WHY DOES BODY WEIGHT PREDICT EMPLOYEE SALARY?

A TEST OF COMPETING HYPOTHESES

A Thesis

Presented to

The Faculty of the Department

of Psychology

University of Houston

In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts

By

Bobbie A. Dirr

December 2017

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ABSTRACT

I tested self-esteem and health limitations as two alternate mechanisms to explain the relationship between weight and salary, besides discriminatory practices. In the United States., there is some evidence to suggest that self-esteem mediates the relationship between weight and salary, however the mediation was only supported for non-Hispanic and non-Black men. While there may be some cases where weight is a factor in health limitations at work, it was not an overall trend in the United States. Similar to Judge and Cable (2011) findings, men in the United States have a positive curvilinear weight and salary relationship, as weight increases so does salary, until overweight levels where as weight increases, salary decreases. I found women to have a negative linear relationship with weight but found no evidence of a negative curvilinear weight and salary relationship that Judge and Cable (2011) found. I discovered that Black women and Hispanic men have different weight and salary relationships from others of their gender. The lower the weight for Hispanic men, the higher their salary tended to be. Black women had a weight salary relationship similar to non-Hispanic men. In addition, I explored cultural variations in the other 18 countries by exploring the variations in the weight salary relationship based on type of community (urban vs. rural) and country beauty norms. No evidence of a weight and salary relationship was found for women in the 18 counties. However, there were variations in the weight and salary relationship for men based on the type of community. Specifically, the weight and salary relationship was stronger for men in rural communities than in urban communities.

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Why Does Body Weight Predict Employee Salary?

A Test of Competing Hypotheses

A fair amount of research shows that obese employees tend to be paid less than their nonoverweight colleagues (Baum & Ford, 2004; Cawley, 2004; Frieze, Olson, & Good, 1990; Loh, 1993; Pagan & Davila, 1997; Register & Williams, 1990; Rothblum, Brand, Miller, & Oetjen, 1990). Stereotyping mechanisms leading to weight-based discrimination, has been named the driving force in the weight-salary relationship (see Roehling, 1999 for a review). People may stereotype the obese as lazy, because they assume the obese are too lazy to engage in healthy behaviors, such as dieting and exercising, to decrease their weight. People may not consider the many factors that contribute to weight gain and furthermore assume that obese persons are lazy in all aspects of life. Others tend to view obese individuals as less conscientious than their normal weight counterparts, even if these stereotypes are inaccurate (Roehling, Roehling, & Odland, 2008). In the workplace, stereotypes of the overweight result in others viewing obese employees as less competent, qualified, desirable to work with, and productive (Jasper & Klassen, 1990; Klassen, Jasper, & Harris, 1993; Klesges et al., 1990; Lennon, 1992; Ross & Ferris, 1981). When organizational leaders inaccurately perceive obese employees' productivity levels, such biases may give rise to weight-based discrimination, including weight-based salary decisions

More recently, Judge and Cable (2011) uncovered other weight-based salary disparities for average weight women and below average weight men. Below average weight women are paid more than both average weight and above average weight women, with the above average weight women being paid the least (Judge & Cable, 2011). Over a 25-year career, a woman who is 33 pounds (one standard deviation) below average (for her gender) is predicted to earn

\$41,270 more than a woman of average weight, \$73,186 more than a woman who is 33 pounds above average, and \$87,458 more than a woman who is 66 pounds above average (Judge & Cable, 2011). The wage disparities increase when considering a woman who is 66 pounds below average. A woman who is 66 below average is predicted to earn \$99,522 more than a woman of average weight, \$131,438 more than a woman who is 33 pounds above average, and \$145,709.25 more than a woman who is 66 pound above average. Conversely, slightly above average weight men are paid the most and the underweight are paid the least (Judge & Cable, 2011). Thus, for men gaining weight is expected to lead to an increase in salary until a certain weight level (somewhat above average) at which increases in weight are expected to lead to salary decreases. Over a 25-year career, a man who is 33 pounds above average weight is predicted to earn \$11,308 more than an average weight man, \$7,657 more than a man who is 66 pound above average, \$48,883 more than a man who is 33 pounds below average, and \$112,724.75 more than a man who is 66 pounds below average (Judge & Cable, 2011).

Previous literature about weight-based salary disparities does discuss the salary disparities experienced by average weight women and underweight men. As mentioned, weightbased wage disparities differ greatly based on gender. Underweight men are paid the least compared to others of the same gender and conversely underweight women are paid the most amongst women. The previous discussion does not

Judge and Cable (2011) suggested the incorporation of gender beauty norms into the stereotyping discussion.

A more nuanced examination shows that the weight-salary relationship not only varies by gender, but also depends on racial/ethnic group membership. Notably, the association is reversed

for Black men, that is heavier Black males are typically paid more than Black males who weigh less (Cawley, 2004).

The weight-salary relationship is not distinctive to American employees. European overweight employees also tend to make less than their non-overweight counterparts (Fahr, 2006; Garcia & Quintana-Domeque, 2007; Judge & Cable, 2011; Paraponaris, Saliba, & Ventelou, 2005). Even though Brunello and d'Hombres (2007) found similar weight-salary relationships in all nine of the European countries they studied (i.e., no reversed associations), there were stronger relationships in southern countries than in northern countries. It is unclear why the weight-salary association is more prominent in some European countries over others.

The overarching goal of the current study is to explain why there is any association between weight and salary at all and to investigate why variations in the weight-salary relationship exist. As noted, the weight-salary relationship varies between ethnicities and genders in the United States, as well as across countries, thus it is likely that cultural aspects are at play in the weight-salary relationship. Utilizing and extending a cultivation framework, I explore ethnic, gender and country (both between and within) variations to the weight-salary relationship. Moreover, I propose a psycho-physio-social mechanism model of the weight-salary relationship, and posit that the psychological and social mechanisms are influenced by aspects of one's culture.

Previous Explanations for the Weight-Salary Relationship.

To explain the weight-salary relationship, researchers have proposed a stereotyping framework (Roehling, 1999). Under a stereotyping framework, overweight employees are stereotyped by supervisors as too lazy or incompetent to engage in weight reducing behaviors. Supervisors may assume that overweight employees are generally lazy or incompetent (not just

concerning weight control behaviors) and thus too lazy or incompetent to be productive, irrespective of actual productivity levels. When supervisors stereotype overweight employees as unproductive, they may withhold promotions and raises from deserving overweight employees. Hence, supervisory discrimination is one possible explanation for the weight-salary relationship.

Judge and Cable (2011) noted that previous weight-salary research under a strictly stereotyping framework does not fully investigate the weight-salary relationship at all weight levels and only concentrates on stereotyping at overweight levels. According to Judge and Cable (2011), "stereotype theory predicts that an average weight man or woman who gains 30 lbs would be labeled with the negative stereotypes attached to obese individuals and subsequently penalized, whereas a very thin man or woman who gains 30 lbs (and becomes average weight) should not be labeled with negative stereotypes or penalized" (p. 109). However, Judge and Cable (2011) predict that the very thin man would be rewarded and the very thin woman would be penalized for gaining the 30 lbs. Their predictions are consistent with the different curvilinear relationships for men and women they found in the United States and Germany. Judge and Cable (2011) found that for women the underweight are paid more than normal and overweight women. On the other hand, both underweight and overweight men are paid less than normal weight men.

Judge and Cable (2011) argued for supplementing a stereotyping framework with cultivation theory research to enhance researchers understanding of the weight-salary relationship at all weight levels. According to cultivation theory, media, particularly television, is a powerful driver in western culture and influences consumers' conceptions of social reality (Gerbner & Gross, 1976). Research under cultivation theory examines the effects of media on numerous outcomes, including most notoriously violence, but also other outcomes, such as sex roles, aging, and family (Shanahan & Morgan, 1999). Specifically important for the weight-

salary association is how media creates body-weight beauty norms (e.g. Ata & Thompson, 2010; Tiggemann, 2003), as beauty norms could help explain the weight-salary relationship. For instance, media-induced body-weight beauty norms may determine which employees supervisors will stereotype and discriminate against based on weight. Supervisors may penalize deserving employees who do not align with body-weight beauty norms.

Beauty standards vary between genders and align with the different curvilinear weightsalary relationships found for men and women. Beauty standards for women are much thinner than for men (Silverstein, Perdue, Peterson, & Kelly, 1986). Furthermore, unlike for women, being underweight is considered undesirable for men, as media promotes muscularity to men (Hatoum & Belle, 2004). Body-weight beauty norms are consistent with underweight women being paid more than both normal weight and overweight women, but both underweight and overweight men being paid less than normal weight men. It seems that the overweight are not the only ones being stereotyped by supervisors as less productive, and normal weight women and underweight men are also being stereotyped. By considering variations in beauty norms across genders, under a cultivation framework, Judge and Cable (2011) were able to unveil more intricate details of the weight-salary relationship at lower levels of weight than revealed by the previous framework, which focused solely on stereotyping at overweight levels.

Aims of the Current Study.

The overarching aim of the current study is to extend and further investigate cultivation theory to better understand the weight-salary relationship. I replicate Judge and Cable's (2011) hypotheses on the weight-salary relationship and gender that stemmed from cultivation theory. Furthermore, I expand the scope of the weight-salary investigation by including nineteen countries across the world and explore variations in curvilinear weight-salary relationships

between countries. I investigate variations in the weight-salary relationships within countries and across sub-groups. Moreover, I propose a psycho-physio-social mechanism model to the weight-salary relationship, and I test alternative mechanisms to the weight-salary relationship other than stereotyping. Explicitly, I test self-esteem, an extension of cultivation theory, and health, competing with a cultivation framework, as explanatory mechanisms to the weight-salary relationship. However, due to limitations in archival data availability, the explanatory mechanisms for the weight-salary relationship are only examined in the United States.

I start with a summary of how the media creates body-weight beauty norms under a cultivation framework. Then review stereotyping theory, which has been previously assumed as the driving force in the weight-salary relationship. I follow with discussion of self-esteem and health mechanisms as alternate explanations to the weight-salary relationship. I conclude with various circumstances in which the weight-salary relationship may vary across and within other countries outside the United States. Throughout the paper, I thread in how cultivation theory and specifically how media-induced body-weight beauty norms play a part in the weight-salary relationship.

Cultivation Theory and Media-Induced Cultural Body-Weight Beauty Norms

According to cultivation theory, media, especially television, affects consumers' conceptions of social reality (Shanahan & Morgan, 1999). Media affects consumers' conceptions of how much people ought to weigh, that is the weight-based beauty standards that people strive to achieve and judge the appearances of others against (Ata & Thompson, 2010; Barlett, Vowels, & Saucier, 2008; Grabe & Hyde, 2006; Hebl & Turchin, 2005). Western media communicates that men should not be overweight. However, men are also told not be too skinny or unmuscular and when exposed to media, men are often concerned with building muscle mass (Hatoum &

Belle, 2004). For women, the beauty standards are often thinner than the criteria for anorexia (Silverstein et al., 1986).

One way that the media influences weight-based beauty norms by over-representing some weight classes and under-representing others. For instance, underweight women (i.e., women who meet weight-based beauty norms) are overrepresented on television, with almost 33% of women on television being underweight, while only 5% of the women in the United States are underweight (Greenberg, Eastin, Hofschire, Lachlan, & Brownell, 2003). Conversely, those who do not align with weight-based beauty norms are under-represented, with only 13% of females and 24% of males on television being overweight, as compared to 51% of females and 59% of males in the general United States population (Greenberg et al., 2003). Television characters are not representative of the general public in terms of weight.

Additionally, the media influences weight-based beauty norms by attaching negative attributions to characters who do not align with weight-based beauty standards. On television, overweight male characters are less likely to have romantic relationship and being underweight leads to more ridicule for males than being normal weight or overweight (Greenberg et al., 2003). Overweight female characters are more likely to be targets of humor and are less likely to receive positive comments from male characters than normal weight female characters (Fouts & Burggraf, 1999, 2000; Greenberg et al., 2003). Yet, overweight male characters are no more likely to receive negative comments from females or thinner male characters, but are more likely to make negative comments about themselves (Fouts & Vaughan, 2002). Comparison of the frequency of negative comments made about overweight men versus overweight women suggest that being overweight is more severe for females than for males.

Evidence for Stereotyping Framework: Social Mechanism

Previously, stereotyping mechanisms leading to weight-based discrimination, has been named the driving force in the weight-salary relationship (see Roehling, 1999 for a review). Others tend to view obese individuals as less conscientious than their normal weight counterparts, even if these stereotypes are inaccurate (Roehling, Roehling, & Odland, 2008). In the workplace, stereotypes of the overweight result in others viewing obese employees as less competent, qualified, desirable to work with, and productive (Jasper & Klassen, 1990; Klassen, Jasper, & Harris, 1993; Klesges et al., 1990; Lennon, 1992; Ross & Ferris, 1981). When organizational leaders inaccurately perceive obese employees' productivity levels, such biases may give rise to weight-based discrimination, including weight-based salary decisions.

