

RUNNING HEAD: GENDERED NATURE OF WEIGHT BIAS

*Is Fat a Feminist Issue? Exploring the Gendered Nature of Weight Bias*

**Abstract:** Although research and scholarship on weight-based stigma have increased substantially in recent years, the disproportionate degree of bias experienced by fat women has received considerably less attention. This paper reviews the literature on the weight-based stigma experienced by women in North America in multiple domains, including employment, education settings, romantic relationships, health care and mental health treatment, and portrayals in the media. We also explore the research examining the intersection of gender and ethnicity related to weight stigma. Across numerous settings, fat women fare worse than thinner women and worse than men, whether the men are fat or thin. Women experience multiple deleterious outcomes as a result of weight bias that have a significant impact on health, quality of life, and socioeconomic outcomes. Because of this gender disparity, we argue that feminist scholars need to devote as much attention to the lived experiences of fat women as they have to “fear of fat” experienced by thin women.

**Key words:** fat women, feminism and weight, weight-based stigma, weight bias, women and weight

*Introduction*

In the late 1970s and early 1980s, feminists began to draw increasing attention to the gendered nature of weight preoccupation and disordered eating, with Orbach's self-help book, *Fat is a Feminist Issue* (1978), perhaps the best known of this genre. Helping women to see their private struggles with compulsive eating and hatred of their bodies as rooted in the social constraints placed on women's autonomy and patriarchal devaluation of all things feminine (including fat bodies) had a major impact on the field of psychotherapy and has spawned subsequent generations of feminist writing on the topic of women and weight. However, as critics noted then (e.g., Diamond, 1985), the assumption that "fat" was indicative of pathology and, in Orbach's formulation, unconscious drives to defend against unwanted experiences (such as intimacy), was left largely intact. Additionally, the resolution of these psychological issues was seen as the pathway to permanent weight loss, thus also leaving unquestioned the assumption that thinness should still be a woman's goal.

By contrast, other writers at this time (e.g., Wooley, et al., 1979) were starting to question the assumptions about fat as a medical or psychological problem to be solved. Wooley and colleagues (1979), followed by others (e.g., Brown, 1985, 1989; Chrisler, 1989), asserted that fat is a feminist issue because the culture at large allows for much less deviation from aesthetic ideals for women than it does for men, meaning that many more women than men end up feeling badly about their (normal and healthy) bodies, and thus engage their energies in all manner of corrective action, from restrictive dieting to eating disorders. Wooley and colleagues (1979) also noted that the "price paid" by women for having deviant bodies is more than psychological and emotional, and went on

to cite some of the early research on weight bias. It is this “price,” in the form of discrimination experienced by women due to weight, which is the point of departure for the current article.

The purpose of our review is to pool evidence from several disciplines and across multiple domains that demonstrates the disparate impact of weight bias on women. We conducted an internet search on gender and weight stigma, and also found additional references within those articles. We focus our review on studies of women or studies in which gender is examined as an independent variable. In so doing, we had to eliminate a number of studies that do not mention gender of the sample, especially in the health arena, where the focus is largely on how “obese people” (gender unspecified) are perceived by health care professionals (e.g., Berryman, et al., 2006; Klein, et al., 1982). We have limited the scope of our review to research conducted on samples of adults and older adolescents in North America, although a number of investigators are also examining the intersection of weight bias and gender in other countries (e.g., Sargent & Blanchflower, 1994, and Viner & Cole, 2005, in Great Britain; Sarlio-Lähteenkorva & Lahelma, 1999; Sarlio-Lähteenkorva and colleagues, 2004, in Finland; Lundborg et al., 2007, across 10 European countries; Schorb, 2009, in Germany) and among children (Tang-Péronard & Heitmann, 2008). We also emphasize more recent studies, to avoid replication of earlier reviews of the weight bias literature (Rothblum, 1992). When possible, we prefer to use the term “fat,” as it is descriptive, whereas the term “overweight” implies unfavorable comparison to a normative standard and “obese” is a medical term with its own negative connotations. However, so that we may most

accurately represent the work of others, we at times use the terms (bracketed in quotes) used by the authors themselves in our review of the literature.

We end the paper with our own thoughts on the relative scarcity of feminist writing and scholarship that directly deals with the social meanings and consequences of the fat female body. Though a significant amount has been written from a feminist perspective on eating disorders, self-starvation, and the “normative discontent” that is rooted in the hatred and fear of fat (cf. Bordo, 1993; Fallon, et al., 1994; Guille & Chrisler, 1999; Hesse-Biber, 2007; Rodin, et al., 1984), much less has been written to date that documents and explores the experience for women in this culture of actually *being fat*.

### *Employment and Income*

As we will review in this section, the literature on weight-based employment discrimination spans several disciplines and includes both experimental studies and analyses of trends in occupational attainment and compensation within large data sets. Common to most of the studies exploring this phenomenon is that fat women are more adversely impacted by weight-based employment discrimination than are men in a number of ways (Fikkan & Rothblum, 2005; Griffin, 2007) and are over 16 times more likely than men to perceive such discrimination, according to results from a large U.S. sample (Roehling, et al., 2007). As detailed below, discrimination against fat women in the employment sphere occurs at multiple levels, including hiring, promotion, performance evaluation, and compensation.

### *Experimental studies*

In the experimental investigations of weight-based discrimination reviewed below, research participants are generally asked to rate hypothetical job candidates on their desirability. With other relevant variables being held constant, experimenters can vary the candidate's weight (either through manipulating photographs or video or through verbal descriptions) to assess the impact of weight on desirability.

Rothblum and colleagues (1988) assessed the impact of weight on job candidate desirability in an all-female college student sample and found that when raters read written descriptions of candidates' appearance, fat women were rated more negatively than non-fat women on supervisory potential, self-discipline, professional appearance, personal hygiene, and ability to perform a physically strenuous job. When level of attractiveness was controlled, however, the negative stereotyping of fat applicants was considerably reduced, indicating that the bias against fat women may be mostly due to the presumed negative effect on physical attractiveness.

When participants are asked to rate both male and female job candidates, the disparate impact of weight stigma on women can more easily be observed. Two studies by Jasper and Klassen (1990a; 1990b) using a college student sample found participant raters were significantly less likely to report a desire to work with a fat person than with a non-fat person. In the first of these studies (1990a) males reported significantly less desire to work with a fat woman, whereas there was no comparable gender difference in desire to work with a fat man. In the second study (1990b), both male and female participants reported less interest in working with the fat female employee than with the fat male employee. Pingitore and colleagues (1994) also found that fat female applicants were less likely than fat male applicants to be recommended for hiring, especially by

raters who were satisfied with their own bodies and for whom body satisfaction was central to their self-concept.

A recent study by Miller and Lundgren (2010), which also used a college student sample, examined whether a double standard existed for female political candidates based on weight. Consistent with the investigators' hypotheses, "obese" female candidates were evaluated more negatively overall and assessed more negatively in terms of reliability, dependability, honesty, ability to inspire, and ability to perform a strenuous job than were non-obese female applicants. Strikingly, not only was there an absence of the same penalty for obese male candidates, obese men were actually rated *more* positively than non-obese male candidates.

The stigma of being a fat woman is so pronounced that, in one study sample, non-fat men who are merely associated with a fat woman appeared to experience stigmatizing effects. Hebl and Mannix (2003) found in a sample of adult raters that non-fat male job applicants were judged more harshly when seen with a fat woman prior to being interviewed than were men seated next to a non-fat woman.

Once on the job, fat women also appear to face harsher treatment. In studies using samples of actual sales managers recruited from the community, Bellizzi and colleagues (Bellizzi & Hasty, 1998; Bellizzi, et al., 1989) asked participants to assess treatment of hypothetical employees in "role play" scenarios. They found that employees described as "extremely overweight" were more likely to be assigned by sales managers to undesirable sales territories or to no territory within the manager's region and less likely to be assigned an important or desirable region. This discrimination was stronger for fat women than for fat men (Bellizzi, et al., 1989).

Additionally, when managers were presented with scenarios in which they needed to discipline the unethical sales behaviors of hypothetical employees, fat women fared worse than non-fat women (Bellizzi & Hasty, 1998). Although a general finding in the sales and marketing literature has been that saleswomen are less harshly punished than salesmen for unethical sales behavior, this leniency seems to disappear when the saleswoman is fat.

*Large-scale studies*

Given the differential treatment of fat women in the job market, it is not surprising that evidence continues to accumulate about the long-term effects of this discrimination. Longitudinal studies using large national data sets, which we review below, have demonstrated trends of lower occupational attainment and lower hourly and lifetime earnings for fat women, even after controlling for other relevant variables, such as education and family socioeconomic status. Investigators have generally used data from the National Longitudinal Survey of Youth (NLSY) and the Panel Study of Income Dynamics (PSID) to analyze these trends.

Some earlier analyses of NLSY data (Averett & Korenman, 1996; Gortmaker et al., 1993), have clearly demonstrated that fat women have lower household incomes than non-fat women, while this was not the case for fat men. However, since this is likely confounded with the lower probability of marriage for fat women (discussed later), investigations of the impact of women's weight on their own wages are more relevant to the current review. Register and Williams (1990) found, after controlling for conventional variables associated with income (e.g., years of education, ethnicity, geographic region, etc.) that fat women (defined as those 20% in excess of standard



weight for height) in the NLSY sample earned an average of 12% less than non-fat women, whereas this finding did not extend to fat men. Pagán & Dávila (1997) also reported lower occupational attainment and earnings for “obese” women using data from the NLSY and found that men appeared able to offset any weight-related penalty by sorting themselves into jobs in which weight did not impact wages. Women, by contrast, may only be able to offset the wage penalty for being overweight by being above average in skill level (Mitra, 2001).

Cawley (2004) pooled data from 13 years of the NLSY to examine the relationship between weight and wages and found that the negative relationship between body weight and wages is most consistently found for “significantly overweight” White women, whom he estimates are paid on average 9% less than women of median weight. He proposes this wage difference is equal to that associated with roughly three years of prior work experience, two years of job tenure, or one year of education.

Baum and Ford (2004) also used multiple years of NLSY data to examine the impact of weight on wages over time. Though they did not examine ethnicity, they did control for a number of other socioeconomic and familial variables and also found a weight penalty for both men and women, with that for women roughly twice as large as that for men. Additionally, they found that being “overweight or obese” has a significant impact on women’s wages, while only “obesity” negatively impacts the wages of men.

Finally, analysis of NLSY data by Han and colleagues (Han, Norton & Stearns, 2009) also found that “obesity” reduces the likelihood of employment among White women and reduces hourly wages for both White and Black women, whereas no effect is observed for men when other variables are controlled. They found this wage effect for

women to increase with age (particularly after age 30) and to be larger in occupations requiring more social interactions than in other occupations. A second investigation by these authors (Han, Norton & Powell, 2009) was conducted to examine both the direct effect of weight on wages and indirect effects through educational attainment and occupational sorting. Specifically, the authors hypothesized that a higher body mass index (BMI) in the late teen years may predict lower educational attainment and/or choice of lower-paying occupations. Findings were consistent with hypotheses for both genders, although the findings for women were larger. The authors concluded, in fact, that the total wage penalty for women's BMI is underestimated in other samples by approximately 19% without the inclusion of these indirect effects.

