, is a form of discrimination that is typically not addressed by Michigan’s law or U.S. fair employment laws more generally. The next two most common forms of weight-based discrimination reported by women, harassment by co-workers and harassment by supervisors, may or may not be proscribed by a law making “weight” a protected characteristic. Thus, while enacting a law like Michigan’s will provide obese applicants significant legal protection from employer policies that preclude the hiring of obese workers because of perceived health care costs, and protection from other forms of overt weight-based discrimination, it appears unlikely that merely enacting a law like Michigan’s will be effective in addressing sex differences in the experience of more subtle

interpersonal types of weight discrimination. Many of the more subtle forms of weight discrimination fall within the class of behaviors referred to as “workplace bullying” (Giorgi 2012), suggesting that in addition to more traditional forms of antidiscrimination legal protection, such as Michigan’s law, policy makers concerned about effectively addressing all forms of weight discrimination in the workplace should consider adopting the wider scope of protection provided by anti-bullying legislation.

It has long been accepted that employers’ ethical responsibilities are not limited to their legal responsibilities (Gatewood and Carroll 1991). More recently, there appears to be growing recognition that employer’s ethical responsibilities require a proactive and “full-fledged” effort to address discrimination in the workplace (Demuijnck 2009, p. 85). Therefore, the present findings point to the need for ethically minded employers, including those in Michigan and in other jurisdictions adopting laws prohibiting weight discrimination in employment, to consider what steps can be taken to address the more subtle interpersonal forms of weight discrimination in the workplace. Roehling’s (2002) analysis of ethical issues associated with weight discrimination concluded with a set of suggestions for employers that still remain sound guidance (e.g., increasing decision maker accountability, the use of job analysis, structured interviews, and other validated selection devices). However, those suggestions are primarily directed at decision makers, and at addressing more overt and traditional forms of employment discrimination (e.g., discrimination in hiring decisions). Based on the present findings and other relevant research referenced below, the earlier suggestions need to be supplemented in several ways.

First, it is important for employers to have clear policies that explicitly address weight discrimination in the workplace that apply to all employees. Research indicates that formal organizational policies can help reduce workplace harassment and other expressions of bias, including weight bias (e.g., Bellizzi and Hasty 2001; Demuijnck 2009; Gruber 1998). Whether separately stated or incorporated into broader policies addressing diversity, inclusion, and/or workplace civility, employer policies should provide clear guidance that identifies as “unacceptable behavior” both: 1) the consideration of weight in hiring and other employment decisions *unless* there is reasonable evidence that weight is related to the successful performance of the position(s) in question (i.e., evidence that meets accepted standards of human resource management practice), and 2) interpersonal forms of weight discrimination (e.g., disparaging weight-related comments).

Second, employers with workplace wellness initiatives should carefully evaluate whether their attempts to reduce their health care costs and/or promote healthy employee lifestyles may be promoting subtle forms of discrimination against overweight employees. Are there incentives based on group weight loss that lead to the exertion of undue pressure or harassment directed at overweight employees by coworkers? Do other aspects of the wellness initiative, such as public “weigh ins” or the required disclosure of personal information, increase the salience of employee weight and promote interpersonal or subtle forms of weight discrimination?

Third, the training suggested in Roehling (2002) should be expanded in terms of the scope of its content and who receives it. Changing negative attitudes and behaviors directed at obese individuals has proven to be a challenging task, and recent research suggests that merely raising “awareness of weight and sex related stereotypical beliefs” (Roehling 2002, p. 187) is not likely to be effective (O’Brien et al. 2010). Training that provides empirical evidence rebutting common stereotypes about overweight individuals (e.g., Roehling et al. 2008) invokes empathy toward obese individuals, and educates trainees regarding the extent to which obesity is outside of the control of some individuals would appear to offer the greatest promise (Teachman et al. 2003; O’Brien et al. 2010). Finally, given that coworkers are a significant potential source of both harassing and/or discriminatory behavior, and social support that may buffer overweight

employees from the negative effects of experiencing discrimination, the suggested training should not be limited to supervisors and other decision makers.

Limitations and Additional Research Needs

Based on our review the present study represents the first attempt to examine the potential effect of legal context on the suppression of weight bias in employment settings, the data do not allow us to directly compare results in Michigan with results in other states. Rather, we rely on a large and diverse body of research establishing consistent sex differences in the experience of weight discrimination in national and other non-Michigan samples (discussed further below) to provide evidence of the pattern of sex differences in weight discrimination found in states that do not have law prohibiting weight discrimination in employment. Accordingly, although we believe our results are informative and the “best available evidence” of the potential role of legal context in suppressing sex differences in weight discrimination, the study is best viewed as exploratory in nature.

As noted earlier, some forms of interpersonal discrimination may constitute illegal discrimination under Michigan’s law, and other forms do not. Our study, like the overwhelming majority of studies investigating perceived employment discrimination, assesses only respondent’s beliefs regarding whether they were discriminated against; it does not directly assess the perceived legality or illegality of the discriminatory acts. To what extent do adults living in Michigan recognize any forms of interpersonal weight-based discrimination as a violation of the law? The answer to this question will inform employers, the state agency charged with enforcing Michigan’s fair employment law, and workers’ rights advocacy groups of the potential need for additional education or public awareness efforts. It may also suggest a need for researchers to adopt new approaches to assessing perceived discrimination (for example, if qualitative interviews indicate that many Michigan residents do not understand that subtle forms of weight discrimination may be illegal, and that lack of awareness appears to affect how they respond to typical perceived discrimination survey items).

Finally, we encourage researchers to work with practitioners in applied (e.g., employee training), and use quasi-experimental designs to investigate both the causes of weight-based employment discrimination and potential approaches to reducing weight bias in the workplace. For example, as part of a broader training program addressing workplace responsibilities and rights, separate modules addressing legal prohibitions against weight discrimination and ethical responsibilities relating to the treatment of obese employees could be manipulated across employee groups, and the impact of the respective training modules on relevant training outcomes assessed (e.g., attitudes toward the obese, behavior intentions, subsequent workplace behaviors). Which type of knowledge has the greatest impact on training outcomes, knowledge of legal prohibitions or knowledge of ethical responsibilities? Are there individual difference variables (e.g., specific personal values or personality traits) that moderate the effect of one or both types of knowledge on training outcomes? Does training of this type increase the sensitivity of overweight trainees to interpersonal slights or mistreatment, making them more likely to characterize such experiences as involving “discrimination,” or “illegal discrimination”?

Conclusion

It appears that legal protection against weight discrimination can help reduce sex differences in the experience of weight-based employment discrimination. However, even in settings

where legal protection is provided, a not insignificant level of weight discrimination is reported by overweight workers, and sex differences in the experience of specific types of weight discrimination (exclusion from socializing, harassment) remain a “practical likelihood”. Therefore, regardless of the legal protection that is available, fair and ethically minded employers will need to remain vigilant and be proactive in taking steps to prevent the manifestation of weight bias in the workplace.

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