Survey-based field studies find meager support for a stereotyping mechanism to explain the weight-salary relationship (Roehling, 1999). In one study, Rothblum et al. (1990) found that only people at extreme levels of obesity (not the overweight or people at lower levels of obesity) report higher levels of perceived discrimination than people of normal weight, but surprisingly the very obese did not report lower salaries. In a sample of MBA students, even though overweight men reported lower salaries than normal weight men (no weight-salary relationships was found for women), only less than .05 percent reported experiencing weight discrimination (Frieze et al., 1990). Weight-based salary discrimination might be occurring for only the very obese and be a rarity rather than a norm that can fully explain the weight-salary relationship.

Then again, overweight employees may not be able to identify when they are being discriminated against based on weight, as they may contribute such acts to other reasons. In fact supervisors and managers most likely do not know when they are discriminating against others, because stereotyping is often an implicit cognition and not usually a conscious act based on

malintent (Devine, 1989). Evidence in field studies for stereotyping mechanisms as the root cause of the weight-salary relationship is small. However, it is still quite possible for weight-based discrimination to be a main cause of the weight-based salary relationship and the small findings are a result of study limitations.

Research utilizing experimental designs has shown more support for a stereotyping mechanism than survey-based methods (Roehling, 1999). Nevertheless, such experimental designs have limitations. In these experimental studies salary cannot be easily measured and consequently other related outcomes have been measured. For example, Bordieri, Drehmer, and Taylor (1997) analyzed supervisors and managers ratings of hypothetical obese and non-obese employees' promotability. Even when the obese candidates were just as qualified as the non-obese candidates, the supervisors and managers tended to rate the obese employees lower on promotability (Bordieri et al., 1997). Similarly, the preference for non-obese over obese is found for promotion recommendations and personnel selection decisions in lab settings (Bordieri et al., 1997; Brink, 1988; Klesges et al., 1990; Larkin & Pines, 1979; Larwood, 1995; Pingitore, Dugoni, Tindale, & Spring, 1994).

A stereotyping framework without considering gender specific beauty norms is limited. The previous stereotyping framework focuses only on stereotyping at heavy weight levels. However according to gender specific beauty norms, underweight men and normal weight women are likely to be discriminated against as well. Additionally, overweight women are more likely to be discriminated against than overweight men, because being overweight is more discouraged for women than men in the media. The incorporation of cultivation theory and beauty norms enhances stereotyping theory in weight-salary research.

Testing the Social (Stereotyping) Mechanism

Figure 3 depicts all hypotheses thus far and the following hypotheses in this section. It depicts the full psycho-physio-social mechanism model to the weight-salary relationship. After controlling for self-esteem and health mechanisms, I expect a direct relationship of weight with salary, presumably from stereotyping mechanisms. Discrimination is not measured in the current study. Perceived discrimination may be inaccurate. As noted, field studies find meager support for weight-based discrimination, but experimental studies find more support for such discrimination (Roehling, 1999) and stereotyping is an implicitly motivated act rather than a consciously motivated one (Devine, 1989). I will control for

Hypothesis 1a: Weight will have a negative direct relationship with salary, after controlling for self-esteem and health.

Variations in the Stereotyping Mechanism based on Gender.

Aligning with Judge and Cable (2011), I expect for the direct weight-salary relationship to vary by the gender and follow the beauty norms for men and women. I expect that managers and supervisors will stereotype those employees who do not align with weight-based beauty norms.

Hypothesis 2b: Gender will moderate the direct relationship of weight and salary, after controlling for the weight and self-esteem. Such that there will be different quadratic relationships between weight and salary across genders. For women, weight will have a negative linear relationship with salary, but the quadratic term will be positive, such that the negative relationship is stronger at underweight levels than at normal weight and overweight levels. For men, the weight will have a positive linear relationship with

salary, but the quadratic term will be negative, such that the relationship is positive until obesity levels, where it becomes negative.

Variations in the Stereotyping Mechanism based on Ethnicity.

Assuming consistent relationships between weight and salary at all weight levels (i.e., assuming linear relationships), Cawley (2004) found different weight-salary relationships depending on ethnicity. As weight increases, so does Black men's salaries, but the weight-salary relationship is in the opposite direction for Hispanic males and is non-existent for White males (Cawley, 2004). Cawley (2004) also found a weaker negative weight-salary relationship for Black women than for Women of other ethnicities (Hispanic or White). Such findings may be explained by differences in beauty norms across ethnicities. American Black culture does not always align with mainstream standards of beauty (Allan, Mayo, & Michel, 1993; Hebl & Heatherton, 1998). Specifically, Black beauty standards tend to be heavier than mainstream beauty norms (Allan et al., 1993; Hebl & Heatherton, 1998; Hebl, King, & Perkins, 2009). However, it is not certain how the weight-salary relationship would be not assuming consistent relationships between weight and salary at all weight levels (i.e., considering curvilinear relationships).

Will managers and supervisors of all ethnicities hold Black employees to Black beauty norms or to mainstream beauty norms?

For men, it seems that Black men are held to different beauty standards than White men (Hebl & Turchin, 2005). Hebl and Turchin (2005) instructed Black and White participants of both genders view photographs of thin, medium, and heavy sized people. The participants rated the depicted people on a variety of attributes, including job success. Heavy Black men were less stigmatized and rated more favorable than heavy White men. The authors suggest that heavy

Black men may be viewed as more athletic, while heavy White men are viewed as lazy and out of shape, as a result of sports-related media.

For women, the beauty norms that Black women are held to may depend on the gender and ethnicity of the manager or supervisor (Hebl & Heatherton, 1998; Hebl & Turchin, 2005). Hebl and Heatherton (1998) found that White women stigmatize large women and rate them lower on job success. Black women do not show the same biases (Hebl & Heatherton, 1998). How favorably men rated women depended on both the woman's ethnicity and the ethnicity of the male rater (Hebl & Turchin, 2005). When men rated women of a different race, they did not rate women of various sizes differently on the attributes. However, when men rated women of the same ethnicity, they did rate certain sizes more favorable. White men rated White medium and large sized women less favorably than thin White women, but did not differ in their ratings between White medium and large women. Black men rated Black large women less favorably than Black medium and thin sized women, but did not differ in ratings of Black medium and thin sized women. Black men seem to have a higher threshold for weight acceptability than White men when rating women of their own ethnicity.

Based on work by Hebl and colleagues, I hypothesize that Black men and women will receive less weight-based salary discrimination than men of other ethnicities. The stigmatizing effects for Black women are a little less clear and would depend somewhat on the gender and ethnicity of the manager or supervisor. However, I do hypothesize that Black women will receive less weight-based salary discrimination than women of other ethnicities. Figure 4 depicts the hypothesized interaction effects of weight, gender, and ethnicity on salary for the direct relationship of weight with salary.

Hypothesis 1c: After controlling for weight and self-esteem, being of Black ethnicity moderates the quadratic relationship of weight on salary for men. Such that, there will be a higher positive linear effect of weight on salary for Black men than for men of other ethnicities and a more negative quadratic weight effect on salary for men of other ethnicities than for Black men. For women, there will be a stronger negative weight linear effect on salary for women of other ethnicities compared to Black women and a higher positive quadratic weight effect on self-esteem for Black women than women of other ethnicities.

Alternative Self-Esteem Framework: Psychological Mechanism

Intriguingly, but not previously pointed out, cultivation theory lends support to an alternate self-esteem explanation for how the weight-salary relationship occurs. Cultivation theory research indicates that media exposure of beauty norms leads to body dissatisfaction (Barlett et al., 2008; Bilukha & Utermohlen, 2002; Tiggemann, 2003) and lowered self-esteem (Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006). According to Organizational Behavior research, low self-esteem can lead to lowered job performance (Judge & Bono, 2001). A supervisor may not be stereotyping at all, and instead an employee might have low job performance and salary, because of low self-esteem stemming from body dissatisfaction. While not well established, self-esteem related mechanisms may explain the weight-salary relationship. I extend cultivation theory by testing self-esteem as an alternative explanatory mechanism of the weight-salary relationship. Figure 1 highlights the linkage of weight to salary through self-esteem mechanisms and the following paragraphs summarizes support for those links. It should be noted that I will not test all links directly.

The first link depicted is the association between weight and body satisfaction. Media exposure increases body dissatisfaction and eating disorders in women (Tiggemann, 2003). The effect of media and men's body satisfaction is not as widely studied, however media also has influence over men's body satisfaction (Barlett et al., 2008). The association between media exposure and body dissatisfaction is higher for the overweight than for the non-overweight (Tiggemann, 2003). Hence, weight will likely be negatively related to body dissatisfaction.

It is known that body satisfaction affects one's self-esteem (Abell & Richards, 1996; Furnham, Badmin, & Sneade, 2002; Lerner, Karabenick, & Stuart, 1973). Thus weight should be negatively related to self-esteem. Self-esteem is the overall value one has for their self (Harter, 1990). Research suggests that people consider their weight as a criteria for evaluating their selfworth. Therefore, I hypothesize a negative association between weight and self-esteem, because being overweight is typically not a desirable characteristic.

Hypothesis 2a: Weight has a negative relationship with self-esteem.

In adulthood, self-esteem is related to many outcomes, including job performance (Judge & Bono, 2001). Self-esteem is one of the four core evaluations outlined by Judge and colleagues (Judge, Locke, & Durham, 1997). These four core self-evaluations (self-esteem, emotionally stability, generalized self-efficacy, and locus of control) are theorized to create a higher order construct, termed as one's self-concept. Persons with a poor self-concept may determine a challenge at work as unmanageable and out of their control. These persons may believe they do not possess the ability to overcome the challenge or any life obstacle, as a result they will have low motivation to attend to the challenge (Judge, Erez, & Bono, 1998). Any effort would seem pointless for those with low self-esteem. The low motivation will lead to low job performance.

Following this line of reasoning, low self-esteem is thought to lead to low job performance, from a lack of motivation.

Finally, job performance is positively related to salary (Ferris, Witt, & Hochwarter, 2001) and accordingly self-esteem is also positively related to salary (Judge & Cable, 2011). Salary is a reward for good performance and salary ought to be related to raises and promotions. If high self-esteem results in an employee increasing their job performance, then an increase in salary should also follow. Accordingly, I hypothesize a positive association between self-esteem and salary.

Hypothesis 2b: Self-esteem has a positive association with salary.

Based on the linkage described above, I hypothesize that self-esteem is an explanatory mediator of the negative weight-salary relationship found in previous research (e.g., Cawley, 2004).

Hypothesis 2c: Self-esteem mediates the negative relationship between weight and salary.

Variations in the Weight and Self-esteem Relationship across Genders.

Judge and Cable (2011) posited that a stereotyping mechanism explains the different curvilinear weight-salary relationships for men and women, but the gender specific relationships may also be explained by a self-esteem mechanism. Both stereotyping and self-esteem mechanisms would align with gender specific beauty norms. As described earlier, the overweight have higher levels of body dissatisfaction than the normal weight. At lower levels of weight, the association between weight and body dissatisfaction differs for men and women. Only a small percentage of women are dissatisfied with their weight and would like to gain weight (most are dissatisfied, but want to lose weight). Conversely, approximately half of men are dissatisfied with their weight and desire to gain weight, presumably to gain muscle mass, and the other half are also dissatisfied, but would like to lose weight (Drewnowski & Yee, 1987; Furnham et al., 2002; Raudenbush & Zellner, 1997; Silberstein, Striegel-Moore, Timko, & Rodin, 1988). The difference in men's and women's desires to gain weight is consistent with beauty norms.

If the association between weight and body satisfaction differs for men and women, then the relationship between weight and self-esteem should also differ across genders. At low levels of weight, I expect that as weight increases, women's self-esteem decreases, but men's self-esteem increase. At high levels of weight, both men's and women's self-esteem decreases as weight increases. The hypothesized weight and self-esteem relationships for men and women are consistent with the weight-salary relationships found by Judge and Cable (2011). Thus, I expect for such weight and self-esteem relationships to partially account for the curvilinear weight-salary relationships.

Hypothesis 2d: The different curvilinear weight-salary relationships for men and women is accounted for by the moderating role of gender on the relationship between weight and self-esteem. Such that, there will different quadratic relationships between weight and self-esteem across genders. For women, weight will have a negative linear relationship with self-esteem, but the quadratic term will be positive, such that the negative relationship is stronger at underweight levels than at normal weight and overweight levels. For men, weight will have a positive linear relationship with self-esteem, but the quadratic term will be negative, such that the relationship is positive until obesity levels, where it becomes negative.

Variations in Relationship of Weight with Self-esteem across Ethnicities.

Levels of body satisfaction vary by ethnic groups (Grabe & Hyde, 2006). Black women tend to respond to the stigmatizing effect of being overweight by not adhering to mainstream beauty standards of thinness as relevant for their self-evaluations (Kerr, Crocker, & Broadnax, 1995). White women tend to be more dissatisfied with their weight than Black women (Grabe & Hyde, 2006). Averett and Korenman (1999) found that obesity is associated with lower selfesteem among White females, but not among Black females. Yet, the difference in body satisfaction between White females and Asian and Hispanic females is non-existent or very small (Gluck & Geliebter, 2002; Grabe & Hyde, 2006). Thus, I expect the relationship between weight and self-esteem to be weaker for Black females than for other females.