A couple of investigators have more recently extended this work by examining relationships between weight and economic outcomes for men and women using data from the PSID. The PSID is also a national survey of U.S. adults who are, on average, much older than respondents from the NLSY samples described previously. Conley and Glauber (2007) found that "obesity" is associated with a 17.51% reduction on women's wages, with no economic penalty observed for men's weight (except for a small wage penalty experienced by obese Black men). Consistent with previous research, when including examination of race, they also found that the financial penalties for excess weight are experienced by White women. Because of the expanded age range in the PSID sample, they were also able to examine age differences in the weight penalties on earnings and found that differences in earnings by weight are significant for young women (ages 25-34) but not for older women (ages 35-44). They estimate that the

difference between the predicted wages of a non-obese White woman and an obese White woman is roughly equivalent to the difference due to two years of education.

Gregory and Ruhm (2009) also used PSID sample data to examine these relationships and found that the wage penalty for White women begins well below conventional thresholds for “overweight” or “obese,” with wages for this group peaking at a BMI of 21.8, whereas wages peaked at higher BMI values for Black women. Results for men were somewhat dependent on the modeling technique used but main estimates suggested that wages peaked at higher BMI levels (26.7). When other factors were controlled in subsequent modeling, however, wages also appeared to peak at lower values for men.

Given these collective findings of lower occupational attainment and lower earnings among fat women, we should also expect their lifetime earnings to reflect such discrimination. A study by Fonda and colleagues (Fonda, et al., 2004), which used data from the Health and Retirement Study of men and women in their 50s, indeed showed that “overweight” and “obese” women have a lower logged net worth at retirement-age than do their non-fat counterparts. This difference was attenuated to a non-significant level once potential covariates were controlled (e.g., sociodemographics, health, work, and marital status). For men, however, “overweight” and “obesity” were associated with *higher* logged net worth at retirement.

*At what weight do women experience this wage penalty?*

In addition to the main findings of employment-related discrimination against fat women, a few notable trends are worth highlighting. The first is that women, predominantly White women, tend to experience decreasing wages at much lower

weights than do men, as found in the aforementioned analysis by Gregory and Ruhm (2009). For example, Maranto and Stenoien (2000), using data from the NLSY, found the negative effect of weight on salaries to be highly significant for White women in the “overweight” range and only marginally significant for Black women. White and Black men, on the other hand, experienced wage *premiums* for being “overweight” or “mildly obese” and only experienced wage penalties at the very highest weight levels (100% above standard weight for their height). In fact, White women in this sample were found to suffer a greater wage penalty for “mild obesity” (20% over standard weight for their height) than Black men did for weight that is 100% over standard weight.

A recent study by Judge and Cable (2011) also explored this phenomenon of women being financially penalized for much lesser deviations from what is considered “ideal” in terms of weight. In their analysis of NLSY data, men experienced increased pay with increased weight. These returns only began to diminish at above-average levels of weight. For women, by contrast, increases in weight had negative linear effects on pay and the negative effect was much stronger at the lower end of the weight spectrum. In other words, it was the point at which women moved from the “thin” category into the “average weight” category that they experienced the most severe punishment, and decrements in pay for further weight increases were actually less severe. To put this in concrete financial terms, the authors calculate that...”all else equal, a woman who is average weight earns \$389,300 less across a 25-year career than a woman who is 25 pounds below average weight” (p.15).

*At what occupational level do women experience the most discrimination?*

Another consistent finding is that the penalties for fatness in women vary by occupational level and appear to most significantly impact a women attempting to move into higher prestige (and more highly compensated) occupations. A study by Haskins and Ransford (1999) of female employees in the aerospace industry found that, whereas weight was an important and significant predictor of occupational attainment in the entire sample, it only significantly impacted wages for those women in entry-level professional and managerial strata. The authors suggest that this finding could reflect the fact that women may undergo the most intense “screening” (of both job-relevant and irrelevant factors) at this occupational level, when they are, in essence, moving from lower-paying blue-collar positions into upper-level professional and managerial positions. Moreover, thinness or being at an “ideal weight” was especially related to high occupational status in the male-dominated cluster of professions (e.g., research scientist, senior engineer, physicist, etc.).

If such intense scrutiny is, in fact, being applied to women moving up the ranks, then it could explain the absence of fat women among these ranks. Saporta and Halpern (2002) surveyed male and female lawyers to determine the relationships between weight and compensation. Male lawyers were found to experience a penalty for deviating in either direction from the “ideal” physique whereas women were only penalized for being above the “ideal” weight. Perhaps most interesting, however, is that the relationships between weight and pay did not reach statistical significance among fat female lawyers, most likely due to the fact that there were so few fat female lawyers in the sample at all.

A similar absence of fat women was found by Roehling and colleagues (2009) in their study of top U.S. CEOs at Fortune 1000 companies. Women in general are

underrepresented in this stratum of the corporate world, but fat women remarkably so. Whereas roughly two thirds of adult women in the U.S. are classified as “overweight” or “obese,” only 10% of top US female CEOs fall into these weight categories. And though obese men are also quite rare among top CEOs, overweight men are actually overrepresented among them (61% of top US male CEOs are overweight, compared to 31% of an age-matched population sample).

Griffin (2007) has suggested that subjective evaluation systems of a potential employee’s disposition, ambition or attitude are more likely to be employed in supervisory or professional jobs (as opposed to blue-collar occupations). This suggests that fat women, who managers tend to view as lacking in self-discipline and overall competence, may face even larger barriers in their efforts to move into these more prestigious positions. Alternatively, it may be that the stigma fat women face is more likely to negatively impact their performance in certain environments. For example, research has demonstrated that fat women’s self-esteem is negatively impacted in situations emphasizing achievement, whereas the same is not true for thin women (Jambekar, et al., 2001), and that women with a stigmatized appearance perform worse than those without a stigmatized appearance when they are the only woman in a group of men (Kiefer, et al., 2006).

In summary, there is ample evidence that weight-based employment discrimination is disproportionately experienced by women and that such discriminatory practices have a significant impact on their work experiences, occupational attainment and financial compensation. Recent findings that women may be experiencing the greatest wage penalty when they move from “below-average” in weight to just slightly

over “ideal weight” highlights the extremely narrow range of body weights deemed acceptable for women and the pervasive emphasis placed on appearance in the evaluation of women in professional settings. Additionally, it appears that a woman’s weight is even more of a liability as she attempts to move into higher-ranking professions.

### *Education*

Given the disparities that have been documented between fat and non-fat women in the labor market, researchers have also examined whether these differences begin to emerge prior to entering the workforce. There is cross-sectional evidence that body weight and educational attainment are inversely related among White women, whereas the relationship is less consistent among men and women of color (Leigh, Fries & Hubert, 1992). Although the direction of effect has often been presumed to be that lower levels of education lead to increases in weight, evidence from longitudinal studies has demonstrated that the educational outcomes of young women are also negatively impacted by prior weight status (Glass, et al., 2010; Gortmaker, et al., 1993).

Studies highlighting the impact of weight on educational outcomes began nearly 40 years ago with work by Canning and Mayer (1966) demonstrating that, among elite universities in the Northeastern US, students classified as “obese” were significantly more likely to be denied acceptance, and this was especially true for women. Based on additional research by these investigators (Canning & Mayer, 1967) showing that, among high school students, there were no significant differences between those classified as obese and non-obese on standardized intelligence scores, grades, involvement in extracurricular activities, or interest and intent in pursuing higher education, they

concluded that obese students were being discriminated against during in-person interviews by college admission boards primarily based on their weight status. This seminal work has since inspired additional research on how body weight plays a role in both the high school experiences of adolescents and college enrollment rates.

Falkner and colleagues (2001) conducted a cross-sectional study in a population-based sample of public school students in 7<sup>th</sup>, 9<sup>th</sup>, and 11<sup>th</sup> grades. They found that “obese” status was associated with adverse social and educational outcomes for both boys and girls, but that these associations were both greater in number and worse in severity for girls. After adjusting for the possible influence of confounding variables, they found that “obese” girls, in addition to having greater odds of reporting adverse social and emotional outcomes, were over two times as likely to perceive themselves as being below-average students and one-and-a-half times more likely to report having been held back a year in school. Despite this, these girls did not report lower educational aspirations or less confidence in expecting to be professionally successful in adulthood.

A series of more recent longitudinal studies by Crosnoe and colleagues (Crosnoe, 2007; Crosnoe & Muller, 2004; Crosnoe, et al., 2008) found that the negative impact of body weight on educational outcomes for girls may be partly attributable to the social stigma they experience and the emotional consequences of this stigma. Using data from the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative study of U.S. adolescents in grades 7—12, these researchers found that adolescents of both genders who were “at risk of obesity” (those in the 85<sup>th</sup> percentile or above in BMI for their age group and gender) had lower academic achievement than other students. This was particularly true in schools where the average BMI of the



student body was lower and where there were higher rates of dating, contexts in which a heavier body might be both more noticeable and more of a social liability in the context of romantic activity. This led the authors to conclude that the impact of body weight on achievement may be mediated through lower self-appraisals in the context of higher stigma (Crosnoe & Muller, 2004).

These pathways appear to be especially potent in the case of adolescent females. In subsequent research using a subset of Add Health, (Crosnoe, et al., 2008) they found that as BMI increased among high school students the likelihood of being nominated by peers as “friends” decreased, especially among girls. Additionally, both boys and girls tended to organize themselves into friendship networks by body size, meaning that girls who were already stigmatized for their own weight were also more likely to be socially segregated from their non-stigmatized peers.

The hypothesis that the social consequences of weight for young women are, at least in part, what determines their academic outcomes was tested in a third study using data from Add Health. In this investigation, Crosnoe (2007) found that adolescent girls classified as “obese” (at or above the 95<sup>th</sup> percentile of BMI for their age-gender group) were less likely to enter college after high school than their non-obese peers, especially when they attended schools in which obesity was relatively uncommon and even when controlling for numerous other factors (e.g., parental education, academic ability, etc.) that could conceivably be related to both obesity and educational attainment. Obesity was not related to boys’ rates of college matriculation. Additionally, body weight for young women predicted an increase in internalizing symptoms, more alcohol and drug

use, and academic disengagement. These psychosocial factors explained about one third of obese girls' lower odds of enrolling in college.

A series of studies reported by Crandall (1991; 1995) demonstrated that young women may face additional hurdles rooted in weight-based discrimination even if they do manage to enroll in college. Specifically, he found that college students with higher body weight received less financial support from their parents (and, thus, relied more heavily on jobs, savings and financial aid) to pay for the expense of college. This finding was more reliable for women than it was for men across three different studies in two separate universities and after controlling for parental education level, income, race, family size and number of children attending college (Crandall, 1991). In a second set of studies, Crandall (1995) replicated these findings in other college samples and also found evidence consistent with the hypothesis that it was parental attitudes (rather than parental financial means) that most likely explained these discriminatory practices toward fat daughters.

Finally, several other recent studies have replicated the general findings of the negative impact of women's weight on educational outcomes while also considering the role of race. Merten, Wickrama and Williams (2008) examined the relationships between weight status during Wave 1 data collection in the Add Health study (average participant age = 15) and depressive symptoms and status attainment (indexed by college enrollment, employment and job satisfaction) at Wave 3 (average participant age = 22). They found that "obesity" among adolescent girls was associated with more depressive symptoms and lower status attainment in young adulthood when compared with girls with weight in the normative range, whereas obesity status among males was not associated with either

outcome. These researchers found no difference in these relationships between White and Black adolescents.

However, two other studies did find that the impact of adolescent girls' weight on academic outcomes differs by race. In cross-sectional analysis of Add Health data, Sabia (2007) found evidence of a significant negative relationship between BMI and grade point average for White females between the ages of 14 and 17. He also found, while controlling for other relevant variables, that White females who *perceived* themselves to be overweight had lower grade point averages than those who did not perceive themselves to be overweight. The results for White females were consistent across statistical estimates, whereas evidence for a significant relationship between weight and academic achievement for nonwhite females and males was not consistent.

Finally, Okunade, Hussey and Karakus (2009) examined the longitudinal relationship between weight status among students in grades 7—10 and on-time high school graduation rates. Whereas they found no significant adverse impact of weight on timely high school completion for males, there were significant negative effects for females. In particular, Asian girls appeared to suffer the largest penalty for higher weight status (significant at both the “obese” and “overweight” levels). There was also a strong negative effect of being “overweight” (but not “obese”) on White girls and a negative effect for “obesity” (but not “overweight”) among Hispanic girls. No adverse impact was found for either overweight or obese status among Black girls.

Collectively, these data point to yet another domain in which a higher body weight is more of a liability for females than for males, perhaps particularly so for certain ethnic groups. Additionally, understanding the discrepancies between fat and non-fat

women in the labor market may be better understood by an appreciation for the different trajectories that begin in earlier stages of development and impact employment prospects.

### *Romantic Relationships*

Another area in which females are more heavily penalized for their weight than males is in the context of romantic relationships. The vast majority of this research has been conducted on heterosexual relationships, which we will review first, followed by a discussion about what is known about women's weight in same-sex relationships.

Starting in early adolescence, young women who are at the higher end of the weight spectrum report fewer opportunities to date and less involvement in romantic relationships, relative to their thinner peers. A longitudinal study of seventh and eighth-grade girls by Halpern and colleagues (1999) demonstrated that girls with higher levels of body fat were significantly less likely to report dating activity over the past six months, and this was particularly true for White girls and for Black girls whose mothers were college graduates. Heavier girls were also less likely to be engaged in sexual activity, although this was mostly mediated by their reduced opportunities to date. A second study by this group (Halpern, et al., 2005) using a large, nationally-representative sample of slightly older girls (mean age= 15.7 years) found that, after controlling for potential confounding variables (e.g., physical maturity, demographic characteristics, and prior relationship history), for each one-point increase in BMI, the likelihood of being in a romantic relationship decreased by 6-7%. Widerman and Hurst (1998) found a similar pattern among college-aged women, where being heavier was related to lower probability

of being involved in a romantic relationship and less sexual experience, despite the women having similarly positive attitudes toward, and interest in, sexual relationships.

Whereas the preceding three studies only examined these relationships among females, studies that compare the experiences of males and females consistently find that having a heavier body weight is not as detrimental to the dating and sexual relationships of young men. Pearce and colleagues (2002), for example, found that, among students in grades 9-12, 50% of girls classified as “obese” reported having never dated, compared to only 20% of their average-weight peers. For boys, however, the percentage reporting no dating experience was virtually identical between “obese” boys (29%) and average-weight boys (30%).

A similar pattern of results is found for college students. In a study by Sheets and Ajmere (2005), women who were a standard deviation or more above the mean BMI for the women in their sample were half as likely to be dating as women one standard deviation or more below the mean BMI, with no significant differences in dating status observed between men in various weight categories. Among those in the sample who were coupled, weight was also inversely related to relationship satisfaction among women, but positively correlated with relationships satisfaction among men, indicating that the negative feedback women receive about their weight may both determine the likelihood of being in a relationship and the quality of relationships.

The negative experiences of fat women reported above map on to the perceptions of fat women examined in experimental studies. Regan (1996) found that college students receiving information about a male and female target presumed that an “obese” man’s sexual experiences and level of sexual desire would be virtually identical to that of

a “normal-weight” man. When the target was a woman, however, her weight status made a significant difference in how participants perceived her. Specifically, the fat female target was not only rated as less sexually desirable and experienced but also as less skilled, warm and responsive as a sexual partner and less likely to feel sexual desire for others. Chen and Brown (2005) asked college students to rate the attractiveness of prospective partners and found that men were more likely to choose sexual partners on the basis of weight than were women. Male study participants rated “obese” women as less attractive than women who were missing a limb, in a wheelchair, mentally ill or had a sexually transmitted disease.

The importance placed on women’s weight in the dating sphere is also confirmed by two studies examining personal advertisements. In the first (Smith et al., 1990), significantly more males than females requested partners with a low body weight (primarily using the descriptors “thin,” “slim,” or “petite”). In a second study, male respondents to a personal advertisement were significantly more likely to respond to an ad in which the woman was described as being in recovery from drug addiction than one who was described as 50 pounds “overweight” (Sitton & Blanchard, 1995). Not surprisingly, research on self-presentation in online dating profiles finds that women are more likely than men to lie about their weight (Toma, et al., 2008).

The finding that women’s weight is more of a liability than men’s in the sphere of romantic relationships has probably received the most attention in studies of so-called “marriage market” outcomes. This research has largely been done by economists using data from the National Longitudinal Study of Youth (NLSY) and the Panel Study on Income Dynamics (PSID). Findings consistently show that women who are fat have

lower rates of both cohabitation (Mudhopadhyay, 2008) and marriage (Averett & Korenman, 1996; Averett, Sikora & Argys, 2008; Conley & Glauber, 2007; Fu & Goldman, 1996) than thinner women and that, when they do marry, tend to marry partners with lower levels of education (Garn, Sullivan & Hawthorne, 1989a, 1989b), lower earnings (Averett & Korenman, 1996; Conley & Glauber, 2007;), of shorter stature (Oreffice & Quintana-Domeque, 2010) and less physical attractiveness (Carmalt, et al., 2008) than do thinner women, whereas these effects are either less or not observed at all for men's weight.

Thus, for fat women, heterosexual romantic relationships are yet another domain in which they fare worse, primarily because men are both more focused on, and critical of, the weight of their female partners, which may stem, in part, from the negative social judgment leveled at men who are associated with fat women (Hebl & Mannix, 2003). The potential outcomes for fat women range from being excluded entirely from desired relationships, to forming relationships with less desirable partners, to the extreme case of being targeted as "easy marks" for sexual conquest (Gailey & Prohaska, 2006; Prohaska & Gailey, 2010).

There has been no research to date on the impact of body weight on the frequency or quality of relationships among lesbians. Yet this would be an interesting area to investigate, since studies have found lesbians to be feel more satisfied with their bodies, diet less, and score lower on measures related to eating disorders than heterosexual women (Bergeron & Senn, 1998; Gettelman & Thompson, 1993; Herzog, et al., 1992; Moore & Keel, 2003; Owens, et al., 2003; Share & Mintz, 2002; Schneider, et al., 1995; Siever, 1994). This is despite the fact that some studies have found lesbians to weigh

more than heterosexual women (e.g., Boehmer, et al., 2007; Guille & Chrisler, 1999; Herzog, et al., 1992; Owens et al., 2003), even when compared with their heterosexual sisters (Rothblum & Factor, 2001). In contrast, gay men are usually found to be less satisfied with their bodies, diet more, and score higher on measures related to eating disorders than heterosexual men (Beren et al., 1996; French et al., 1996; Gettelman & Thompson, 1993; Herzog, et al., 1991; Schneider et al., 1995; Silberstein, et al., 1989; Strong, et al., 2000). Based on the above-reported findings that men place more importance on body weight as a factor in selecting romantic partners, we would hypothesize that weight stigma may be much less of a factor in lesbian relationships than in relationships between gay men.

### *Health and Mental Health*

There have been many studies examining attitudes of health and mental health professionals and trainees about weight in their clients and patients (cf., Puhl & Brownell, 2001, for a review), but the majority have not examined the role of gender. As will be reviewed below, a few studies have examined the association between weight stigma and gender of health care provider, gender of patient, or gender of case vignette. Other studies have used exclusively female samples.

*The health care setting.* In a study on attitudes of medical students, student participants watched videos of a female “patient” who appeared either average weight or “overweight” via padding and make-up (Breytspraak, et al., 1977). Subsequently students rated the heavier woman more negatively on 14 of 21 variables, such as defensive, cold, nervous, incompetent, depressed, and not likeable. The students also



rated the heavier woman as less educated, less in need of help, less likely to benefit from help, more likely to have continuing problems, but also reported that they had more desire to help the heavier woman. More recently, Puhl, Wharton and Heuer (2009) asked dietetic students (92% of whom were female) to view a hypothetical patient profile who was either male or female and either “obese” or “non-obese.” Students who viewed the profile of an obese patient generally rated him/her as less healthy, as having a poorer diet, and as less likely to comply with treatment recommendations, despite the fact that the health and nutritional habits attributed to these patients were identical across conditions. Although the profile of the obese male patient was given less favorable ratings on energy intake by the overall sample, students with higher levels of fat phobia rated the obese female patient’s diet quality as being poorer.

Anderson et al. (2001) sent physicians three hypothetical case vignettes that differed in BMI (25, 28 and 32, respectively), which were either all of women or all of men. Physicians were more likely to recommend weight loss for heavier case vignettes regardless of gender. But for those case vignettes with a BMI of 25, physicians were more likely to recommend weight loss, Weight Watchers, or a reduction in calories when the vignette was female, and more likely to discourage dieting and encourage accepting appearance when the vignette was male. There were no significant effects for physicians’ gender.

Schwartz, Chambliss, Brownell, Blair and Billington (2003) gave the Implicit Attitudes Test (IAT) to researchers and clinicians attending an international obesity conference. There was significant anti-fat bias on variables of bad/good, lazy/motivated, stupid/smart, and worthless/valuable. In addition, on self-report measures, participants

also rated fat people as lazy, stupid and worthless. Women and younger participants showed more anti-fat bias; participants who worked with fat people, had fat friends, or provided clinical care to fat patients had less anti-fat bias. In contrast, Foster et al. (2003) found over half of physicians to regard fat patients as noncompliant, ugly, and awkward, but female physicians had more positive attitudes about fat patients, such as greater empathy.

In a study designed to videotape and analyze how primary care physicians interact with their patients, Bertakis and Azari (2005) used a coding system and trained coders to note the occurrence of a number of practice-related variables. Physicians were twice as likely to diagnose “obesity” in female patients as in male patients. Physicians were more likely to discuss exercise with obese patients and less likely to discuss health education.