Fewer studies have been conducted on body-weight dissatisfaction across ethnicities for men. One study found that White men are less satisfied with their appearance than Black men (Smith, Thompson, Raczynski, & Hilner, 1999). Some studies on ethnicity and men's bodyweight dissatisfaction are limited in their measure of body dissatisfaction (e.g., Cachelin, Rebeck, Chung, & Pelayo, 2002; Demarest & Allen, 2000). Body dissatisfaction is often calculated by subtracting a measure of ideal size from a measure of perceived current size. A positive rating indicates that a man would like to lose weight and a negative rating indicates that a man would like to gain weight. The further away a rating is from zero, the larger the body dissatisfaction. When the positive and negative ratings are averaged out for the whole sample, the degree of dissatisfaction is lost. These measure of body satisfaction is more appropriate for women, because most of the ratings will in one direction.

I hypothesize that the relationship between weight and self-esteem will be depend on the ethnicity of the employee. I posit that the effect of being heavier on salary will be less

detrimental for those of Black ethnicity than for those of other ethnicities. Figure 2 depicts the proposed relationships between weight and self-esteem based on both gender and ethnicity. At low levels of weight, I expect the relationship between weight and salary and self-esteem will be stronger for Black men than for men of other ethnicities. At high levels of weight, the negative association between weight and self-esteem will be stronger for men of other ethnicities than for Black men. For women, the negative association between weight and self-esteem will be stronger for those of other ethnicities than for those of Black ethnicity. Such weight and self-esteem relationships, might explain the variations in the weight-salary relationship depending on gender and ethnicity found in previous research (i.e., Cawley, 2004).

Hypothesis 2e: Being of Black ethnicity moderates the quadratic relationship of weight on self-esteem for both men and women. There will be a three way interaction between weight, gender, and ethnicity on self-esteem. Such that, there will be a higher positive linear effect of weight on self-esteem for Black men than for men of other ethnicities and a more negative quadratic weight effect on self-esteem for men of other ethnicities than for Black men. For women, there will be a stronger negative weight linear effect on selfesteem for women of other ethnicities compared to Black women and a higher positive quadratic weight effect on self-esteem for Black women than women of other ethnicities.

Competing Health Framework to Cultivation Theory: Physiological Mechanism

Conversely, a cultivation framework and by extension stereotyping and self-esteem mechanisms may not entirely account for the weight-salary relationship. Instead another mechanism, such as health could explain the phenomena. Obesity is associated with health issues, such as diabetes (Leong & Wilding, 1999). Health issues may lead to decreased

performance and absenteeism (Pronk et al., 2004), resulting in lower salaries. In competition to cultivation theory, I test health as a facilitator of the weight-salary relationship.

According to the National Heart, Lung, and Blood Institute (NHLBI, 2013), being overweight or obese is a known risk factor for many chronic diseases, such as type 2 diabetes, coronary heart disease, and cancer. Such chronic health problems are associated with work impairment and work absenteeism (Collins et al., 2005), which can lead to a decrease in salary . For instance, according to the Center for Disease Control (CDC, 2015), health complications for diabetes include blurry vision, sometimes leading to blindness, kidney failure, with the patient needing dialysis or a kidney transplant, nerve damage leading to numbness, pain and weakness in the hands, arms, feet, and legs, and depression. Any one of the health complications associated with diabetes could lead to work impairments and job absenteeism (Cawley, Rizzo, & Haas, 2008). Diabetic employees may miss work due to the health complications themselves or going to the doctor to manage their condition. When employees cannot perform well, they earn lower salaries than their coworkers (Ferris et al., 2001).

Even if a person does not have any of these chronic diseases, overweight persons are at more risk for other impairments, such as sleep apnea and breathing problems, daytime sleepiness (even with the absence of sleep apnea), mental illnesses, such as depression or anxiety, body pain, and difficulty with physical functioning (Hitt, McMillen, Thornton-Neaves, Koch, & Cosby, 2007; Kasen, Cohen, Chen, & Must, 2008; Luppino et al., 2010; NHLBI, 2013; Stone & Broderick, 2012; Vgontzas et al., 1998). Any of these impairments, even without the presence of the formerly mentioned chronic diseases, can cause difficulty at work. Sleepiness and mental illnesses can lead to difficulty concentrating at work and body pain and difficulty with physical functioning may result in difficulty meeting physical demands of a job.

Not surprisingly, obesity is associated with absenteeism, lower work performance, and salary (Baum & Ford, 2004; Pronk et al., 2004). In contrast to a cultivation theory, there is evidence that weight may be associated with salary via health issues. Weight is associated with health complications that make work life tougher on those overweight and obese employees, which can lead to decreased job performance, absenteeism, and job salary.

Hypothesis 3a: Weight has a positive relationship with health limitations.

Hypothesis 3b: Health limitations is negatively related to salary.

Hypothesis 3c: Health will mediate the negative relationship between weight and salary.

Variations in the Weight-Salary Relationship across the World

In the previous sections, I focused on mechanisms in which the weight-salary may occur and will test them only in the United States. In the next sections, and in an effort to extend and more rigorously test cultivation theory, I explore variations in the weight-salary outside the United States in eighteen countries across the world. Beauty norms are a key focus in the next sections. Beauty norms are assumed to alter the weight-salary relationship in all countries, even though explanatory mechanisms are not explicitly investigated in countries outside of the United States due to limitations in data availability (that is, no access to self-esteem or discrimination information). Health mechanisms (while controlled for) are not discussed in the following sections, because it is assumed that the effect of weight on salary through health is at least moderately consistent and negative across countries. Variations may differ based on differences in health care, but certainly should not change based on beauty norms and according to cultivation theory.

Gender

I begin with replication of Judge and Cable's (2011) hypotheses outside of the United States and Germany.

Hypothesis 4: Across the world, gender will moderate the effect of weight on salary. Such that, there will different quadratic relationships between weight and salary across genders. For women in various countries, weight will have a negative linear effect on salary, but the quadratic term will be positive, such that the negative relationship is stronger at underweight levels than at normal weight and overweight levels. For men in various countries, weight will have a positive linear effect on salary, but the quadratic term will be negative, such that the relationship is positive until obesity levels, where it becomes negative.

Country Beauty Norms

Countries vary in their beauty standards, hence the weight-salary relationship should vary from country to country. In less socioeconomically developed societies, plumpness is linked with psychological traits of fertility, sexuality, and attractiveness (Brown, 1991; Teti, 1995). Swami et. al (2010) explored beauty ideals in ten world regions, including twenty-six counties across the world, and the authors found that body ideals did indeed differ across countries.

The current study expands previous research by including more countries and also directly testing if beauty norms predict the weight-salary relationship. Most research on the effects of weight on earnings has been conducted in western cultures, including the United States and some European countries. Slightly different weight beauty norms may explain differences in weight-salary relationships among European countries found by Brunello, and d'Hombres (2007).

Figure 5 depicts the hypothesized relationships between weight and salary based on beauty norms. Applying the tenets of a cultivation framework which argues that beauty norms dictate the weight-salary relationship through self-esteem and stereotyping mechanisms, those meeting the beauty norms of a country are expected to be paid the most. The employees meeting the beauty norms of their country of employment may have higher self-esteem, leading to more confidence and performance at work, and finally a higher salary. Supervisors, no matter in what country, may stereotype based on beauty norms, even if the beauty norms differ by country. The supervisors might stereotype those who do not meet beauty norms as poor performers and penalize them with a decrease in salary.

Hypothesis 5a: The type of female beauty norms a country has moderates the relationship between weight and salary for women. I predict that the relationship between weight and salary, will be weakened in some countries, where heavier female body images are viewed more positively. For women, I expect a more negative linear effect of weight on salary and a smaller positive quadratic effect of weight on salary for countries with heavier beauty norms compared to countries with thinner beauty norms. For men, I do not hypothesize any differences based on female beauty norms of a country.

Hypothesis 5b: The type of male beauty norms a country has moderates the relationship between weight and salary for men. For men, I expect a more positive linear effect of weight on salary and a less negative quadratic effect of weight on salary for countries with heavier beauty norms compared to countries with thinner beauty norms. For women, I do not hypothesize any differences based on male beauty norms of a country.

Community

Cultivation theory is centered on the idea that media exposure creates beauty ideals, consequentially those exposed to less media should have different beauty norms than those exposed to a lot of media. In non-western countries, the more exposure to western media, the more likely females will internalize western beauty norms and desire to become thinner (Bilukha & Utermohlen, 2002). In western cultures, the same is true, exposure to media images depicting the ideal thin is related to body dissatisfaction (Grabe, Ward, & Hyde, 2008).

Following a cultivation framework, beauty norms should differ between rural and urban communities, because people living in urban communities have different exposure rates to media than in rural communities (Chan & McNeal, 2006). Evidence of this is found in Malaysia and South Africa, where heavier bodies are preferred in rural sites compared to urban sites (Swami et al., 2010).

Urban communities are more exposed to western media than rural communities, with the media being a big driver of beauty norms, logically then the relationship between weight and salary should be different in those urban communities than in rural areas. I hypothesize that the relationship between weight and salary is moderated by the type of community (urban vs rural).

Hypothesis 6a: Heavier body figures are preferred in rural communities more so than in urban communities.

Hypothesis 6b: The relationship between weight and salary is moderated by the type of community (rural vs urban). I propose a three-way interaction between weight (quadratic and linear effects), gender, and type of community (urban vs. rural). I expect a more negative linear effect and less positive quadratic effect for women in urban communities than women in rural communities. For men, I posit a larger positive linear effect and a

less negative quadratic effect for those living in urban communities compared to those living in rural communities. *Figure 6* shows the hypothesized relationship.

Method

Two archival dataset were used, with the first strictly sampling from the United States. The first archival data is from the National Longitudinal Surveys of Youth 79 (NLSY79) Cohort, a panel study funded by the U.S. Department of Labor and Bureau of Labor Statistics. This data set has been previously used in other weight-salary research (e.g., Cawley, 2004 & Judge and Cable, 2011). However, to my knowledge, has not been used to test the mechanism in which the weight-salary relationship occurs to such an extent. The NLSY79 Cohort is a longitudinal project that follows the lives of a sample of American youth born between 1957 and 1964. The cohort originally included participants ages 14-22 when first interviewed in 1979. Data are now available from round 1 (1979 survey year) to round 25 (2012 survey year). The individuals were interviewed annually until the year of 1994 and are now interviewed on a biennial basis. My analyses focuses on the years on three survey years. Weight is extracted from the year 1986, the mediator, self-esteem and health limitations, are from the year 1987, and the outcome hourly wage is from the year 1988. I focused on the 1987 time point, because self-esteem, with all the item levels, was available for this time point. In 1987, the participants were in their twenties.

The second archival dataset is from an international sample from the 2007 the International Social Survey Program's (ISSP) leisure time and sports study. The study was designed to measure participation in leisure and sport activities and included optional weight related items, which were included in over half of each country's survey version, but not for all countries. The survey spanned over 34 countries, with respondents in the following 18 countries reporting their body weight: Austria, Bulgaria, Dominican Republic, Finland, France, Germany,

Hungary, Ireland, Israel, South Korea, Mexico, New Zealand, Philippines, Poland, Russia, Slovak Republic, Switzerland, Great Britain, and Uruguay. The 18 listed countries are included in the current study. The survey was translated in multiple languages.

Participants for NYLSY79

In 1979, 12,686 participants began the study. In the initial sample 59% were non-Black and non-Hispanic 25% were Black, and were 16% Hispanic or Latino. To be included for analysis, the participant had to work in the public or private sector (not self-employed or unemployed). Participants could report up to 5 jobs. In order to control for job tenure, only those reported that their current job was job 1 were included, this dropped only 134 participants. Listwise deletion was used. The final data set included 3,422 men and 3,314 women.

Measures for NYLSY79

Weight in 1986. Interviewers asked the participants their weight in pounds during each interview. Weight was mean centered separately for men and women for all regression analyses. The mean weight for women was 138 pounds with a standard deviation of 29 pounds. For men, the men weight was 173 with a standard deviation of 29 pounds.

Hourly Wage in 1988. Hourly wage was recorded in cents. To achieve normality of the residuals, hourly wage was transformed by taking the natural log of hourly wage plus 1.

Gender. In the 1979 interview, researchers recorded the gender of the participant.

Ethnicity. In the initial interview, the interviewers recorded the participants' ethnicity Black, Hispanic, or other. To dummy coded variables were created, one for Black and another for Hispanic. *Self-Esteem*. Self-esteem was measured in 1987 with the Rosenberg self-esteem scale on a four point scale from strongly disagree to strongly agree (Cronbach's alpha = .86). Self-esteem was mean centered for all regression analyses (separately for men and women).

Health Limitations in 1987. Participants reported if their health limited either the amount of work they did or the type of work they did. If participants reported that either their health limited the type or frequency of work, I coded health limitations as 1 and 0 otherwise.

Urban in 1986 and 1988. Then NLS researchers coded if lived in an urban or rural community. I recoded urban as 1 and rural 0. Urban in 1986 was used for the self-esteem analyses and urban in 1988 was used for the salary analysis.

Controls for NYLSY79

Height in 1986. Participants reported their height in feet and inches. I transformed height into total inches (feet x 12 + inches). For the regression analyses height was mean center separately for men and women. The average height for the men was 5'10" and the average height for the women was 5'4".