Given these results, it is not surprising that women perceive their body weight to be a factor in their interactions with health care providers. Amy, Aalborg, Lyons and Keranen (2006) used community samples to survey Black and White women with BMIs of 25 or higher about barriers to gynecological care. BMI was not correlated with education, employment, or access to health insurance, yet there was a strong association between the women’s BMI and their decisions to delay seeking health care or cancer-screening tests because of weight. Close to three-quarters of the women reported one or more specific barriers to health care such as disrespectful treatment, embarrassment about being weighed, negative attitudes by health care providers, unsolicited advice to lose weight, or the use of gowns, medical equipment, or exam tables that were too small. Women with higher BMIs were significantly more likely to report each barrier. Adams, Smith, Wilbur and Grady (1993) recruited women via newspaper advertisements and

found a significant difference between “average weight,” “moderately overweight,” and “very overweight” women (based on Metropolitan Life Tables for weight and height) on self-reported frequency of pelvic exams and reluctance to obtain pelvic exams, with heavier women reporting more reluctance and lower frequency of pelvic exams. They also surveyed physicians and found that 83% did not like performing pelvic exams on “very reluctant” (p. 52) patients, 17% did not like examining the “very obese,” and male physicians, especially if they were older, were more averse to examining “reluctant” patients than were female physicians and younger physicians. Fontaine, Faith, Allison and Cheskin (1998) used data from women in the 1992 National Health Interview Survey. After they controlled for age, race, education, income, smoking, and health insurance status, higher BMI was related to women delaying gynecological exams, Papp smears, and clinical breast exams, though not mammograms. In a study of female nurses (Olson, Schumaker & Yawn, 1994), those who were heavier were more likely to have delayed medical care because they were embarrassed about their weight, did not want a lecture about their weight, or were trying to lose weight before their medical appointment.

In a study that asked male and female patients about the quality of their medical care, Hebl and Mason (2003) found that “overweight” male patients reported that physicians spent less time with them than did average weight male patients; there was no effect for weight among female patients. Physicians were more likely to discuss weight-related issues with heavier female than male patients, including nutrition counseling and stress. At the same time, heavier female patients reported more positive care by physicians than did average weight female patients; there was no weight effect for men.

*Exercise.* Wee, McCarthy, Davis and Phillips (1999) used data from the National Health Interview Survey to examine factors that are associated with physicians counseling patients to exercise. Physicians were more likely to recommend exercise for patients who were female, had higher BMIs, were in their forties, had health insurance, had higher incomes, and had higher levels of education. However, the gender difference disappeared when the results were adjusted for current weight loss attempts.

Even though exercise for health and/or weight loss is frequently suggested by health care professionals, gyms and fitness clubs may be uncomfortable settings for heavier people. A study of college women by Vartanian and Shaprow (2008) found that a higher frequency of weight stigmatizing experiences was positively correlated with motivation to avoid exercise behavior.

*The mental health setting.* Young and Powell (1985) asked mental health professionals to evaluate a case history of a middle-aged, White female client accompanied by a photograph that was altered to appear average weight or 20% or 40% over “best weight.” The heaviest photograph received significantly higher ratings of psychological dysfunction. Additionally, female mental health professionals as well as mental health professionals who were younger and those who were average weight assigned more negative psychological ratings to the heavier photographs.

Two studies have focused specifically on attitudes toward weight among psychologists. Agell and Rothblum (1991) mailed a case vignette to psychologists who were members of Division 29 (psychotherapy) of the American Psychological Association (APA), which depicted a client as either male or female, average weight or heavy. Psychologists rated the heavier case vignette as more physically unattractive and

embarrassed, but also softer and kinder than the average-weight case. Female clients were evaluated as more motivated and less severely impaired than male clients, but there were no significant gender or weight effects on recommendations for therapy. Davis-Coelho, Waltz and Davis-Coelho (2000) mailed a self-description of a hypothetical Caucasian female client accompanied by a fat or thin photograph to psychologists who were members of APA Division 12 (clinical psychology), 17 (counseling psychology), 29 (psychotherapy) and 42 (independent practice). Psychologists who received the fat photograph were more likely to diagnose an eating disorder, and to suggest “improve body image” and “increase sexual satisfaction” as treatment goals. Younger psychologists who received the fat photograph were more likely to predict that fat clients needed to make more effort, and female psychologists gave the fat “client” a worse prognosis.

In sum, there has been limited research focusing on weight bias and gender in health and mental health settings. Existing research finds strong evidence of bias against fat women among health care providers, who are both more likely to diagnose women as “obese” and to treat fat women as having more negative personal qualities. The fact that fat women report delaying medical care and avoiding exercise facilities because of weight-based stigma, and the subsequent impact on their health, is of considerable concern.

### *Media*

Although a sizable body of research in the field of eating disorders has examined the impact of the ever-present *thin* female body in the media on both standards of

attractiveness and eating disorder symptoms (see Greenberg & Worrell, 2005, for a review), far fewer studies have explored the roles assigned to fat women in mass media. Indeed, one of the main challenges in analyzing the characterization of fat women in the media is that they are largely absent. One of the first studies examining prevalence of body types in prime time television was conducted by Kaufman in 1980, who found that 88% of the individuals shown in prime time television programming had thin or average body types and only 12% were “overweight or obese.” Men with larger body sizes were depicted roughly twice as frequently (15% of the sample) as were women with larger bodies (8% of the sample).

More recent studies have replicated both the underrepresentation of all fat bodies, as compared with statistics from the general population, and the discrepancy between men and women. Analysis by Spitzer and colleagues (1999) of the “ideal” body types portrayed for men and women over the last four decades found that, while the average BMI of Miss America Pageant contestants and centerfold models in *Playboy* has decreased significantly, the BMI of male models featured as centerfolds in *Playgirl* magazine has *increased*. The average body weight for both men and women has increased during this time period; thus, the discrepancy between the BMIs of female bodies portrayed in these media and women in the general population has increased at the same time as the discrepancy between the BMIs of idealized male bodies and those of men in the general population has actually decreased. (The authors do note, however, that the increase in the BMI of male centerfolds likely reflects an increase in muscularity, which is not necessarily accounted for in BMI measurement).

A study analyzing both primetime network television and daytime soap opera characters found that female body types were more slender on average than male body types, with 72.5% and 29.2% of females and males, respectively, in the underweight category. Conversely, 12.8% of female body types were classified as “overweight,” compared with 32.9% of male body types (White, et al., 1999). Interestingly, thin women even outnumber heavier women on weight loss infomercials, where they are depicted as the “satisfied customers” of products and men (who appear less often overall) are depicted as the “scientific experts” (Blaine & McElroy, 2002).

Finally, a study that examined both the distribution and associated characteristics of various body types on prime-time television found that only 14% of females and 24% of males were in the “overweight or obese” category, less than half the percentages in the general population. Although a number of unfavorable characteristics were associated with large body size for both genders (e.g., reduced likelihood of interacting with romantic partners), fat women were also less likely than their thinner counterparts to be judged as attractive, less likely to show physical affection, and more likely to be the object of humor, whereas these differences were not significant between weight categories for male characters (Greenberg et al., 2003).

The tendency for fat women, when they are included in mass media, to be cast primarily as foils for thinner characters has also been studied. Fouts and colleagues (Fouts & Burggraf, 1999; 2000, Fouts & Vaughan, 2002) have shown in studies of situation comedies shown on prime time television in the late 1990s that below-average weight women are over-represented, compared with the general population, and receive significantly more positive verbal comments from male characters with regards to body

weight and shape than do heavier women (Fouts & Burggraf, 1999). Conversely, heavier female characters receive significantly more derogatory comments from male characters and the majority of the time these comments are followed by audience reactions of laughter, “oohs,” or giggles, implying that male commentary on fat female bodies is a socially acceptable behavior (Fouts & Burggraf, 2000).

When they explored whether the same would be true for heavy male characters they found that, while fat men were also underrepresented compared to the population, there was a smaller discrepancy than that for women, and that it was the heavy male characters themselves who made comments about their own weight (again, followed by audience laughter) rather than a dynamic in which either females or other males made reference to their weight (Fouts & Vaughan, 2002). Similar findings were also reported by Himes and Thompson (2007), who examined fat stigmatization messages presented in both television shows and movies between 1984 and 2004 and found that, although men and women were almost equally likely to be the targets of fat stigmatization, men were about three times more likely to make comments about someone’s weight than were women.

In addition to often being the butt of jokes, as noted above, fat women are less likely to be portrayed as being the object of romantic interest. In a more in-depth analysis of two particular television situation comedies that featured fat female characters, Giovanelli and Ostertag (2009) found that the fat women characters, although often present during discussions of the romantic or sexual adventures of other (thin) characters, either did not participate in these conversations by referring to their own sexual or romantic interests, or were depicted as pursuing love interests who had already



been judged by others as clearly flawed and/or who were also the butt of jokes. Analysis of other media (i.e., popular movies and sub-genres of so-called “Chick Lit,” a genre of fiction written by and for women) find that even when a fat woman *is* portrayed as a romantic lead, her weight is often as much of interest (comically, or otherwise) as any other aspect of the plot line (Frater, 2009; Mendoza, 2009).

Indeed, fat women celebrities in general are often discussed as much for their weight and size as anything else, and this is especially true when these women have public “battles” with their weight that become the topic of tabloid news. In their essay on how fat women are sometimes “betrayed” by these celebrity icons, Bernstein and St. John (2009) focus on four women in particular (Ricky Lake, Carnie Wilson, Oprah Winfrey and Roseanne Barr), and their public weight losses (and/or continuing weight loss efforts). The general theme noted by the authors is of women who begin by appearing to defy expectations to apologize for their size who then, subsequent to their own weight loss, distance themselves from this stance by participating in the denigration of fat bodies.

In summary, the media contribute to the marginalization of fat woman either by rendering them invisible when presenting a “norm” of predominantly underweight women and/or by making fat women’s weight the most salient characteristic about them as people and a target for remedy (through weight loss), pity, or comedy. Aside from the deleterious effect on consumers of the media, it can also be inferred that, given their scarcity in the industry, fat women likely face steep challenges to obtaining employment in this domain.

*Race and ethnicity*

Research has generally found some racial and ethnic minority groups in the U.S. to weigh more than White people but also to be more satisfied with their weight and body size. Carr, Jaffe and Friedman (2008) found Black participants to self-report higher weights than White participants in the National Survey of Midlife Development in the United States (MIDUS). Winkleby, Gardner and Taylor (1996), using data from the Stanford Five-City Project, found that Hispanic participants had higher BMIs than White participants matched on relevant demographic variables, and also had higher desired weights than White counterparts. Rand and Kuldau (1990) interviewed over 2,000 adults in Florida from a community probability sample; White women had lower BMIs than Black women yet were more likely to state that they had a “weight problem.” It is important to note that weight in the U.S. is inversely correlated with income, particularly for women (e.g., Sobal & Stunkard, 1989), and that people of color in the U.S. have lower mean incomes than do White people.

These differences in both absolute body weights and in perception of “overweight” among people of color have led researchers to examine how weight-related discrimination is influenced by race or ethnicity. Puhl, Andreyeva and Brownell (2008) used data from MIDUS, which asked participants about daily or lifetime discrimination in interpersonal relationships based on age, gender, race, height or weight, ethnicity or nationality, physical disability, appearance other than height or weight, sexual orientation, religion, or other reason. Women (10.3%) were twice as likely as men (4.9%) to report weight-based discrimination, and weight discrimination was reported more frequently by Black women (23.9%) and Black men (12.7%), who also weighed

more. In regression analyses, being younger, female, and having high BMI were predictors of weight discrimination, but there was no effect for race.

Carr and colleagues (2008) similarly used the discrimination variables in the MIDUS data set to examine the relationship between race, socioeconomic status (SES), gender and weight. Their factor analysis of items of perceived daily interpersonal discrimination yielded three subscales: lack of respect (e.g., being treated with discourtesy, receiving poor service), blemish of character (e.g., being treated as dishonest or frightening to others) and harassment/teasing (e.g., being called names, insulted, or teased). Black participants and those with lower SES had higher BMIs, and people with higher BMIs reported more instances of all three subtypes of discrimination. Women reported greater lack of respect but lower blemish of character and harassment/teasing than did men. White men in the highest BMI category reported higher levels on all three subscales of discrimination than thinner men, whereas Black men in the highest BMI category reported lower levels of discrimination than men who were average weight. There was no significant effect for race among women.