Marriage in 1986 and 1988. Each survey year participants were asked to report their current marital status. I recoded the responses as 1 = currently married and 0 = not currently married. Marriage in 1986 was used as a control for self-esteem regression models and marriage in 1988 as a control

Children in 1986 and 1988. The number of children living in the household were reported for 1986 and 1988. The number of children in 1986 was used as a control for the self-esteem regression models and the number of children in 1988 was used as a control for the salary (hourly wage) regression models.

Hours worked in 1988. Each year participants responded to the interviewer question "How many hours per week do/did you usually work?" at their current jobs.

Public sector job. Each study year, participants were asked to report whether they worked for the government. Their responses were recoded as 1 = Public and 0 = Private.

Job Tenure. Respondents reported their tenure in weeks as of the interview date. The cube root of job tenure was taken to correct for heterogeneity in residual variance for job tenure. The cure root of the job tenure mean centered separately for men and women.

Education in 1986 and 1988. Respondents reported their highest level of education at the time of the interview.

Participants for ISSP Leisure and Sports Study

Only employed participants, full- or part-time, but not self-employed in the 18 countries listed above will be included for the analyses. The final sample contains 9,125 (80%) full-time employees and 2,357 (20%) part-time employees. Of the 11,482 total employees in the final sample, 66% worked in a private firm and 34% in a public firm. Participants ranged from 15 to 88 years of age, with a mean age of 40 years and was approximately split according to gender. Education levels varied in the sample, as 37% did not complete higher secondary school and 20% completed a university degree.

Measures for ISSP Leisure and Sports Study

Weight. Weight was self-reported. ISSP researchers converted the weight into kilograms (kg), if the respondents did not report in these metrics.

Salary. Respondents reported their personal salary in the currency for their country. Most countries reported monthly salaries, however respondents in Ireland and New Zealand reported yearly incomes and those incomes were converted to monthly income by dividing the yearly

income by 12. Some countries' surveys asked in terms of salaries ranges and thus categorized the salaries into salary ranges and other countries did not. If categories were used, the number of categories ranged from 7 to 11 and usually the midpoint of the range was entered into the dataset. To be consistent with other countries' coding systems, I recoded French participants' income such that the numbers will be at the midpoint of salary ranges. For the multilevel regression models, the salaries were standardized by country for each gender separately. Additionally, the log of the salary was taken to correct for non-normality of the residuals.

Gender. Females will be coded as 1 and males will be coded as 0.

Body Weight Beauty Norms. Respondents chose from four images of males that became increasingly thinner, and respondents also chose from four images of females that became increasingly thinner. *Appendices A* and *B* depicts replications of the images shown to participants. The images were coded by ISSP researchers from 1 to 4, with larger numbers indicating smaller figures. I reversed code these two items, such that larger numbers indicate heavier. Additionally, I aggregated the beauty ideals for men and women by country to obtain a proxy of male and female beauty norms for each country. Only 14 of the 18 countries included reported on beauty ideals.

Urban Community. Respondents indicated if they lived in a big city, the outskirts of a big city, a two or small city, a country village, or a farm or home in the country. I coded a living environment as urban (1) if they indicated that they lived in a big city or the outskirts of a big city, otherwise their responses were coded as non-urban (0).

Controls for ISSP Study

Height. Height was self-reported. ISSP researchers converted height into centimeters if height was not reported in other units.

Health. Participants indicated how their health was in general on a five point likert-type.

Their responses will be coded as poor =1, fair = 2, good = 3, very good = 4, excellent = 5.

Years of Education Respondents indicated the number of education they completes.

Age. The respondents' age in years will be controlled for.

Marital Status. Participants indicated if they were married (1) or not (0). Participants in Hungary were not asked about their marital status.

Children. Participants reported if they had children (1) or not (0). Those in Hungary were not asked if they had children or not.

Union Membership. Participants indicated if they were currently a part of a union (1) or

not (0). Hungarian researchers did not asked about union membership.

Weekly Work Hours. The number of work hours per week was controlled for.

Type of Sector. Participants indicated if they worked for the government (1) or for a private company (0).
Results for U.S. Sample

See table 1 for zero-order correlations. Barron and Kenny's (1986) mediation steps were followed. I did not use Hayes' macro because of the dichotomous health mediator. Logistic regression was conducted for path A of the mediation analysis for the health limitations mediator. Least squares linear regression was conducted for all other hypotheses. Residuals for the regression models on hourly wage were non-normal and a log transformation was taken on the hourly wage plus 1. Additionally, in order to fix the problem of heterogeneity of variance for the residuals, the cube root of job tenure was taken.

Direct Effect of Weight on Salary (C' path)

Hypothesis 1a was supported. I predicted that weight would have a negative direct linear effect on salary. I put forth that even after controlling for self-esteem and health limitations, weight would be negatively related to salary, presumably through discrimination by supervisors. In hypothesis 1a, I ignored gender and ethnic differences in the weight and salary relationship. Many previous studies on the weight and salary relationship have ignored gender and ethnic differences and have not considered variations in beauty norms (see Roehling, 1999). Under previous stereotyping frameworks, supervisors are assumed to only stereotype the obese. A negative weight and salary relationship would indicate that the obese are penalized with wage disparities and the more a person weighs, the less they tend to make. Hypothesis 1a replicates those studies. Table 2 displays the results for hypothesis 1a. In step 1, I entered the control variables. Step 3 displays the results for hypothesis 1a (step 2 is for another hypothesis). There was a significant linear weight term for the outcome hourly wage. Indicating, that as weight increased, salary tended to decrease, after controlling for health limitations and self-esteem, and ignoring gender and ethnic differences in the relationship between weight and salary.

Hypothesis 1b was mostly supported. In hypothesis 1b, I predicted that gender would moderate the direct effect of weight on salary, after controlling for self-esteem and health limitations (presumingly through discrimination). I purposed a positive weight term and a negative weight squared term for men's salary and a negative weight term and a positive weight squared term for women's salary. In other words, I predicted a positive quadratic weight and salary relationship for men and a negative quadratic weight and salary relationship for women. Step 4 of tables 3 and 4 display the results for hypothesis 1b. Two regression models were conducted, one for men and one women. Table 3 displays the results for men and table 4 displays the results for women.

For men, there was a non-significant positive weight term and a significant negative weight squared term for predicting hourly wages, indicating a positive quadratic weight and salary relationship for men. The results indicate that for men at lower weight levels, as weight increased, salary tended to also increase, and at high weight levels, weight increases were associated with decreases in salary.

For women, there was a significant negative weight term and a non-significant positive weight squared term for predicting salary. For women, the hypothesized negative quadratic weight and salary relationship was not supported, however a negative linear weight and salary relationship was supported. The lower the women weighed, the more the women tended to make. I did not fully replicate the results from Judge and Cable (2011). Judge and Cable (2011) found support for a negative quadratic relationship, meaning that the difference in salaries between below average weight women and average weight women was larger than the difference between salaries for average weight women and above average weight women. In the current study, I only found support for a negative linear weight and salary relationship for women, meaning there was

no difference in the difference in salaries between below average weight women and average weight women and the difference between salaries for average weight women and above average weight women.

For hypothesis 1c, I hypothesized a three-way interaction between weight, gender, and ethnicity in predicting salary.

The results for men are presented first. I hypothesized that Black men would have a stronger positive relationship with salary at below average weight and average weight levels and a weaker negative relationship at overweight levels, because Black men tend to hold heavier weight beauty norms than other men. I did not have any hypotheses specifically for differences in the weight and salary relationship between Hispanic men and other men, due to lack of literature on beauty norms for Hispanic men, but I explored such differences.

The results partially supported hypothesis 1c for men. For men, there were ethnic differences, but not in the hypothesized way. The results for men are in step 4 of table 3. There was no significant difference between the direct effect of weight on salary between Black men and other men. However, there were significant differences for the exploratory analysis of comparing the weight and salary relationships for Hispanic men and other men. There was a significant negative difference between the weight terms for other men's hourly wages and Hispanic men's hourly wages, meaning the term was lower for Hispanic men than for other men (non-Hispanic and non-Black men). There was a significant positive difference between the squared weight terms for other men's hourly wages, meaning that the squared weight term was higher for Hispanic men than for other men. A follow up regression model was conducted for Hispanic men. The model was identical to the model for all men, without the ethnicity terms. For Hispanic men, there was a significant difference between

the weight and salary relationship for those in an urban community versus those in a rural community. The weight linear term for hourly wage was significantly lower for men in an urban community than for men in a rural community (-3.94 E-3, SE = 1.81 E-3, p = 0.03), but there was no significant difference between the weight squared terms on hourly wage between urban Hispanic men and rural Hispanic men (3.85 E-5, SE=3.95 E-5, p=.33). Two follow up regression models were conducted (without ethnicity or urban terms), one for rural Hispanic men (n = 32) and one for urban Hispanic men (n = 526). For rural Hispanic men, there was a nonsignificant positive weight term (1.28 E-3, SE = 2.21 E-3, p = .59) and a marginally significant negative weight squared term on hourly wage (-5.08 E-5, SE = 2.56 E-5, p = .06). Conversely, for urban Hispanic men there was a negative significant weight linear term on hourly wages (-3.44 E-3, SE = 1.30 E-3, p < .01) and a non-significant weight squared term on hourly wages (1.92 E-5, SE = 1.76 E-5, p = .28). The data suggests that rural Hispanic men have a similar weight and salary relationship to non-Hispanic men (a positive quadratic relationship), but urban Hispanic men have a negative linear (non-quadratic) weight and salary relationship. For urban Hispanic men, as weight increases, their wages tended to decrease.

Figure 7 shows the interaction plot for weight and ethnicity on men's hourly wages, controlling for self-esteem and work related health limitations The predicted values are based on the full model presented in table 3. Note the regression table shows the results for the log of hourly wage in cents (plus 1) in 1988, but salary was transformed to actual dollar amount for the figure. Additionally, the predicted wages for men in the actual dollar amount are presented in Table 10. At underweight and normal weight levels (based on BMI for an average height man), increases in weight were associated with wage increases for Black men and other men (non-Black and non-Hispanic), but wage decreases for Hispanic men. For Hispanic men, wages tended

to decrease, as weight increased at all weight levels. While the differences in the weight and weight squared terms between other men and Black men were non-significant, there were slight differences in the predicted values between Black men and other men. For other men (non-Hispanic and non-Black men) at 188 pounds and above, increases in weight were associated with decreases in wages. At 188 an average height man is considered overweight. For Black men, weight increases were not associated with decreases in wages until 218 pounds, at obesity levels for a man of average height.

A non-Hispanic and non-Black man of average height and self-esteem, with no healthrelated work limiations, who is 44 pounds (1.5 standard deviations) below the average weight of 173 pounds for men is expected to earn \$6.90 an hour. Alternatively, if the same man was of average weight, he would be expected to earn \$7.75 an hour, and if the man was 44 pounds above average weight, then he would be expected to earn \$7.66 an hour. For non-Hispanic and non-Black men, the wage difference between below average weight men and average weight men is 85 cents. Assuming a non-Hispanic and non-Black man works 8 hours, 5 days a week, for 50 weeks out of the year, that adds up to a difference of \$6.80 a day, 34 dollars a week and \$1,700 a year. Over a 25-year career that adds up to \$42,500, based on 1988 wages for 20 to 30 year olds. Accounting for inflation, \$42,500 in 1988 translates to \$95,539 in 2016 (BLS).

A Black man of average height and self-esteem and no health-related work limitations, who is 44 pounds (1.5 standard deviations) below the average weight of 173 pounds for men is expected to earn \$5.81 an hour. Alternatively, if the same man was of average weight, he is expected to earn \$6.93 an hour and if the man was 44 pounds above average weight, then he would be expected to earn \$7.32 an hour. For Black Men, the difference between below average weight men and above average weight men is about \$1.50. Assuming a man works 8 hours, 5

days a week, for 50 weeks out of the year, that adds up to a difference of 12 dollars a day, 60 dollars a week and 3,000 a year. Over a 25- year career that adds up to \$75,000 based on wages in 1988 for 20 to 30 year olds. Adjusting for inflation, \$75,00 in 1988 translates to \$152,566 in 2016.

A Hispanic a man of average height and self-esteem and no health-related work limitations, who is 44 pounds (1.5 standard deviations) below the average weight of 173 pounds for men is expected to earn \$8.13 an hour. Alternatively, if the same man was of average weight, is expected to earn \$7.71 an hour and if the man was 44 pounds above the average weight, then he would be expected to earn \$7.22 an hour. The difference between below average weight men and above average is about 90 cents an hour. Note, alternatively to other men, the below average weight men made the highest hourly wages. Assuming a Hispanic man works 8 hours, 5 days a week, for 50 weeks out of the year, that adds up to a difference of \$7.20 a day, 36 dollars a week and \$1,800 a year. Over a 25-year career that adds up to \$45,000 based on wages in 1988 for 20 to 30 year olds. Adjusting for inflation, \$45,000 in 1988 translates to \$91, 539 in 2016.

Results for women are presented in step 4 of table 4. The results mostly supported hypothesis 1c for women. I predicted Black women would have a weaker negative quadratic weight and salary relationship compared to other women. I did not hypothesize a different weight and salary relationship for Hispanic women compared to other women, because the literature for Hispanic women's beauty norms is mixed, but I did explore such differences.