Wade and DiMaria (2003) found an interaction of race and weight when White college students were asked to rate vignettes of women that were accompanied by a photograph depicting the woman as either Black or White, and either fat or thin. The thinner White woman was rated more positively than the fatter White woman on attractiveness, friendliness, enthusiasm, occupational success, and mate potential, whereas there was no difference on trustworthiness or parenting skills. In contrast, the heavier Black woman was rated more positively than the thinner Black woman on

friendliness, trustworthiness, parenting skills, and mate potential, while there was no difference on attractiveness, enthusiasm, or occupational success.

Hebl and Heatherton (1998) asked Black and White college students to rate magazine photographs of nine Black and nine White female fashion models; one-third were thin, one-third average weight, and one-third larger than average. White women rated heavier Black and White women in photographs as less attractive, intelligent, good at her job, successful in her relationships, happy with her life, and popular. In contrast, Black women did not rate Black and White women in photographs differently according to weight, except for rating heavier Black women as less attractive. When the participants were asked to select suitable jobs for each target woman, White women assigned jobs much lower in status to heavier women in photographs, whereas there was no such systematic bias in the ratings by Black participants.

Using the same methodology as Hebl and Heatherton (1998), Hebl, King and Perkins (2009) also found that White participants rated heavier Black and White targets more negatively than thin or average-weight targets, whereas there was no target weight effect for Black raters. In a second experiment, participants were first asked to read an article that was either neutral or that stated that Black women were thinner than White women (given to Black participants) or the reverse (given to White participants). Reading the article did not change the results for White female participants (who continued to rate heavier Black and White targets more negatively) but Black female participants who read the article stating that Black women have lower weights than White women engaged in more negative stereotyping of heavier Black and White targets. The

authors concluded (p. 1168) that “individuals tend to self-affirm in domains in which they succeed.”

Latner, Stunkard and Wilson (2005) asked male and female college students to rate figure drawings of adults (men rated male targets and women rated female targets) who were depicted as average weight with no visible disability, holding crutches with braces on one leg, sitting in a wheelchair, missing a hand, having a facial disfigurement, or fat. Overall the fat figure drawing received the second-to-lowest rating, above the drawing of the adult missing a hand, and men gave the fat drawing lower ratings than did women. Black and Asian students rated the fat drawing more positively than did White students; there was no difference between Hispanic students and White students. In a gender by race/ethnicity interaction, Black women rated the fat drawing more positively than did White women.

A study by Hebl and Turchin (2005) examined differences in weight stigma between White and Black male college students by having them rate targets on seven dimensions. In addition to the male students stigmatizing heavy White men more than heavy Black men, there were also ethnic differences in the ratings given to female targets. Specifically, White men appeared to have a narrower range of acceptable weight for White women, rating both heavy and medium-sized women more negatively than thin women whereas Black men gave more positive ratings to both thin and medium-sized Black women than they gave to heavy Black women. Interestingly, body size did not influence men’s evaluations of women of a different race, only their ratings of women within their own racial group.

This greater latitude of body sizes perceived as attractive among Black men may help explain differences in the dating experiences of White and Black women of different sizes. Harris, Walters and Waschull (1991) found that self-reported frequency of dating was negatively correlated with BMI for White female college students, whereas there was no significant relationship between BMI and dating frequency for White male students or for Black female or male students. White male students were significantly more likely than Black male students to have refused to date someone because of her weight. Similarly, Powell and Kahn (1995) found Black male college students to express less desire for dating thin women than did White male students.

In sum, Black and Hispanic women may weigh more than White women and in that regard be subjected more often to weight-related discrimination. On the other hand, research on Black and White women and men shows Black people to be more accepting of heavier weight. Reasons for this could include the greater prevalence of large body size among these groups, or a tendency among people of color to reject mainstream White values, including White standards of bodily attractiveness. Moreover, even if lower body weight is preferred for the sake of attractiveness, fatness is not necessarily associated with negative personal qualities. As Hebl and Heatherton write (1998, p. 424): “This stigma of obesity may condemn large White women to downward socioeconomic mobility because of widespread discrimination....Although Black women may have an aesthetic preference for thin body shapes, they tend not to generalize this preference to non-weight-relevant domains, such as occupational ability or social status.”

We caution against an overly optimistic reading of this phenomenon for two reasons. The first is that other sources of discrimination against Black women may

simply overshadow those attributable to body size. The venues in which fat White women are most likely to be discriminated against, namely high status jobs and marriage to earners of high income, may be venues from which many women of color have been excluded due to other factors, making additional effects due to weight impossible to detect (Averett & Korenman, 1999).

Second, some scholars have interpreted the apparent lack of size discrimination against Black women in particular as fitting with the racial stereotype of Black women as being large, strong, independent and nurturing of others (Beauboeuf-Lafontant, 2003; Bowen, Tomoyasu & Cauce, 1991). Such a stereotype, however, often masks the very real powerlessness and marginalization of Black women, as well as potentially invalidating the experiences of Black women who do experience body image distress, as well as discrimination due to body size (Neumark-Sztainer, et al., 1998).

### *Conclusion*

The price paid by women as a result of weight-based discrimination is significant, cuts across multiple domains, and yet has received relatively little attention by feminist scholars when compared with other topics relating to weight (e.g., eating disorders and body image disturbance) or with other sources of discrimination impacting women. Although research on weight stigma has increased significantly in recent years, few researchers have addressed or attempted to assess the gendered nature of this bias (Griffin, 2007 being a notable exception). As can be surmised from this review, however, there is substantial and consistent evidence that women suffer disproportionately from weight bias in a number of domains.

In employment settings, fat women are less likely to be hired, receive worse treatment on the job and earn less than their non-fat peers. Whereas there is some evidence of bias against fat men in employment settings, it is generally of a lower magnitude and/or occurs only at the highest levels of weight. Women also appear to suffer a penalty for being fat when it comes to both their functioning within educational settings and their accumulation of education, whereas men experience this penalty much less frequently, if at all. In romantic relationships and in the so-called “marriage market” women also fare worse if they are fat, with both lower probabilities of marriage and marriage to partners of lower status. Again, evidence for men suffering penalties for weight in this domain is either totally absent or inconsistent across samples.

A reduction of opportunities in the domains of employment, education and marital relationships has a substantial impact on a woman’s economic opportunities in life. While there has long been recognition of the inverse relationships between women’s weight and socioeconomic status (most particularly in the Western part of the world, but increasingly elsewhere; McLaren, 2007), this relationship has often been interpreted as one in which poor women become fat due to lack of resources and education. Given the findings from longitudinal studies reviewed here, however, we agree with the conclusion of Ernsberger (2009) who has argued that “although there is some evidence that poverty is fattening, a stronger case can be made for the converse: fatness is impoverishing” (p. 26). This is especially true for women, who suffer from multiple sources of weight-based discrimination and thus, experience the impact of cumulative disadvantage (Clarke, et al., 2010).



At a time when the declared “war on obesity” has brought more attention than ever to the presumed health risks associated with body weight, fat women’s health care is actually being compromised because of the bias of various health care professionals. There is evidence that fat women delay care or avoid certain types of facilities entirely in order to avoid these stigmatizing experiences and yet *this* impact on the health of fat women has received very little attention. Moreover, the direct impact of the stress associated with stigmatizing experiences has been proposed to operate as an independent risk factor for adverse health outcomes (Muennig, 2008). As women experience more weight bias, they are also likely to shoulder a disproportionate share of this risk.

Lastly, there are very few opportunities for fat women (or, for that matter, any woman who is not exceedingly slender) to view favorable reflections of herself in mass media. Instead, various media outlets display and legitimize the view of fat women as targets of humor or pity. In the rare case of the fat female celebrity, often her size is given more attention than any other aspect of her professional life, and speculations about weight loss or regain predominate any coverage of her activities.

In much of this research, it appears that it is white women who most often experience weight bias (and white men who most often perpetuate anti-fat bias), although this is not universally true and likely depends on other factors, such as socioeconomic status and peer group (Ofosu et al., 1998). It may be that people of color, who tend to weigh more, perceive less “deviance” in a fat body and thus do not stigmatize fatness. Alternatively, the lack of engagement with the thin ideal may reflect a more general disengagement with a mainstream media that largely excludes people of color.

To our knowledge, this is the first systematic review of the ways in which weight bias disproportionately impacts fat women in multiple domains. This is despite research demonstrating the downward social mobility of fat women dating back nearly fifty years (Goldblatt et al., 1965). This is also despite recent research conducted in a large sample of U.S. adults showing that discrimination based on weight ranked as *the third most prevalent cause of perceived discrimination among women* (after gender and age discrimination) and was reported more frequently than discrimination based on race, sexual orientation, religion or physical disability (Puhl, et al., 2008).

Given how extensively anti-fat bias impacts the lives of women, we question why feminist scholars have not paid more attention, why, as Hartley (2001) writes, "...the fat body has largely been ignored in feminist studies that attempt to theorize the female body" (p. 61). Whereas anorexic bodies have been conceptualized as a metaphor for cultural proscriptions on women, fat bodies too often get interpreted in terms of poor health, with blame placed squarely on the individual (LeBesco, 2009). This discrepant treatment in the feminist literature parallels the treatment of eating disorders and fatness in the popular media. Saguy and Gruys (2010) have examined how news media (specifically, the *New York Times* and *Newsweek*) described anorexia versus "overweight" in the years 1995 to 2005. They state: "...the news media treats anorexics as *victims* of a terrible illness beyond their and their parents' control, while obesity is caused by bad individual behavior, including, in the case of children, parental neglect" (p. 232). They also point out that girls with anorexia are portrayed as White and from affluent families whereas fatness is associated with poor girls of color.

Since the publication of *Fat is a Feminist Issue* in the late 1970s, much of the writing by feminists on the subject of women's weight has concerned itself primarily with the question of whether fatness (often conflated with disordered eating or other forms of psychopathology) should be "treated" by feminist therapists (e.g., Chrisler, 1989) and, much more often, with the subject of how thinness came to be prized as highly as it is in a patriarchal culture (e.g., Bordo, 1993). We propose that it is not enough to note that the ever thinner cultural ideal means that practically every woman will feel badly about her body. Feminists also need to turn our collective attention to the reality that, because of the pervasiveness and gendered nature of weight-based stigma, a majority of women stand to *suffer significant discrimination* because they do not conform to this ever-narrower standard.

Although the feminist movement has mobilized women to organize in opposition to other forms of discrimination that disproportionately impact women, there seems to be an exception when it comes to weight-based discrimination (Rothblum, 1994). That a fat woman's experience would not receive the same level of attention, critique, and organized action only serves to further devalue her.

References

- Adams, C.H., Smith, N.J., Wilbur, D.C., & Grady, K.E. (1993). The relationship of obesity to the frequency of pelvic examinations: Do physician and patient attitudes make a difference? *Women & Health, 20*(2), 45-57. doi: 10.1300/J013v20n02\_04
- Agell, G., & Rothblum, E.D. (1991). Effects of clients' obesity and gender on the therapy judgments of psychologists. *Professional Psychology: Theory and Practice, 22*, 223-229. doi: 10.1037/0735-7028.22.3.223
- Amy, N.K., Aalborg, A., Lyons, P., & Keranen, L. (2006). Barriers to routine gynecological cancer screening for White and African-American obese women. *International Journal of Obesity, 30*, 147-155. doi:10.1038/sj.ijo.0803105
- Anderson., C., Peterson, C.B., Fletcher, L., Mitchell, J.E., Thuras, P., & Crow, S.J. (2001). Weight loss and gender: An examination of physician attitudes. *Obesity Research, 9*, 257-263. doi: 10.1038/oby.2001.30
- Averett, S., & Korenman, S. (1996). The economic reality of the beauty myth. *Journal of Human Resources, 31*, 304-330. doi:10.2307/146065
- Averett, S., & Korenman, S. (1999). Black-white differences in social and economic consequences of obesity. *International Journal of Obesity, 23*, 166-173. doi:10.1038/sj.ijo.0800805
- Averett, S.L., Sikora, A., & Argys, L.M. (2008). For better or worse: Relationship status and body mass index. *Economics and Human Biology, 6*, 330-349. doi:10.1016/j.ehb.2008.07.003

- Baum, C.L., & Ford, W.F. (2004). The wage effects of obesity: A longitudinal study. *Health Economics, 13*, 885-899. doi:10.1002/hec.881
- Beauboeuf-Lafontant, T. (2003). Strong and large black women? Exploring relationships between deviant womanhood and weight. *Gender & Society, 17*, 111-121. doi: 10.1177/0891243202238981
- Bellizzi, J.A., & Hasty, R.W. (1998). Territory assignment decisions and supervising unethical selling behavior: The effects of obesity and gender as moderated by job-related factors. *Journal of Personal Selling & Sales Management, 18*(2), 35-49.
- Bellizzi, J.A., Klassen, M.L., & Belonax, J.J. (1989). Stereotypical beliefs about overweight and smoking and decision-making in assignments to sales territories. *Perceptual and Motor Skills, 69*, 419-429.
- Beren, S.E., Hayden, H.A., Wilfley, D.E., & Grilo, C.M. (1996). The influence of sexual orientation on body dissatisfaction in adult men and women. *International Journal of Eating Disorders, 20*, 135-141. doi:10.1002/(SICI)1098-108X(199609)20:2<135::AID-EAT3>3.3.CO;2-1
- Bergeron, S.M., & Senn, C.Y. (1998). Body image and sociocultural norms. *Psychology of Women Quarterly, 22*, 385-401. doi: 10.1111/j.1471-6402.1998.tb00164.
- Bernstein, B., & St. John, M. (2009). The Roseanne Benedict Arnolds: How fat women are betrayed by their celebrity icons. In E. Rothblum and S. Solovay (Eds.), *The Fat Studies Reader* (pp. 263-270). New York: New York University Press.
- Berryman, D.E., Dubale, G.M., Manchester, D.S., & Mittelstaedt, R. (2006). Dietetics students possess negative attitudes toward obesity similar to nondietetics students.

*Journal of the American Dietetic Association*, 106, 1678-1682.

doi:10.1016/j.jada.2006.07.016

Bertakis, K.D., & Azari, R. (2005). The impact of obesity on primary care visits.

*Obesity Research*, 13, 1615-1623. doi:10.1038/oby.2005.198

Blaine, B., & McElroy, J. (2002). Selling stereotypes: Weight loss infomercials, sexism and weightism. *Sex Roles*, 46, 351-357. doi: 10.1023/A:1020284731543

Boehmer, U., Bowen, D.J., & Bauer, G.R. (2007). Overweight and obesity in sexual-minority women: Evidence from population-based data. *American Journal of Public Health*, 97, 1134-1140. doi: 10.2105/AJPH.2006.

Bordo, S. (1993). Unbearable weight: Feminism, Western culture, and the body.

Berkeley, CA: University of California Press.

Bowen, D., Tomoyasu, N. & Cauce, A. (1991). The triple threat: A discussion of gender, class and race differences in weight. *Women & Health*, 17(4), 123-143.

doi: 10.1300/J013v17n04\_06

Breytspraak, L.M., McGee, J., Conger, J.C., Whatly, J.L., & Moore, J.T. (1977).

Sensitizing medical students to impression formation processes in the patient interview. *Journal of Medical Education*, 52, 47-54. doi:10.1097/00001888-197701000-00007

Brown, L.S. (1985). Women, weight, and power: Feminist theoretical and therapeutic issues. *Women & Therapy*, 4, 61-71.

Brown, L.S. (1989). Fat-oppressive attitudes and the feminist therapist: Directions for change. *Women & Therapy*, 8, 19-29.

- Canning, H., & Mayer, J. (1966). Obesity—its possible effect on college acceptance. *New England Journal of Medicine*, 275, 1172-1174.  
doi:10.1056/NEJM196611242752107
- Canning, H., & Mayer, J. (1967). Obesity: An influence on high school performance? *American Journal of Clinical Nutrition*, 20, 352-354.
- Carmalt, J.H., Cawley, J., Joyner, K. & Sobal, J. (2008). Body weight and matching with a physically attractive romantic partner. *Journal of Marriage and Family*, 70, 1287-1296. doi: 10.1111/j.1741-3737.2008.00566.x
- Carr, D., Jaffe, K.J., & Friedman, M.A. (2008). Perceived interpersonal mistreatment among obese Americans: Do race, class, and gender matter? *Obesity*, 16(Supplement 2), S60-S68. doi:10.1038/oby.2008.453
- Cawley, J. (2004). The impact of obesity on wages. *Journal of Human Resources*, 39, 451-474. doi:10.2307/3559022
- Chen, E.Y., & Brown, M. (2005). Obesity stigma in sexual relationships. *Obesity Research*, 13, 1393-1397. doi: 10.1038/oby.2005.168
- Chrisler, J.C. (1989). Should feminist therapists do weight loss counseling? *Women & Therapy*, 8(3), 31-37. doi: 10.1300/J015V08N03\_05
- Clarke, P.J., O'Malley, P.M., Schulenberg, J.E., Johnston, L.D. (2010). Midlife health and socioeconomic consequences of persistent overweight across early adulthood: Findings from a national survey of American adults (1986-2008). *American Journal of Epidemiology*, 172, 540-548. doi:10.1093/aje/kwq156

- Conley, D., & Glauber, R. (2007). Gender, body mass, and socioeconomic status: New evidence from the PSID. *Advances in Health Economics and Health Services Research, 17*, 253-275. doi: 10.1016/S0731-2199(06)17010-7
- Crandall, C.S. (1991). Do heavy-weight students have more difficulty paying for college? *Personality and Social Psychology Bulletin, 17*, 606-611. doi: 10.1177/0146167291176002
- Crandall, C.S. (1995). Do parents discriminate against their heavyweight daughters? *Personality and Social Psychology Bulletin, 21*, 724-735. doi: 10.1177/0146167295217007
- Crosnoe, R. (2007). Gender, obesity, and education. *Sociology of Education, 80*, 241-260. doi: 10.1177/003804070708000303
- Crosnoe, R, Mueller, A.S., & Frank, K. (2008). Gender, body size and social relationships in American high schools. *Social Forces, 86*, 1189-1216.
- Crosnoe, R., & Muller, C. (2004). Body mass index, academic achievement, and school context: Examining the educational experiences of adolescents at risk of obesity. *Journal of Health and Social Behavior, 45*, 393-407. doi:10.1177/002214650404500403
- Davis-Coelho, K., Waltz, J., & Davis-Coelho, B. (2000). Awareness and prevention of bias against fat clients in psychotherapy. *Professional Psychology: Research and Practice, 31*, 682-684. doi:10.1037/0735-7028.31.6.682
- Diamond, N. (1985). Thin is the feminist issue. *Feminist Review, 19*, 45-64.



- Ernsberger P. (2009). Does social class explain the connection between weight and health? In E. Rothblum & S. Solovay (Eds.), *The fat studies reader* (pp. 25-36). New York: New York University Press.
- Falkner, N.H., Neumark-Sztainer, D., Story, M., Jeffery, R.W., Beuhring, T. & Resnick, M.D. (2001). Social, educational, and psychological correlates of weight status in adolescents. *Obesity Research*, 9, 32-42. doi: 10.1038/oby.2001.5
- Fallon, P., Katzman, M.A., & Wooley, S.C. (1994). *Feminist perspectives on eating disorders*. NY: The Guilford Press.
- Fikkan, J., & Rothblum, E. (2005). Weight bias in employment. In K.D. Brownell, R.M. Puhl, M.B. Schwartz. & L. Rudd (Eds.), *Weight bias: Nature, consequences and remedies* (pp. 15-28). New York: Guilford.
- Fonda, S.J., Fultz, N.H., Jenkins, K.R, Wheeler, L.M., & Wray, L.A. (2004). Relationship of body mass and net worth for retirement-aged men and women. *Research on Aging*, 26, 153-176. doi: 10.1177/0164027503258739
- Fontaine, K.R., Faith, M.S., Allison, D.B., & Cheskin, L.J. (1998). Body weight and health care among women in the general population. *Archives of Family Medicine*, 7, 381-384. doi:10.1001/archfami.7.4.381
- Foster, G.D., Wadden, T.A., Makris, A.P., Davidson, D., Sanderson, R.S., Allison, D.B., & Kessler, A. (2003). Primary care physicians' attitudes about obesity and its treatment. *Obesity Research*, 11, 1168-1177. doi: 10.1038/oby.2003.161
- Fouts, G., & Burggraf, K. (1999). Television situation comedies: Female body images and verbal reinforcements. *Sex Roles*, 40, 473-481. doi: 10.1023/A:1018875711082

- Fouts, G., & Burggraf, K. (2000). Television situation comedies: Female weight, male negative comments, and audience reactions. *Sex Roles, 42*, 925-932. doi: 10.1023/A:1007054618340
- Fouts, G. & Vaughan, K. (2002). Television situation comedies: Male weight, negative references, and audience reactions. *Sex Roles, 46*, 439-442. doi: 10.1023/A:1020469715532
- Frater, L. (2009). Fat heroines in Chick-Lit: Gateway to acceptance in the mainstream? In E. Rothblum and S. Solovay (Eds.), *The fat studies reader* (pp. 235-240). New York: New York University Press.
- French, S.A., Story, M., Remafedi, G., Resnick, M.D., & Blum, R.W. (1996). Sexual orientation and prevalence of body dissatisfaction and eating disordered behaviors: A population-based study of adolescents. *International Journal of Eating Disorders, 19*, 119-126. doi:10.1002/(SICI)1098-108X(199603)19:2<119::AID-EAT2>3.3.CO;2-B
- Fu, H., & Goldman, N. (1996). Incorporating health into models of marriage choice: Demographic and sociological perspectives. *Journal of Marriage and the Family, 58*, 740-758. doi:10.2307/353733
- Gailey, J. A., & A. Prohaska. (2006). "Knocking off a fat girl": An exploration of hogging, male sexuality and neutralizations. *Deviant Behavior, 27*, 31-49. doi: 10.1080/016396290968353
- Garn ,S.M., Sullivan, T.V., & Hawthorne, V.M. (1989a). Educational level, fatness and fatness differences between husband and wives. *American Journal of Clinical Nutrition, 50*, 740-745.