There was no significant difference between the weight and salary relationships of Hispanic women and other women (non-Hispanic and non-Black). There was however, a positive difference between the linear weight coefficients for other women's and Black women's hourly wages, meaning the coefficient was lower for other women than for Black women. There was

also a marginally significant (p = .06) negative difference between the weight squared term on hourly wages for other women and Black women, meaning the weight squared term is lower for Black women than for other women. An almost identical regression model was conducted for the sub-population of Black women (without any ethnicity terms). The weight coefficient for hourly wages was non-significant (3.65 E-4, SE = 1.55 E-3, p = .81). The weight squared term for hourly wages was also non-significant (-1.25 E-5, SE = 2.55, p = .62). When the urban interactions terms were removed from the model, the weight term for hourly wages became significant (1.65 E-3, SE = 8.39 E-4, p=.05) and the weight squared term for hourly wages also became significant (-2.79 E-5, SE = 1.11 E-5, p=.01). I predicted a weaker negative quadratic weight and salary relationship for Black women than for other women. However, the difference between the weight and salary relationship for Black women and other women was more drastic than just a weaker negative relationship. In fact, the results for Black women are similar to the results for non-Hispanic men. For Black women, as weight increases, wages tended to also increase, until a certain weight level, where increases in weight were associated with decreases in wages.

Figure 8 plots the moderating effect of ethnicity on the relationship between weight and salary for women, when controlling for self-esteem and health limitations. Table 11 presents the predicted wages for various weight levels. Predicted salaries for figure 8 and table 11 are in dollar amount (instead of the log of wages in cents) and are based on a woman who is of average height and self-esteem, with no health limitations. For non-Black women (Hispanic and other), as weight increases, wages are predicted to decrease at all weight levels. For Black women, as weight increases, wages also tended to increase until 167 pounds (overweight for an average height woman), where increases in weight lead to decreases in wages.

A non-Hispanic and non-Black woman of average height and self-esteem, without health related work limitations, who is 44 pounds (1.5 standard deviations) below the average weight of 138 pounds for women is expected to earn \$7.32 an hour. Alternatively, if the same woman was of average weight, she would be expected to earn \$6.69 an hour and if the woman was 44 pounds above average weight, then she would be expected to earn \$6.16 an hour. The difference between below average weight women and above average weight women's salary is \$1.16 an hour. Assuming a non-Hispanic and non-Black woman works 8 hours, 5 days a week, for 50 weeks out of the year, that adds up to a difference of \$9.28 a day, \$46.40 a week and \$2,320 a year. Over a 25-year career that adds up to \$58,000 based on wages in 1988 for 20 to 30 year olds. After adjusting for inflation, \$58,000 in 1988 translates to \$117,984 in 2016 (BLS).

A Black woman of average height and self-esteem, without health-related work limitations, who is 44 pounds (1.5 standard deviations) below the average weight of 138 pounds for women is expected to earn \$5.34 an hour. Alternatively, if the same woman was of average weight, she would be expected to earn \$5.98 an hour and if the woman was 44 pounds above average weight, then she would be expected to earn \$6.16 an hour. The difference between below average weight women and above average weight women is about 80 cents. Assuming a woman works 8 hours, 5 days a week, for 50 weeks out of the year, that adds up to a difference of \$6.40 a day, 32 dollars a week and \$1,600 a year. Over a 25-year career that adds up to \$40,000 based on 1988 wages for 20 to 30 year olds. After adjusting for inflation, \$40,000 in 1988 translates to \$81,368 in 2016.

A Hispanic woman of average height and self-esteem, without health-related work limitations, who is 44 pounds (1.5 standard deviations) below the average weight of 138 is expected to earn \$7.99 an hour. Alternatively, if the same woman was of average weight, she

would be expected to earn \$6.80 an hour and if the woman was 43 pounds above the average weight, then he would be expected to earn \$6.29 an hour. The difference between below average weight women and above average weight women is about \$1.70 an hour. Assuming a woman works 8 hours, 5 days a week, for 50 weeks out of the year, that adds up to a difference of \$13.60 a day, 68 dollars a week and 3,400 a year. Over a 25-year career that adds up to \$85,000 based on 1988 wages for 20 to 30 year olds. After adjusting for inflation, \$85,000 translates to \$172,907 in 2016.

Effect of Weight on Salary Through Self-Esteem Ignoring Moderating Effects

Hypothesis 2a was not supported. In hypothesis 2a, I predicted that weight would have a negative relationship with self-esteem, meaning the more people weighed, the lower their self-esteem would tend to be. In hypothesis 2a, I ignored gender and ethnicity differences in the weight and self-esteem relationship. Hypothesis 2a is based loosely on the previous stereotyping framework, in which the obese are stereotyped as lazy and incompetent. However, for hypothesis 2a, instead of focusing on discriminatory practices (as in hypothesis 1), I focused on self-esteem and I proposed that the obese would have lower self-esteem than the non-obese. Table 5 displays the results for hypothesis 2a. In step 1, the control variables were entered and in step 2 weight was added to the model. The weight coefficient for self-esteem was negative, but non-significant.

Hypothesis 1b was supported. In hypothesis 1b, I predicted that self-esteem would be positively relate to salary. Table 2 displays the results for hypothesis 1b. In step 1, I entered the control variables, in step 2 I entered the weight term, and in step 3 I added self-esteem to the model. Self-esteem was significantly and positively related to hourly wages, when ignoring gender and ethnicity differences. As self-esteem in 1987 increased, the salary in 1988 tended to increase as well.

Hypothesis 2a was not supported, as a result hypothesis 2c is not supported. I predicted that self-esteem would mediate the relationship between weight and salary, while ignoring gender and ethnicity differences. Without considering gender and ethnicity differences, there was no evidence that self-esteem mediates the weight and salary relationship.

Moderating Effects on the Effect of Weight on Salary Through Self-Esteem (Path A)

In hypothesis 2d, I predicted that gender would moderate the relationship between weight and self-esteem and in hypothesis 2e I hypothesized a three-way interaction for weight, gender, and ethnicity on self-esteem. Thus, in hypothesis 2d, I predicted that gender would moderate the weight and salary relationship through self-esteem mechanisms and in hypothesis 2e there would be a three-way interaction on salary relationship through self-esteem. I first discuss the results for the moderating effects on the path from weight to self-esteem (path a), then I discuss the indirect effects for weight on salary through self-esteem, while considering gender and ethnicity differences in the relationship between weight and self-esteem.

Hypothesis 2d was not supported. Separate models were conducted for men and women. For men, I proposed that weight would be positively related to self-esteem until overweight levels, where the relationship tampers off and becomes negative. Accordingly, I proposed a positive weight coefficient and a negative weight squared coefficient for self-esteem (a positive quadratic relationship). For women, I predicted weight to be negatively related to self-esteem, but the relationship would weaken at overweight levels. Thus, I predicted a negative weight coefficient and a positive weight squared coefficient for self-esteem (a negative weight relationship). Results for hypothesis 1d are in step 2 of tables 6 and 7. All four coefficients were in the hypothesized direction, but were non-significant.

Additionally, in hypothesis 1e, I proposed a three-way interaction between weight, gender and ethnicity on self-esteem. Specifically, I hypothesized Black men would have a stronger positive relationship at underweight and average weight levels, and have a weaker negative relationship at overweight levels. I predicted a stronger weight coefficient, but a weaker weight squared coefficient on salary for Black men when compared to other men. I did not hypothesize a different weight and self-esteem relationship for men of Hispanic ethnicity than for other men. However, I did explore differences for men of Hispanic ethnicity. I did so, because there is little research on men's body satisfaction. There may be cultural differences in weight perceptions among Hispanic men, when compared to other men, not well documented in past literature.

See table 6 for results for men. I used a model building approach. In the first step, I including the controls only, in the second step I added the main effects, and in the last step I included the interactions. For non-Hispanic and non-Black men, as hypothesized, weight has a significant positive relationship with self-esteem and weight squared has a significant negative relationship with self-esteem. For other men, as weight increased, so did self-esteem until a certain weight level, where increases in weight were associated with decreases in self-esteem. There was a hypothesized difference for the non-squared weight term on wages between Black men and other men (not Hispanic or Black), however there was no statistically significant evidence of such a difference. There was not a significant difference between the weight (not squared) term on wages between Hispanic men and other men. However, there were significant differences between the weight squared terms on wages for other men and non-Black) and Hispanic men and between the weight squared terms on wages for other men and Black men. For Black men and Hispanic men, the squared weight term was higher than for other men (a positive difference).

Two follow up regression models were conducted separately for Black men and Hispanic men. For Black men the weight term was non-significant for predicting self-esteem (1.35 E-4, SE = 3.81 E-4, p = .99) and weight squared term was also non-significant in predicting self-esteem (-8.19 E -6, SE = 1.06 E-5, p = .44). For Hispanic men, the weight term on self-esteem was nonsignificant (6.25 E -4, SE = 7.03 E-4, p = .37) and the weight squared term on self-esteem was also non-significant (-4.24 E -6, SE = 9.17 E-6, p = .64). Even without the urban interaction terms, no weight or weight squared term on self-esteem was significant for either Hispanic or Black men.

Figure 9 plots the interaction of weight and ethnicity on self-esteem. Self-esteem was mean centered. Table 10 shows the predicted values for self-esteem at various weight levels. A value of 0 indicates the predicted value is at the average self-esteem level for men. For other men (not Hispanic or Black), self-esteem is predicted to increase as weight increases until 218 pounds, when an average height man is considered obese. At obesity levels, as weight increases, self-esteem decreases. I predicted that the self-esteem would start to decrease overweight levels all men, but the decrease did not occur until obesity and weight only significantly predicted self-esteem for non-Hispanic and non-Black men.

An identical regression model was conducted for women. See table 7 the results for women. Again a model building approach was used. For women in hypothesis 1d, I proposed a negative quadratic relationship between weight and self-esteem for women. At overweight levels I predicted that the relationship would be weakened. Thus, I predicted a negative weight coefficient and a positive weight squared coefficient on women's salaries. Additionally, in hypothesis 1e I predicted that Black women would have a weaker negative weight coefficient and a higher positive weight squared term on wages. I explored differences for Hispanic women

as well, because literature for women's body satisfaction for Hispanic women has been mixed over the years.

For women, there were non-significant results for the weight and self-esteem relationships. When all interactions weight terms (including the squared weight term) are absent in the model, weight becomes marginally significant for predicting self-esteem (-4.37 E-4, SE = 2.48 E-4, p=.07). In the current sample, there is no evidence of a curvilinear relationship between weight and self-esteem and no moderating effects of ethnicity. Table 11 presents the predicted values for various weight levels.

Indirect Effect of Weight through Self-Esteem

As mentioned, weight significantly predicted self-esteem only for non-Hispanic and non-Black men. Weight marginally predicted self-esteem for all women. I tested hypothesis 1e using the Sobel test, I calculated the indirect effects. For other men, weight had a non-significant positive indirect effect on wages through self-esteem (1.04 E-4, SE = 6.41 E-5 E-4, z = 1.61) and weight squared had a significant positive indirect effect on wages through self-esteem (-2.55 E-6, SE = 9.80 E-7, E-4, z = 2.60). For all women, weight had a non-significant negative indirect effect on wages through self-esteem (-6.80 E-5, SE = 4.01 E-05, z = -1.70).

Health Path A

In hypothesis 3a, I predicted that weight would positively relate to health-related work limitations. I did not hypothesis that weight squared would have a significantly related to health, because I did not expect curvilinear relationships. The weight and health relationship should not be affected by beauty norms and thus I expected a linear relationship and no interactions between weight and ethnicity. Results for health are displayed in tables 7 and 8. Again a model building approach was used. Logistic regression was conducted with health limitations as the outcome (1= has health limits the type or frequency of work and 0 = does not). I controlled for ethnicity, urban community, (1= urban, 0=rural), age, height, children, education, marriage, and previous salary. Weight did not significantly relate to health limitations for either men or women (confidence intervals contained 0).

In hypothesis 3c, I hypothesized that health mediates the relationship between weight and salary was not supported. Hypothesis 3a, was not support, thus according to Baron Kenny (1986), if there is not a significant relationship between the predictor and mediator, then there cannot be a mediating effect.

Path B from Health to Salary

Hypothesis 2b was supported. In hypothesis 2b, I predicted good health would positively predict wages. The same regression model used for the path B from self-esteem to salary was used to test path B from health to salary (step 4 in tables 3 and 4).. I expected a negative relationship between health limitations and salary, because health limitations indicate poor health instead of good health. For both men and women, health limitations negatively predicted wages.

Around the World Results

Two separate multi-level regression analyses were conducted in SAS for men and women. All currencies were transformed in United States dollars according to average exchange rates from 2007 and 2008. Table 12 summaries the exchange rates and the average and median monthly salaries each country by gender. To account for non-normality of residuals, the log of the USD was taken. Then currencies were standardized by country, by subtracting the monthly salary by the mean salary for respective country and gender and dividing by the standard deviation for the respective country and gender. All non-dichotomous predictors were mean centered before analysis. Weight squared is the square of the mean-centered weight.