- Garn, S.M., Sullivan, T.V., & Hawthorne, V.M. (1989b). The education of one spouse and the fatness of the other spouse. *American Journal of Human Biology*, 1, 233-238. doi: 10.1002/ajhb.1310010302
- Gettelman, T.E., & Thompson, J.K. (1993). Actual difference and stereotypical perceptions in body image and eating disturbances: A comparison of male and female heterosexual and homosexual samples. *Sex Roles*, 29, 545-562. doi: 10.1007/BF00289327
- Giovanelli, D., & Ostertag, S. (2009). Controlling the body: Media representations, body size, and self-discipline. In E.Rothblum and S. Solovay (Eds.), *The fat studies reader* (pp. 289-296). New York: New York University Press.
- Glass, C.M., Haas, S.A., Reither, E.N. (2010). The skinny on success: Body mass, gender and occupational standing across the life course. *Social Forces*, 88, 1777-1806.
- Goldblatt, P.B, Moore, M.E., Stunkard, A.J. (1965). Social factors in obesity. *Journal of the American Medical Association*, 192, 97-102.
- Gortmaker, S.L., Must, A., Perrin, J.M., Sobol, A.M., & Dietz, W.H. (1993). Social and economic consequences of overweight in adolescence and young adulthood. *New England Journal of Medicine*, 329, 1008-1012.  
doi:10.1056/NEJM199309303291406
- Gregory, C. A., & Ruhm, C. J. (2009, May). Where does the wage penalty bite? NBER Working Paper Series (Vol. w14984). Retrieved from <http://www.nber.org/papers/w14894>

- Greenberg, B.S., Eastin, M., Hofschire, L., Lachlan, K., & Brownell, K.D. (2003).  
Portrayals of overweight and obese individuals on commercial television.  
*American Journal of Public Health, 93*, 1342-1348. doi:10.2105/AJPH.93.8.1342
- Greenberg, B.S., & Worrell, T.R. (2005). The portrayal of weight in the media and its  
social impact. In K.D. Brownell, R.M. Puhl, M.B. Schwartz, & L. Rudd (Eds.),  
*Weight bias: Nature, consequences, and remedies* (pp. 42-53). New York:  
Guilford.
- Griffin, A.W. (2007). Women and weight-based employment discrimination. *Cardozo  
Journal of Law and Gender, 13*, 631-662.
- Guille, C., & Chrisler, J.C. (1999). Does feminism serve a protective function against  
eating disorders? *Journal of Lesbian Studies, 3*(4), 141-148. doi:  
10.1300/J155v03n04\_18
- Halpern, C.T., Udry, J.R., Campbell, B., & Suchindran, C. (1999). Effects of body fat on  
weight concerns, dating and sexual activity: A longitudinal analysis of Black and  
White adolescent girls. *Developmental Psychology, 35*, 721-736.  
doi:10.1037//0012-1649.35.3.721
- Halpern, C.T., King, R.B., Oslak, S.G., & Udry, J.R. (2005). Body mass index, dieting,  
romance, and sexual activity in adolescent girls: Relationships over time. *Journal of  
Research on Adolescence, 15*, 535-559. doi: 10.1111/j.1532-7795.2005.00110.x
- Han, E., Norton, E. C., & Powell, L. (2009, June). Direct and indirect effects of teenage  
body weight on adult wages. NBER Working Paper Series (Vol. w15027).  
Retrieved from <http://ssrn.com/abstracts=1413591>

- Han, E., Norton, E.C., & Stearns, S.C. (2009). Weight and wages: Fat versus lean paychecks. *Health Economics, 18*, 535-548. doi: 10.1002/hec.1386
- Harris, M.B., Walters, L.C., & Washull, S. (1991). Gender and ethnic differences in obesity-related behaviors and attitudes in a college sample. *Journal of Applied Social Psychology, 21*, 1545-1566. doi: 10.1111/j.1559-1816.1991.tb00487.x
- Hartley, C. (2001). Letting ourselves go: Making room for the fat body in feminist scholarship. In J.E. Braziel & K. LeBesco (Eds.), *Bodies out of bounds: Fatness and transgression* (pp. 60-73). Berkeley, CA: University of California Press.
- Haskins, K.M., & Ransford, H.E. (1999) The relationship between weight and career payoffs among women. *Sociological Forum, 14*, 295-318. doi: 10.1023/A:1021470813182
- Hebl, M.R., & Heatherton, T.E. (1998). The stigma of obesity in women: The difference in black and white. *Personality and Social Psychology Bulletin, 24*, 417-426. doi: 10.1177/0146167298244008
- Hebl, M.R., King, E.B., & Perkins, A. (2009). Ethnic differences in the stigma of obesity: Identification and engagement with a thin ideal. *Journal of Experimental Social Psychology, 45*, 1165-1172. doi:10.1016/j.jesp.2009.04.017
- Hebl, M.R., & Mason, M.F. (2003). Weighing the care: Patients' perceptions of physician care as a function of gender and weight. *International Journal of Obesity, 27*, 269-275. doi:10.1038/sj.ijo.802231
- Hebl, M.R., & Mannix, L.M. (2003). The weight of obesity in evaluating others: A mere proximity effect. *Personality and Social Psychology Bulletin, 29*, 28-38. doi:10.1177/0146167202238369

- Hebl, M.R., & Turchin, J.M. (2005). The stigma of obesity: What about men? *Basic and Applied Social Psychology*, 27, 267-275. doi: 10.1207/s15324834basp2703\_8
- Herzog, D.B., Newman, K.L., & Warshaw, M. (1991). Body image dissatisfaction in homosexual and heterosexual males. *Journal of Nervous and Mental Disease*, 179, 356-359. doi:10.1097/00005053-199106000-00009
- Herzog, D.B., Newman, K.L., Yeh, C.J., & Warshaw, M. (1992). Body image satisfaction in homosexual and heterosexual women. *International Journal of Eating Disorders*, 11, 391-396. doi:10.1002/1098-108X(199205)11:4<391::AID-EAT2260110413>3.0.CO;2-F
- Hesse-Biber, S.N. (2007). *The cult of thinness* (2<sup>nd</sup> Ed.). NY: Oxford University Press.
- Himes, S.M., & Thompson, J.K. (2007). Fat stigmatization in television shows and movies: A content analysis. *Obesity*, 15, 712-718. doi: 10.1038/oby.2007.635
- Jambekar, S., Quinn, D.M., & Crocker, J. (2001). The effects of weight and achievement messages on the self-esteem of women. *Psychology of Women Quarterly*, 25, 48-56. doi: 10.1111/1471-6402.00006
- Jasper, C.R., & Klassen, M.L. (1990a). Perceptions of salespersons' appearance and evaluation of job performance. *Perceptual and Motor Skills*, 71, 563-566. doi: 10.2466/PMS.71.5.563-566
- Jasper, C.R., & Klassen, M.L. (1990b). Stereotypical beliefs about appearance: Implications for retailing and consumer issues. *Perceptual and Motor Skills*, 71, 519-528. doi: 10.2466/PMS.71.5.519-528

- Judge, T.A., & Cable D.M. (2011). When it comes to pay, do the thin win? The effect of weight on pay for men and women. *Journal of Applied Psychology, 96*, 95-112. doi:10.1037/a0020860
- Kaufman L. (1980). Prime-time nutrition. *Journal of Communication, 30*, 37-46. doi: 10.1111/j.1460-2466.1980.tb01989.x
- Kiefer, A., Sekaquaptewa, D., & Barczyk, A. (2006). When appearance concerns make women look bad: Solo status and body image concerns diminish women's academic performance. *Journal of Experimental Social Psychology, 42*, 78-86. doi: 10.1016/j.jesp.2004.12.004
- Klein, D., Najman, J., Kohrman, A.F., & Munro, C. (1982). Patient characteristics that elicit negative responses from family physicians. *Journal of Family Practice, 14*, 881-888.
- Latner, J.D., Stunkard, A.J., & Wilson, G.T. (2005). Stigmatized students: Age, sex, and ethnicity effects in the stigmatization of obesity. *Obesity Research, 13*, 1226-1231. doi: 10.1038/oby.2005.145
- LeBesco, K. (2009). Weight management, good health and the will to normality. In H Malson & M Burns (Eds.), *Critical feminist approaches to eating dis/orders* (pp. 147-155). London: Routledge.
- Leigh, J.P., Fries, J.F., & Hubert, H.B. (1992). Gender and race differences in the correlation between body mass and education in the 1971-1975 NHANES I. *Journal of Epidemiology and Community Health, 46*, 191-196. doi:10.1136/jech.46.3.191

- Lundborg, P., Bolin, K., Höjgård, S., & Lindren. (2007). Obesity and occupational attainment among the 50+ of Europe. *Economics and Human Biology*, 5, 1-19. doi: 10.1016/j.ehb.2006.11.002
- Maranto, C.L., & Stenoien, A.F. (2000). Weight discrimination: A multidisciplinary analysis. *Employee Responsibilities and Rights Journal*, 12, 9-24. doi: 10.1023/A:1007712500496
- McLaren, L. (2007). Socioeconomic status and obesity. *Epidemiological Reviews*, 29, 29-48. doi: 10.1093/epirev/mxm001
- Mendoza, K.R. (2009). Seeing through the layers: Fat suits and thin bodies in *The Nutty Professor* and *Shallow Hal*. In E. Rothblum and S. Solovay (Eds.), *The fat studies reader* (pp. 280-288). New York: New York University Press.
- Merten, M.J, Wickrama, K.A.S., & Williams, A.L. (2008). Adolescent obesity and young adult psychosocial outcomes: Gender and racial differences. *Journal of Youth and Adolescence*, 37, 1111-1122. doi: 10.1007/s10964-008-9281-z
- Mitra, A. (2001). Effects of physical attributes on the wages of males and females. *Applied Economics Letters*, 8, 731-735. doi: 10.1080/13504850110047605.
- Miller, B.J., & Lundgren, J.D. (2010). An experimental study of the role of weight bias in candidate evaluation. *Obesity*, 18, 712-718. doi:10.1038/oby.2009.492
- Moore, F., & Keel, P.K. (2003). Influence of sexual orientation and age on disordered eating attitudes and behaviors in women. *International Journal of Eating Disorders*, 34, 370-374. doi: 10.1002/eat.10198
- Muennig, P. (2008). The body politic: The relationship between stigma and obesity-associated disease. *British Medical Journal*, 337, 128. doi:10.1136/bmj.337.7681.128



- Mukhopadhyay, S. (2008). Do women value marriage more? The effect of obesity on cohabitation and marriage in the USA. *Rev Econ Household*, 6, 111-126.  
doi:10.1007/s11150-007-9025-y
- Neumark-Sztainer, D., Story, M., & Faibisch, L. (1998). Perceived stigmatization among overweight African American and Caucasian adolescent girls. *Journal of Adolescent Health*, 23, 264-270.
- Ofusu, H.B., Lafreniere, K.D., Senn, C.Y. (1998). Body image perception among women of African descent: A normative context? *Feminism & Psychology*, 8, 303-323. doi: 10.1177/0959353598083005
- Okunade, A.A., Hussey, A.J., & Karakus, M.C. (2009). Overweight adolescents and on-time high school graduation: Racial and gender disparities. *Atlantic Economic Journal*, 37, 225-242. doi: 10.1007/s11293-009-9181-y
- Olson, C.L., Schumaker, H.D., & Yawn, B.P. (1994). Overweight women delay medical care. *Archives of Family Medicine*, 3, 888-892. doi:10.1001/archfami.3.10.888
- Orbach, S. (1978). *Fat is a feminist issue*. NY: Berkeley Books.
- Oreffice, S., & Quintana-Domeque, C. (2010). Anthropometry and socioeconomics among couples: Evidence in the United States. *Economics and Human Biology*, 8, 373-384. doi: 10.1016/j.ehb.2010.05.001
- Owens, L.K., Hughes, T.L., & Owens-Nicholson, D. (2003). The effects of sexual orientation on body image and attitudes about eating and weight. *Journal of Lesbian Studies*, 7(1), 15-33. doi: 10.1300/J155v07n01\_02
- Pagán, J.A., & Dávila, A. (1997). Obesity, occupational attainment and earnings. *Social Science Quarterly*, 78, 757-770.

- Pearce, M.J., Boergers, J., & Prinstein, M.J. (2002). Adolescent obesity, overt and relational peer victimization, and romantic relationships. *Obesity Research, 10*, 386-393. doi: 10.1038/oby.2002.53
- Pingitore, R., Dugoni, B.L., Tindale, R.S., & Spring, B. (1994). Bias against overweight job applicants in a simulated employment interview. *Journal of Applied Psychology, 74*, 909-917. doi: 10.1037/0021-9010.79.6.909
- Powell, A.D., & Kahn, A.S. (1995). Racial differences in women's desires to be thin. *International Journal of Eating Disorders, 17*, 191-195. doi: 10.1002/1098-108X(199503)
- Prohaska, A., & Gailey, J. (2009). Fat women as "easy targets": Achieving masculinity through hogging. In E. D. Rothblum and S. Solovay (Eds.) *The fat studies reader*. NY: New York University Press.
- Puhl, R.M., Andreyeva, T., & Brownell, K.D. (2008). Perceptions of weight discrimination: Prevalence and comparison to race and gender discrimination in America. *International Journal of Obesity, 32*, 1-9. doi:10.1038/ijo.2008.22
- Puhl, R., & Brownell, K.D. (2001). Bias, discrimination, and obesity. *Obesity Research, 9*, 788-805. doi: 10.1038/oby.2001.108
- Puhl, R., Wharton, C., & Heuer, C. (2009). Weight bias among dietetics students: Implications for treatment practices. *Journal of the American Dietetic Association, 109*, 438-444. doi: 10.1016/j.jada.2008.11.034
- Rand, C.S.W., & Kuldau, J.M. (1990). The epidemiology of obesity and self-defined weight problem in the general population: Gender, race, age, and social class.

*International Journal of Eating Disorders*, 9, 329-343. doi: 10.1002/1098-108X(199005)

Regan, P.C. (1996). Sexual outcasts: The perceived impact of body weight and gender on sexuality. *Journal of Applied Social Psychology*, 26, 1803-1815. doi: 10.1111/j.1559-1816.1996.tb00099.x

Register, C.A., & Williams, D.R. (1990). Wage effects of obesity among young workers. *Social Science Quarterly*, 71, 131-141.

Rodin, J., Silberstein, L., Striegel-Moore, R. (1984). Women and weight: A normative discontent. *Nebraska Symposium on Motivation*, 32, 267-307.

Roehling, P.V., Roehling, M.V., Vandlen, J.D., Blazek, J., & Guy, W.C. (2009). Weight discrimination and glass ceiling effect among top US CEOs. *Equal Opportunities International*, 28, 179-196. doi: 10.1108/02610150910937916

Roehling, M.V., Roehling, P.V., & Pichler, S. (2007). The relationship between body weight and perceived weight-related employment discrimination: The role of sex and race. *Journal of Vocational Behavior*, 71, 300-318.  
doi:10.1016/j.jvb.2007.04.008

Rothblum, E.D. (1992). The stigma of women's weight: Social and economic realities. *Feminism & Psychology*, 2, 61-73. doi:10.1177/0959353592021005

Rothblum, E.D. (1994). "I'll die for the revolution, but don't ask me not to diet": Feminism and the continuing stigmatization of obesity. In P. Fallon, M.A. Katzman, & S.C. Wooley (Eds.), *Feminist perspectives on eating disorders* (pp. 53-76). New York: Guilford.

- Rothblum, E.D., & Factor, R. (2001). Lesbians and their sisters as a control group: Demographic and mental health factors. *Psychological Science, 12*, 63-69. doi: 10.1111/1467-9280.00311
- Rothblum, E.D., Miller, C.T., & Garbutt, B. (1988). Stereotypes of obese female job applicants. *International Journal of Eating Disorders, 7*, 277-283. doi:10.1002/1098-108X(198803)7:2<277::AID-EAT2260070213>3.0.CO;2-2
- Sabia, J.J. (2007). The effect of body weight on adolescent academic performance. *Southern Economic Journal, 73*, 871-900.
- Saguy, A.C., & Gruys, K. (2010). Morality and health: News media constructions of “overweight” versus eating disorders. *Social Problems, 57*, 231-250. doi: 10.1525/sp.2010.57.2.231
- Saporta, I., & Halpern, J.J. (2002). Being different can hurt: Effects of deviation from physical norms on lawyers’ salaries. *Industrial Relations, 41*, 442-466. doi: 10.1111/1468-232X.00256
- Sargent, J.D., & Blanchflower, D.G. (1994). Obesity and stature in adolescence and earnings in young adulthood: Analysis of a British birth cohort. *Archives of Pediatric Adolescent Medicine, 148*, 681-687.
- Sarlio-Lähteenkorva, S., & Lahelma, E. (1999). The association of body mass index with social and economic disadvantage in women and men. *International Journal of Epidemiology, 28*, 445-449. doi: 10.1093/ije/28.3.445
- Sarlio-Lähteenkorva, S., Silventoinen, K., & Lahelma, E. (2004). Relative weight and income at different levels of socioeconomic status. *American Journal of Public Health, 94*, 468-472. doi: 10.2105/AJPH.94.3.468

- Schneider, J.A., O'Leary, A., & Jenkins, S.R. (1995). Gender, sexual orientation, and disordered eating. *Psychology and Health, 10*, 113-128. doi: 10.1080/08870449508401942
- Schorb, F. (2009). *Dick doof und arm? Die große Lüge vom Übergewicht und wer von ihr profitiert*. Munich, Germany: Droemer Verlag.
- Schwartz, M.B., Chambliss, H.O., Brownell, K.D., Blair, S.N., & Billington, C. (2003). Weight bias among health professionals specializing in obesity. *Obesity Research, 11*, 1033-1039. doi: 10.1038/oby.2003.142
- Share, T., & Mintz, L.B. (2002). Differences between lesbians and heterosexual women in disordered eating and related attitudes. *Journal of Homosexuality, 42*(4), 89-106. doi: 10.1300/J082v42n04\_06
- Sheets, V., & Ajmere, K. (2005). Are romantic partners a source of college students' weight concern? *Eating Behaviors, 6*, 1-9. doi:10.1016/j.eatbeh.2004.08.008
- Siever, M.D. (1994). Sexual orientation and gender as factors in socioculturally acquired vulnerability to body dissatisfaction and eating disorders. *Journal of Consulting and Clinical Psychology, 62*, 252-260. doi: 10.1037/0022-006X.62.2.252
- Silberstein, L.R., Mishkind, M.E., Striegel-Moore, R.H., Timko, C., & Rodin, J. (1989). Men and their bodies: A comparison of homosexual and heterosexual men. *Psychosomatic Medicine, 51*, 337-346.
- Sitton, S., & Blanchard, S. (1995). Men's preferences in romantic partners: Obesity vs. addiction. *Psychological Reports, 77*, 1185-6.
- Smith, J.E., Waldorf, V.A., & Trembath, D.L. (1990). "Single white male looking for thin, very attractive..." *Sex Roles, 23*, 675-685. doi: 10.1007/BF00289255

- Sobal, J., & Stunkard, A.J. (1989). Socioeconomic status and obesity: A review of the literature. *Psychological Bulletin*, *105*, 260-275. doi: 10.1037/0033-2909.105.2.260
- Spitzer, B.L., Henderson, K.A., & Zivian, M.T. (1999). Gender differences in population versus media body sizes: A comparison over four decades. *Sex Roles*, *40*, 545-565. doi: 10.1023/A:1018836029738
- Strong, S.M., Singh, D., & Randall, P.K. (2000). Childhood gender nonconformity and body dissatisfaction in gay and heterosexual men. *Sex Roles*, *43*, 427-439. doi: 10.1023/A:1007126814910
- Tang-Péronard, J.L., & Heitmann, B.L. (2008). Stigmatization of obese children and adolescents: The importance of gender. *Obesity Reviews*, *9*, 522-534. doi: 10.1111/j.1467-789X.2008.00509.x
- Toma, C.L., Hancock, J.T., & Ellison, N.B. (2008) Separating fact from fiction: An examination of deceptive self-presentation in online dating profiles. *Personality and Social Psychology Bulletin*, *34*, 1023-1036. doi:10.1177/0146167208318067
- Vartanian, L.R., & Shaprow, J.G. (2008). Effects of weight stigma on exercise motivation and behavior: A preliminary investigation among college-aged females. *Journal of Health Psychology*, *13*, 131-138. doi: 10.1177/1359105307084318
- Viner, R.M., & Cole, T.J. (2005). Adult socioeconomic, educational, social, and psychological outcomes of childhood obesity: A national birth cohort study. *BMJ*, *330*, 1354. doi: 10.1136/bmj.38453.422049.E0
- Wade, T.J., & DiMaria, C. (2003). Weight halo effects: Individual differences in perceived life success as a function of women's race and weight. *Sex Roles*, *48*, 461-465. doi: 10.1023/A:1023582629538

- Wee, C.C., McCarthy, E.P., Davis, R.B., & Phillips, R.S. (1999). Physician counseling about exercise. *Journal of the American Medical Association*, 282, 1583-1588. doi: 10.1001/jama.282.16.1583
- White, S.E., Brown, N.J., & Ginsburg, S.L. (1999). Diversity of body types in network television programming: A content analysis. *Communication Research Reports*, 16, 386-392. doi: 10.1080/08824099909388740
- Wideman, M.W., & Hurst, S.R. (1998). Body size, physical attractiveness, and body image among young adult women: Relationships to sexual experience and sexual esteem. *The Journal of Sex Research*, 35, 272-281. doi: 10.1080/00224499809551943
- Winkleby, M.A., Gardner, C.D., & Taylor, C.B. (1996). The influence of gender and socioeconomic factors on Hispanic/White differences in body mass index. *Preventive Medicine*, 25, 203-211. doi:10.1006/pmed.1996.0047
- Wooley, O.W., Wooley, S.C., & Dyrenforth, S.R. (1979). Obesity and women II: A neglected feminist topic. *Women's Studies International Quarterly*, 2, 81-92. doi:10.1016/S0148-0685(79)93096-3 |
- Young, L.M., & Powell, B. (1985). The effects of obesity on the clinical judgments of mental health professionals. *Journal of Health and Social Behavior*, 26, 233-246. doi:10.2307/2136755