Tables 12 through 15 display the descriptive statistics for the second study. Table 12 displays the average and median United States dollars for each country and gender, as well as the ratio of men's to women's median salaries. The ratio represents how much women make for every dollar a man makes. In table 13 are the average heights, weights and ideal body images by gender for each of the 18 countries included in the analyses. The average of the ideal body images was used as the beauty ideals for each country. Tables 14 and 15 display the zero order correlations for men and women. Above the diagonals are the correlations at the country level (level-2) and below the diagonal are correlations at the individual level.

In hypothesis 4, I predicted that the results by Judge and Cable (2011) would replicate across other countries. Judge and Cable (2011) tested their theory in the United States and in Germany. In replication of their results, I predicted that men would have a positive weight term and a negative weight squared term and women would have a negative weight term and a positive weight squared term.

Table 16 displays the multi-level regression results for men. A model building approach was conducted. The first model includes only the controls. In model 2, the weight term was added, and the term was significant and positive. In model 3, weight-squared was added and was negative and significant. The results for males duplicate what Judge and Cable (2011) found and for men across the countries in the study as weight increases, so does salary, until a certain weight level, when increases in weight is associated with decreases in salary.

Table 17 displays the multi-level regression results for women. Again a modeling building approach was conducted and model one includes the controls only. In model 2, the weight term was added. The term was negative as expected, however was non-significant. In model 3, the weight squared term was added, however it also was non-significant. The results for women do not support hypothesis 4 for women.

In hypothesis 5, I predicted that the cultural beauty norms of a country would moderate the relationship between weight and salary. In model 4, for both men and women, I tested this hypothesis. For men, I tested the interaction between the weight and the country's beauty norms for men (average of reports of both men and women about the ideal man), plus the interaction between weight squared and the country beauty norms for men. Similar interactions were tested for women with women's beauty norms instead of men's. There was no evidence of a moderation for either men or women. It should be noted though, for this model only 16 countries were included. Thus, the level two sample size was 16 and given this was a level-2 hypothesis, the power is low.

In hypothesis 6a, I predicted that beauty norms for both men and women would be heavier than in rural communities than in urban communities. For men, hypothesis 6a was supported. Men and women in rural and urban communities chose from pictures of men of

various sizes. The average ideal man was significantly higher in a rural community (M = 2.48, SD = .17, N = 4,392) than the average in a urban community (M = 2.41, SD = .19, N = 4,202), t(8592) = 19.58, p < .01). The men and women in both types of communities also selected from pictures of various sizes of women. The difference between average ideal woman in rural communities (M = 2.42, SD = .66, N = 4,284) and urban communities (M = 2.42, SD = .66, N = 4,120) was not significantly different, t(8,402) = -0.05, p = .96.

Hypothesis 6b was partially supported. In hypothesis 6b, I predicted that being in an urban community would moderate the relationship between weight and salary. For women, there were no significant weight and urban interactions terms (see model 5 of table 17) for either the non-squared weight term or the squared weight term on salary. There however, was a significant negative urban and weight (non-squared) interaction term for men. The significant interaction indicates that the slope for the relationship between weight and salary is less for those in an urban community than those in a rural community. The weight squared and urban interaction term was non-significant. Figure 12 displays the difference in weight and salary relationship between urban and rural men. The results indicate instead that the weight and salary relationship is stronger for men in rural communities than men in urban communities. The results support hypothesis 6 for men. Rural communities have heavier beauty norms and the underweight are more "penalized" with salary disparities in rural communities than in urban ones. The results for men were in the opposite direction than hypothesized. I hypothesized that urban men would have a stronger weight and salary relationship, because media influences are stronger in urban communities.

Discussion

Even though, for most jobs, body weight seemingly has nothing to do with job performance, bodyweight has many workplace implications, including promotablity and salary disparities (Roehling, 1999). In previous works, researchers proposed discrimination as the driving force in the weight and salary relationship and in experimental studies, there is support for weight-based workplace discrimination (e.g., Bordieri et al., 1997). Judge and Cable (2011) added the weight and salary conversation, by exploring how cultural beauty norms predict which weight classes will make the most and which weight classes will make the least. Specifically, the authors demonstrated that men and women have different weight and salary relationships that follow beauty norms for men and women. The underweight women tend to the most compared to average weight and above average weight women. Contrastingly, the below average weight make the least for men, while the below average weight make the most for women. Judge and Cable (2011) still suggested that discrimination is the cause of the weight and salary relationship, but they advocate that the discrimination occurs when a person does not conform to gender beauty norms. They further the stereotyping theory, by showing how the overweight are not the only weight class facing salary disparities and average weight women and underweight men face them as well.

The current study furthers literature in two ways. First, I explore alternate explanations to weight-based salary disparities and test competing theories to the stereotyping theory. Second, I further the exploration of cultural beauty norms by investigating differences in beauty norms besides those due to gender.

Alternative Explanations

While weight-based discrimination is one explanation for differences in salary between weight salaries, other mechanisms are possible. In the first study, I proposed two such mechanisms, health and self-esteem. If weight does relate to salary through other mechanisms than just discrimination, other interventions would be needed to reduce salary disparities between weight classes. There may individual cases in which weight has caused health issues that limit the work one can do and those work limitations lead to salary decreases. Yet, I found no support for a trend of weight-related health issues leading to work limitations and salary disparities. I did, however, find self-esteem to explain how different weight classes have different average salaries, in tandem with a stereotyping mechanism, but only for non-Hispanic and non-Black men. For some men (non-Hispanic and non-Black), I found self-esteem to partially explains the weight and salary relationship. Below average men tend to have the lowest selfesteem and that lowered self-esteem may lead salaries decreases. For women, while I found that the below average weight women tend to have the highest self-esteem, heavier women tend to have lower self-esteem, and women with lower self-esteem tend to have lower salaries, the effect was not large enough to explain why weight is associated with salary.

The self-esteem mechanism adds to the Cultivation theory promoted by Judge and Cable (2011). Very similar results were found for self-esteem that have been shown for salary. Not only do others hold employees to gender based beauty norms, the self does as well. Past research in body dissatisfaction has well established how heavier women on average have lower self-esteem than thinner women. This study adds to the small amount of research on body dissatisfaction in men. The results highlight that the relationship is nonlinear for men. For non-obese men, increases in weight would likely lead to more self-esteem, but for obese men increases in weight

would likely lead to less self-esteem. Additionally, this study demonstrates how weight dissatisfaction can lead to decreases in not just body dissatisfaction, but global self-esteem, and those changes in self-esteem have real work implications. However, the self-esteem only mediated the weight and salary relationship for other men and a further investigation is needed to understand why self-esteem did not mediated the weight and salary relationship for other demographic groups.

Cultural Variations in the United States

The past stereotyping framework without cultural considerations assumed underweight men and women would not be penalized for gaining weight. The old stereotyping framework assumed that only those who seem to be "unhealthy" are considered lazy or incompent. Judge and Cable (2011) demonstrated that this is only underweight men are not penalzied for gaining weight and infact underweight women would be penalized for gaining weight. They posited that beauty ideals created by the media are influencing the weight and salary realtionship and not what is considered unhealthy by medical professionals.

The current study makes further contribution to this cultivation framework showing how The differences in weight and salary realtionship amoungst ethnicities further supports the intergration of cultivation theory in the discussion of the weight and salary realtionship. Through the current study it became evident that not only do beauty norms differ by gender, they also differ by ethncity. In the United States, those belonging to certain ethncities are held to different beauty norms than White mainstream beauty norms (Hebl & Turchin, 2005). Strikingly, in the first study, both Hispanic men and Black women differing weight and salary relationships from their respective genders.

There is a lack of body image literature on men and thus the results for Hispanic men were novel. Hispanic men had a weight and salary relationship similar results for expected women. A Hispanic man who is slightly underweight (according to BMI) makes \$25,000 more than a Hispanic man who is slightly overweight and \$41,000 over a 25-year career. The differences in salary based on weight at the time of data collection (1988) amount a brand new car or two (Morris, 1988).

However, the results for Black women are somewhat consistent with previous on Black women's beauty norms. Black women often reject mainstream beauty norms for females and hold heavier body weight norms (Kerr, Crocker, & Broadnax, 1995). The results are more different than White mainstearm beauty norms than expected. I expected Black women to less penalized for being of larger weight, but instead they were even rewarded for being larger (until a point). Black women had a weight and salary relationship similar to the relationship for non-Hispanic men. The more Black women weigh, the more the higher their salaries tended to be, until obesity levels, where higher weight was associated with lower wages. Over a 25 year career, Black women who were slightly underweight were expected to make \$38,000 less than a Black woman who was slightly overweight and \$41,500 less than a Black woman who is slightly obese. A slightly obese women who gains 15 pounds would be expected to lose \$2,500 over 25 years. If the weight and salary relationship follows beauty norms for Black women, than it would appear that according to beauty norms for Black women, "thicker" is better until a point where a women can weigh too much.

For the other ethnicities considered in the study followed the mainstream beauty norms more closely. For non-Hispanic and non-Black men, the slightly overweight make the most followed by slightly obese and normal weight. Aligning with the expectation for men to be muscular, the underweight make the least. Slightly underweight men are expected to earn \$125,000 less than a man who is slightly overweight. With \$125,000 dollars a person could buy a home in 1988, when the data was collected (Census Bureau, 2015).

Black men were not penalized for being too heavy until obesity levels. This pattern aligns with Black men not being stigmatized as much as White men for being overweight (Hebl & Turchin, 2005). For Black men, the slightly obese make the most, but being too obese is expected to lead to salary decreases. Again, following mainstream beauty norms, the underweight make the least. Over 25 years, a slightly obese Black man is expected to earn \$78,500 more than a slightly underweight Black man.

For non-Black women, the lighter the more money the women tended to make and this follows mainstream beauty norms. Over 25-years, a slightly underweight non-Black and non-Hispanic women is expected to make \$58,500 more than a slightly obese non-Black and Hispanic women. A slightly underweight Hispanic women is expected to earn \$84,500 more than a slightly obese Hispanic women over-25 years. Adjusting for inflation, the dollar amounts in 2016 would be about double the amounts in 1988.

Cultural Variations in the Multi-Country Sample

In the second study, I explored the weight and salary relationship outside of the United States and variations were found depending on the type of community. Judge and Cable (2011), to my knowledge, was the first explore non-linear weight and salary relationship and they explored the relationship in the United States and in Germany. I explored the relationship in an additional sixteen countries. For men, there was a curvilinear weight and salary relationship similar to the relationship found in the United States and Germany. Men with the higher weights

had the higher salaries. I found cultural variations depending on the type of community the men lived in. Larger men are preferred more so in rural communities than in urban communities. Accordingly, underweight men had much lower wages than normal weight or overweight men in rural communities than in urban communities. Thus, it seems underweight men are more penalized in rural communities than in urban communities.

Once again, the second study reinforced the addition of cultivation theory into the study of weight discrimination. Gender and ethnicity is not the only consideration in weight and salary relationship. Beauty norms vary from community to community and thus so the pattern of weight discrimination. Knowing the beauty norms of a community will help predict the amount and pattern of weight discrimination for a community. For instance, an underweight man in an urban community might not see as much discrimination as compared to the same man in a rural community. The discrimination aligns with beauty norms being heavier in rural communities than in urban communities.

Limitations and Future Directions

I tested if beauty norms predicted the weight salary relationship with indirect measures of beauty norms that included gender, ethnicity and type of community, but I was not able to properly test more directly if beauty norms predicted the weight and salary relationship. One strength of the second study was the inclusion of 18 different countries, however for the leveltwo hypothesis of beauty norms, the amount of countries unpowered the test. A larger amount of countries is needed to test this hypothesis or lower level of grouping. For instance, perhaps multiple cities in a vast number of countries would be more appropriate to test more directly if the beauty norms predict weight discrimination.

Another limitation is that discrimination not directly tested. Other explanations, selfesteem and health, but that does not guarantee that discrimination is causing the weight and salary relationships. Experimental studies have linked stereotyping to promotablity and other workplace discriminatory practices (Bordieri et al., 1997; Brink, 1988; Klesges et al., 1990; Larkin & Pines, 1979; Larwood, 1995; Pingitore, Dugoni, Tindale, & Spring, 1994). However, those experimental studies do not include salary. So it cannot be certain that weight is linked to salary through discriminatory practices. Ideally, a study would include weight, supervisory biases, and salary all in one study.

Additionally, there were less findings for women than for men. In study one, I did not find self-esteem as an explanation for the weight salary relationship. More troubling, I did not find a relationship between weight and salary in study two. At first thought, this might sound counterintuitive, because weight is generally seen as a concern for women and most research on body image has been conducted on women only. However, there is another explanation that should be explored. Women's beauty norms might be more complicated than men's beauty

norms and weight does not accurately measure the body shape of women. For women it might depend where the weight goes more so than for men. For instance, in Brazil. women with larger bottoms are more desirable. If a Brazilian woman gains weight and the weight goes to her buttocks, then this would be desirable, but if the weight went to the stomach, this would be undesirable. For women, more so, weight might be important, but where the weight is held and the shape of her body may be more important.

A more precise investigation of men's beauty norms would increase the understanding of weight discrimination in the workplace as well. Body weight does not differentiate between fat and muscle. For men, gains in muscles would be desirable, but gains in fat would be undesirable. Yet both would result in weight gain. Using weight solely limits how accurately it can be determined if men or women align with beauty norms. Other methods have been shown to better identify obesity than basing it solely on weight and height (Akpinar, Bashan, Bozdemir, & Saatci, 2007; Mascie-Taylor & Goto, 2007).

Conclusion

This study suggests both self-confidence and stereotyping influence which weight classes are paid the most. Furthermore, this study demonstrated the complexities of beauty norms and how weight-based salary discrimination is dependent on both ethnicity and type of community. Those who did not align with the beauty norms for their ethnicity or community were paid the least and those who did align were paid the most. The weight and salary relationship is not simply a matter of obese being stereotyped or even just a difference in genders, this study has brought force the many complexities of, a physical characteristic, body weight in predicting employee salary.

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Table 1

Zero Order Correlations for NLS79 U.S. Sample

				-	•	,	0	5	10			10	± 1		10	±,	10	15
1. Height -	11	.13	02	.00	.00	20	.07	02	.30	.08	.08	.02	.07	08	.13	02	02	02
2. Children 8603	-	39	.29	.23	.15	.04	29	03	.05	23	15	.03	20	.88	39	11	11	.15
3. Education 86 .17	20	-	14	.10	03	12	.38	01	05	.37	.28	03	.21	35	.97	.09	.09	04
4. Married 86 .03	.57	06	-	.16	17	.02	09	05	.01	07	04	.02	14	.36	15	.05	.05	.63
5. Age .02	.25	.11	.27	-	01	04	.18	02	.07	.12	.03	.03	.02	.21	.07	.19	.19	.10
6. Black .02	05	06	16	01	-	24	11	.04	.16	13	.02	01	00	.14	03	05	05	20
7. Hispanic26	.08	12	.02	02	26	-	02	.03	06	.01	06	01	04	.05	11	.01	.01	.02
8. Salary 86 .11	.10	.25	.23	.30	15	.00	-	.03	08	.55	.22	06	.35	27	.34	.41	.41	.00
9. Urban 8601	01	02	03	.04	.03	.05	.09	-	01	.02	.01	.01	01	03	00	.03	.03	03
10. Weight 86 .46	.08	.05	.11	.11	04	04	.13	00	-	08	03	.02	.02	.07	06	.01	.01	03
11. Log Hourly Pay 88 .08	.03	.29	.14	.15	15	.01	.48	.05	.05	-	.21	.21	.26	21	.36	29	.29	02
12. Self-Esteem 87 .11	10	.37	.00	.01	03	07	.18	.00	.05	.21	-	02	.08	11	.27	.03	.04	.04
13. Health Limitations00	.01	01	01	.03	.00	01	06	.01	.01	01	04	-	06	.05	03	02	04	.02
14. Work Hours 88 .06	.05	.12	.15	.08	12	04	.31	.02	.11	07	.11	08	-	27	.19	.04	.32	16
15. Children 8804	.72	17	.51	.22	05	.07	.13	01	.06	.06	07	01	.09	-	35	04	08	.25
16. Education 88 .17	21	.98	07	.06	07	12	.21	02	.05	.28	.37	00	.10	19	-	.21	.06	05
17. Public Sector 88 .00	.00	.17	.02	.05	.06	00	01	00	.04	.01	.07	00	03	01	.17	-	.08	02
18. Cuberoot Tenure 88 .03	.12	.06	.19	.21	10	.02	.40	.05	.10	.23	.02	06	.30	.13	.03	.07	-	.08
19. Married 88 .07	.34	.02	.62	.20	18	.00	.25	04	.10	.19	.07	02	.18	.54	.01	.00	.20	-
<i>Note.</i> Men (bottom half): N=3422, for correlations \geq .0335, $p < .05$. For correlations \geq .044, $p < .01$																		

Women (top half): N=3314, for correlations \geq .034, p < .05. For correlations \geq .0447, p < .01

WEIGHT AND SALARY

Table 2

NLS79 U.S. Sample Regression Results Log of 1988 Hourly Wage (plus 1) in Cents (Men and Women)

	Step	1	Step	2	Step 3		
Variable	В	SE	В	SE	В	SE	
Intercept	6.56**	1.36E-2	6.55*	1.36E-2	6.56*8	1.36E-3	
Height ^t	1.58E-2**	1.60E-3	2.00E-2**	1.99E-3	1.94E-2**	1.98@-3	
Children	-2.04E-2	7.08E-3	-1.97E-2**	7.08E-3	-1.81E-2**	7.04E-3	
Education ^t	6.42E-2**	2.901-3	6.35E-2**	2.92E-3	5.54E-2**	3.03E-3	
Married	6.92E-2**	1.42E-2	6.90E-2**	1.42E-2	5.99E-2**	1.42E-2	
Age ^t	1.81E-2**	2.96E-3	1.86E-2**	2.95E-3	1.89E-2**	2.94E-3	
Urban	6.04E-2**	9.83E-2	6.02E-2**	9.82E-3	5.65E-2**	9.77E-3	
Black	-1.09E-1**	1.55E-2	-1.07E-1**	1.55E-2	-1.97E-1**	1.54@-2	
Hispanic	5.96E-2**	1.84E-2	6.36E-2**	1.85E-2	6.66E-2**	1.84E-2	
Total Workhours ^t	9.45E-5**	8.98E-6	9.67E-5**	9.00E6-	9.32E-5**	8.96E-6	
Public Sector	-1.34E-2	1.97E-2	-1.19E-2	1.97E-2	-1.05E-2	1.95E-2	
Tenure ^t	6.58E-4**	4.63E-5	6.62E-4**	1.41E-2	6.63E-4**	4.60E-5	
Health Limitations	-1.68E-1**	3.71	-1.7E-1**	3.70e-2	-1.59E-1**	3.568E-2	
Weight ^t			-6.17E-4**	2.34e-4	-5.96E-4**	2.32E-4	
Self-Esteem ^t					1.48E-1**	1.53E-2	
\mathbb{R}^2	.20		.20				
Adj. R ²	.20		.20				
ΔR^2			.00				

Note.^t Variable was mean centered prior to analysis

* p < .05, ** p < .01
Table 3

NLS79 U.S. Sample Regression Results Log of 1988 Hourly Wage (plus 1) in Cents for Men (N=3422)

		Step 1		Step 2	2	Step 2	3	Step 4	
Variable	-	В	SE	В	SE	В	SE	В	SE
Controls									
Intercept		6.61E+00**	2.00E-02	6.63E+00**	2.08E-02	6.65E+00**	2.25E-02	6.65E+00**	2.24E-02
Height ^t		4.11E-03	3.20E-03	3.30E-03	3.67E-03	2.95E-03	3.68E-03	2.50E-03	3.66E-03
Children		-4.94E-03	1.15E-02	-5.28E-03	1.15E-02	-4.38E-03	1.15E-01	-1.58E-03	1.15E-02
Education	t	6.30E-02**	4.10E-03	6.23E-02**	4.10E-03	6.19E-02**	4.10E-03	5.28E-02**	4.32E-03
Married		1.51E-01**	2.30E-02	1.47E-01**	2.30E-02	1.46E-01**	2.30E-02	1.35E-01**	2.29E-02
Age ^t		1.84E-02**	4.26E-03	1.92E-02**	4.27E-03	1.88E-02**	4.27E-03	1.95E-02**	4.25E-03
Urban		6.58E-02**	1.44E-02	6.37E-02**	1.44E-02	4.99E-02**	1.74E-02	4.74E-02**	1.73E-02
Black		-1.10E-01**	2.27E-02	-1.12E-01*	2.26E-02	-1.12E-01**	2.53E-02	-1.11E-01**	2.51E-02
Hispanic		2.70E-02	2.70E-02	2.85E-02	2.71E-02	-9.87E-03	3.12E-02	-4.50E-03	3.10E-02
Workhour	s ^t	3.32E-05*	1.41E-05	3.16E-05*	1.41E-05	3.27E-05*	1.41E-05	2.66E-05	1.40E-05
Public Sec	tor	-8.48E-02**	3.05E-02	-8.48E-02**	3.05E-02	-8.40E-02**	3.05E-02	-8.77E-02**	3.03E-02
Tenure ^t		5.30E-02**	5.33E-03	5.17E-02**	5.33E-03	5.13E-02**	5.34E-03	5.20E-02**	5.31E-03
Main Effects									
Weight ^t				4.10E-04	4.29E-04	1.33E-03	6.93E-04	1.16E-03	6.89E-04
Weight ²				-1.53E-05**	5.75E-06	-3.55E-05**	1.11E-05	-3.17E-05**	1.11E-05
Health Lin	nitations			-1.73E-01**	6.12E-02	-1.66E-01**	6.12E-02	-1.53E-01*	6.08E-02
Interaction Terms									
Urban x W	/eight					-8.53E-04	6.40E-04	-7.87E-04	6.37E-04
Urban x W	/eight ²					1.55E-05	1.15E-05	1.39E-05	1.14E-05
Black x W	eight					1.39E-03	9.13E-04	1.45E-03	9.07E-04
Black x W	eight ²					3.32E-06	1.36E-05	6.91E-07	1.35E-05
Hispanic x	Weight					-2.55E-03**	9.51E-04	-2.49E-03**	9.45E-04
Hispanic x	Weight ²					3.14E-05*	1.48E-05	2.85E-05*	1.47E-05
Mediator									
Self Esteen	m ^t							1.56E-01**	2.42E-02
R^2		.169		.173		.178		.187	
Adjusted R	22	.167		.170		.173		.183	
ΔR^2				.004		.005		.010*	

^t Variable was mean centered prior to analysis * p < .05, ** p < .01

Table 4

. NLS79 U.S. Sample, Log of Hourly 1988 Wage (plus 1) in Cents, Direct Path and "b" Path for Women (N=3314)

	Step 1		Step	2	Step	3	Step 4	
Variable	В	SE	В	SE	В	SE	В	SE
Controls								
Intercept	6.50E+0**	1.80E-2	6.51E+0**	1.88E-2	6.50E+0**	2.04E-2	6.51E+0**	2.03E-2
Height ^t	6.95E-3*	3.06E-3	1.11E-2**	3.27E-3	1.10E-2**	3.26E-3	9.74E-3**	3.24E-3
Children	-2.75E-2**	9.15E-3	-2.58E-2**	9.12E-3	-2.59E-2**	9.10E-3	-2.39E-2**	9.04E-3
Education	7.09E-2**	4.10E-3	6.89E-2**	4.19E-3	6.86E-2**	4.19E-3	6.17E-2**	4.27E-3
Married	-8.83E-3	4.19E-3	-9.74E-3	1.79E-2	-8.79E-3	1.79E-2	-1.85E-2	1.78E-2
Age ^t	1.70E-2**	3.91E-3	1.86E-2**	3.91E-3	1.86E-2**	3.90E-3	1.83E-2**	3.87E-3
Urban	5.58E-2**	1.30E-2	5.69E-2**	1.30E-2	6.53E-2**	1.61E-2	6.22E-2**	1.60E-2
Black	-1.22E-1**	2.06E-2	-1.09E-1**	2.08E-2	-1.05E-1**	2.32E-2	-1.12E-1**	2.30E-2
Hispanic	3.82E-1	2.53E-2	4.08E-2	2.52E-2	2.73E-2	3.01E-2	2.68E-2	2.99E-2
Total Workhours	8.14E-5**	1.24E-5	8.12E-5**	1.23E-5	8.21E-5**	1.23E-5	8.00E-5**	1.22E-5
Public Sector	3.51E-2	2.48E-2	3.66E-2	2.47E-2	3.65E-2	2.46E-2	4.17E-2	2.45E-2
Tenure	6.30E-2**	4.90E-3	3.27E-2**	4.88E-3	6.24E-2**	4.87E-3	6.20E-2**	4.84E-3
Main Effects								
Weight ^t			-1.10E-3**	4.10E-4	-2.10E-3**	6.53E-4	-2.00E-3**	6.48E-4
Weight ²			-6.54E-6	5.99E-6	2.45E-6	1.10E-5	2.29E-6	1.10E-5
Health Limitations			-1.32E-1**	4.42E-2	-1.34E-1**	4.42E-2	-1.29E-1**	4.38E-2
Interaction Terms								
Urban x Weight					3.02E-4	5.91E-4	3.12E-4	5.87E-4
Urban x Weight ²					-8.25E-6	1.15E-5	-8.96E-6	1.15E-5
Black x Weight					3.65E-3**	9.20E-4	3.60E-3**	9.13E-4
Black x Weight ²					-2.54E-5	1.35E-5	-2.47E-5	1.34E-5
Hispanic x Weight					-6.54E-4	1.05E-3	-7.74E-4	1.05E-3
Hispanic x Weight ²					1.16E-5	1.85E-5	1.44E-5	1.83E-5
Mediator								
Self Esteem							1.56E-1**	2.42E-2
<i>R</i> ²	.238		.245		.250		.261	
Adjusted R^2	.235		.242		.245		.256	
ΔR^2			.007*		.005		.011*	

^tVariable was mean centered prior to analysis * p < .05, ** p < .01

Table 5

_Regression Results for the Effect of Weight on Mean Centered Self-Esteem for Both Men and Women

	Step	1	Step	2
Variable	В	SE	В	SE
Intercept	-1.06E-2	8.01E-3	-1.11E-2	8.03E-3
Height ^t	2.14E-2	1.20E-3	3.05E-3	1.48E-3*
Children	-1.30E-2*	5.99E-3	-1.29E-2*	5.99E-3
Education ^t	5.32E-2**	2.29E-3	5.30E-2	2.30E-3
Married	2.19E-2*	1.09E-2	2.22E-2*	1.09E-2
Age ^t	-7.12E-3**	2.23E-3	-6.95E-3**	2.24E-3
Previous Salary ^t	4.45E-6**	4.90E-7	4.47E-6**	4.91E-7
Urban	5.97E-4	3.46E-3	5.64E-4	3.46E-3
Black	2.02E-2	1.14E-2	2.12	1.14
Hispanic	-2.26E-2	1.34E-2	-2.14E-2	1.36E-2
Weight ^t			-1.79E-4	1.73E-4
\mathbb{R}^2	.12		.12	
Adj. R ²	.12		.12	
ΔR^2			.00	

Note. ^t Variable was mean centered prior to analysis * p < .05, ** p < .01

Table 6

NLS79 U.S. Sample Self Esteem^t Regressed on Predictors, 'a' path- Men (N = 3422)

	Step	1	Step	0 2	Ste	р 3
Variable	В	SE	В	SE	В	SE
Controls						
Intercept	-1.06E-2	1.12E-2	-3.86E-3	1.18E-2	4.90E-3	1.23E-2
Height ^t	4.57E-3*	2.26E-3	2.86E-3	2.59E-3	2.89E-3	2.59E-3
Children	-2.25E-2*	9.74E-3	-2.27E-2*	9.74E-3	-2.26E-2*	9.75E-3
Education ^t	5.95E-2**	3.07E-3	5.94E-2**	3.07E-3	5.92E-2**	3.07E-3
Married	3.21E-2	1.71E-2	3.08E-2	1.71E-2	3.10E-2	1.71E-2
Age ^t	-1.08E-2**	3.11E-3	-1.09E-2**	3.12E-3	-1.09E-2**	3.12E-3
Previous Salary ^t	3.86E-6**	6.14E-7	3.75E-6**	6.17E-7	3.76E-6**	6.17E-7
Urban	7.44E-5	4.73E-3	2.07E-4	4.72E-3	-2.05E-3	5.80E-3
Black	6.35E-3	1.59E-2	5.88E-3	1.59E-2	-9.52E-3	1.77E-2
Hispanic	-1.80E-2	1.89E-2	-1.88E-2	1.90E-2	-3.92E-2	2.19E-2
Main Effects						
Weight ^t			4.75E-4	3.02E-4	7.55E-4*	3.84E-4
Weight ²			-7.00E-6	4.06E-6	-1.75E-5**	5.89E-6
Interaction Terms						
Urban x Weight					1.70E-4	1.85E-4
Urban x Weight ²					2.63E-6	4.24E-6
Black x Weight					-4.92E-4	6.43E-4
Black x Weight ²					1.86E-5*	9.48E-6
Hispanic x Weight					-3.23E-4	6.70E-4
Hispanic x Weight ²					2.04E-5*	1.04E-5
R^2	0.15	51	.15	2		.153
R^2 adjusted	0.14	8	.14	.9		.149
ΔR^2			.00	1		.000

^t Variable was mean centered prior to analysis

* p < .05, ** p < .01

Table 7

NLS79 U.S. Sample Self Esteem Regressed on Predictors, 'a' path- Women (N=3314)

	Step	01	Step) 2	Ste	р 3
Variable	В	SE	В	SE	В	SE
Controls						
Intercept	-1.90E-2	1.16E-2	2.19E-2	1.25E-2	-2.43E-2	1.32E-2
Height ^t	5.84E-3*	2.45E-3	7.43E-3**	2.63E-3	7.62E-3**	2.64E-3
Children	-1.46E-2	8.15E-3	-1.48E-2	8.15E-3	-1.47E-2	8.15E-3
Education ^t	4.05E-2**	3.65E-3	4.01E-2**	3.66E-3	4.10E-2**	3.67E-3
Married	2.32E-2	1.45E-2	2.40E-2	1.45E-2	2.39E-2	1.45E-2
Age ^t	-3.05E-3	3.20E-3	-2.48E-3	3.22E-3	-2.55E-3	3.23E-3
Previous Salary ^t	6.64E-6**	8.86E-7	6.53E-6**	8.88E-7	6.53E-6**	8.90E-7
Urban	1.44E-3	5.06E-3	1.36E-3	5.06E-3	7.11E-5	6.19E-3
Black	4.15E-2*	1.64E-2	4.67E-2**	1.67E-2	5.00E-2**	1.86E-2
Hispanic	-1.30E-2	2.01E-2	-1.13E-2	2.01E-2	2.01E-3	2.41E-2
Main Effects						
Weight ^t			-4.99E-4	3.31E-4	-4.93E-4	4.32E-4
Weight ²			1.36E-6	4.84E-6	4.05E-6	7.01E-6
Interaction Terms						
Urban x Weight					-3.21E-4	2.49E-4
Urban x Weight ²					1.78E-6	5.20E-6
Black x Weight					8.86E-5	7.42E-4
Black x Weight ²					-3.62E-6	1.09E-5
Hispanic x Weight					6.21E-4	8.47E-4
Hispanic x Weight ²					-1.53E-5	1.48E-5
R^2			.10	0		.101
R^2 adjusted			.09	7		.097
ΔR^2						.001

^t Variable was mean centered prior to analysis

* p < .05, ** p < .01

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Table 8

NLS79 U.S. Sample Men's Path 'a" for Health Limitations (1 = Health Limits Type or Amount of Work, 0 = Does not)

			Step	01			Step	2			Step	3	
					95 % CI				95 % CI				95 % CI
	Predictor	В	SE	OR	for OR	В	SE	OR	for OR	В	SE	OR	for OR
Controls													
	Intercept	-3.78E+0	2.05E-1			-3.83E+0**	2.13E-1			-3.91E+0**	2.25E-1		
	Height ^t	1.43E-2	3.94E-2	1.01	0.94, 1.10	8.89E-3	4.43E-2	1.01	0.93, 1.10	5.44E-3	4.48E-2	1.01	0.92, 1.10
	Children	1.62E-1	1.56E-1	1.18	0.87, 1.60	1.46E-1	1.57E-1	1.16	0.85, 1.57	1.41E-1	1.58E-1	1.15	0.85, 1.57
	Education	1.10E-2	5.13E-2	1.01	0.91, 1.12	1.35E-2	5.14E-2	1.01	0.92, 1.12	1.57E-2	5.14E-2	1.02	0.92, 1.12
	Married	-2.39E-1	3.14E-1	0.79	0.43, 1.46	-2.28E-1	3.15E-1	0.80	0.43, 1.48	-2.44E-1	3.18E-1	0.78	0.42, 1.46
	Age ^t	1.42E-1	5.27E-2	1.15	1.04, 1.28	1.39E-1	5.30E-2	1.15	1.04, 1.28	1.40E-1	5.31E-2	1.15	1.04, 1.28
	Previous Salary ^t	-6.00E-5	1.40E-5	1.00	1.00, 1.00	-6.00E-5	1.40E-5	1.00	1.00, 1.00	-6.00E-5	1.40E-5	1.00	1.00, 1.00
	Urban	9.69E-2	9.42E-2	1.10	0.92, 1.33	9.61E-2	9.44E-2	1.10	0.92, 1.33	8.18E-2	1.12E-1	1.09	0.87, 1.35
	Black	-2.64E-1	2.76E-1	0.77	0.45, 1.32	-2.57E-1	2.76E-1	0.77	0.45, 1.33	-1.47E-1	3.12E-1	0.86	0.47, 1.59
	Hispanic	-2.16E-1	3.45E-1	0.81	0.92, 1.33	-2.35E-1	3.46E-1	0.79	0.40, 1.56	4.28E-1	4.16E-1	1.53	0.68, 3.46
Main Eff	ects												
	Weight ^t					-1.40E-4	5.04E-3	1.00	0.99, 1.01	3.30E-3	7.14E-3	1.00	0.99, 1.02
	Weight ²					5.10E-5	4.80E-5	1.00	1.00, 1.00	5.50E-5	8.40E-5	1.00	1.00, 1.00
Interactio	on Terms												
	Urban x Weight									-9.70E-3	5.03E-3	0.99	0.98, 1.00
	Urban x Weight ²									8.90E-5	8.20E-5	1.00	1.00. 1.00
	Black x Weight									-9.40E-4	1.09E-2	0.99	0.98, 1.02
	Black x Weight ²									-1.30E-4	1.54E-4	1.00	1.00, 1.00
	Hispanic x Weight									1.68E-2	1.54E-2	1.02	0.99, 1.05
	Hispanic x Weight ²									-9.00E-5	8.20E-5	1.00	0.98, 1.00
	-211		730.616				728.9	35			716.7	30	
	γ^2	28.45					30.13				42 34		
	df	9					11			17			
	$\Delta \chi^2$		-				1.6	8			2.49)	

Note. * p < .05, ** p < .01

Table 9.

NLS79 U.S. Sample, Men's Path 'a" for Health Limitations (1 = Health Limits Type or Amount of Work, 0 = Does not)

			Step	01			Step	2			Step	3	
					95 % CI				95 % CI				95 % CI
	Predictor	В	SE	OR	for OR	В	SE	OR	for OR	В	SE	OR	for OR
Controls													
	Intercept	-3.31E+0**	1.65E-1			-3.34E+0**	1.77E-1			-3.28E+0**	1.88E-1		
	Height ^t	4.06E-2	3.44E-2	1.04	0.97, 1.11	4.32E-2	3.69E-2	1.04	0.97, 1.12	4.11E-2	3.70E-2	1.04	0.97, 1.12
	Children	-6.24E-3	1.07E-1	0.99	0.81, 1.22	-5.75E-3	1.06E-1	0.99	0.81, 1.23	-9.96E-3	1.07E-1	0.99	0.80, 1.22
	Education	-3.69E-2	5.00E-2	0.96	0.87, 1.06	-3.60E-2	5.02E-2	0.97	0.87, 1.06	-3.80E-2	5.03E-2	0.96	0.87, 1.06
	Married	-6.83E-3	2.02E-1	0.99	0.67, 1.48	8.50E-4	2.02E-1	1.00	0.67, 1.49	-1.31E-2	2.03E-1	0.99	0.66, 1.47
	Age ^t	1.01E-1*	4.42E-2	1.11	1.02, 1.21	1.01E-1*	4.45E-2	1.11	1.01, 1.20	1.02E-1*	4.46E-2	1.11	1.02, 1.21
	Previous Salary t	-5.00E-5**	1.40E-5	1.00	1.00, 1.00	5.00E-5**	1.40E-5	1.00	1.00, 1.00	-5.00E-5**	1.40E-5	1.00	1.00, 1.00
	Urban	4.17E-2	7.55E-2	1.04	0.90, 1.21	4.03E-2	7.55E-2	1.04	0.90, 1.21	4.14E-2	8.89E-2	1.04	0.88, 1.24
	Black	-1.92E-1	2.33E-1	0.83	0.52, 1.30	-1.84E-1	2.36E-1	0.83	0.52, 1.32	-3.29E-1	2.64E-1	0.72	0.43, 1.21
	Hispanic	-1.85E-1	2.97E-1	0.83	0.47, 1.49	-1.80E-1	2.97E-1	0.84	0.47, 1.50	-2.06E-1	3.68E-1	0.81	0.40, 1.68
Main Effe	ects												
	Weight ^t					-1.45E-3	4.56E-3	1.00	0.99, 1.01	-5.10E-4	6.01E-3	1.00	0.99, 1.01
	Weight ²					3.30E-5	5.90E-5	1.00	1.00, 1.00	-3.00E-5	1.01E-4	1.00	1.00, 1.00
Interactio	on Terms												
	Urban x Weight									-1.40E-3	3.76E-3	1.00	0.99. 1.01
	Urban x Weight ²									1.40E-6	7.10E-5	1.00	1.00. 1.00
	Black x Weight									2.48E-3	1.03E-2	1.00	0.98, 1.02
	Black x Weight ²									1.00E-4	1.31E-4	1.00	1.00, 1.00
	Hispanic x Weight									-2.85E-3	1.26E-2	1.00	0.97, 1.02
	Hispanic x Weight ²									5.54E-7	2.75E-4	1.00	0.99, 1.01
	-2LL		1011.47				1011.	.16			1008.	67	
	χ^2	20.56				20.86				23.35			
	df	9				11			17				
	$\Delta \chi^2$		-				0.3	1			2.49)	

Note. * p < .05, ** p < .01

Table 10

	0 0	-	0	· 0		2				
		Underwe	eight	Normal Weight			Overweight		Obese	
	BMI	16.40	18.51	20.63	22.74	24.86	26.97	29.09	31.20	33.32
Weight	Z-score	-2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00
	Pounds	114	129	144	156	173	188	203	218	232
Other Men	Wages (SE)	6.48	6.92	7.28	7.56	7.75	7.82	7.80	7.66	7.43
	Self-Esteem	-0.24	-0.15	-0.08	-0.02	0.01	0.03	0.03	0.01	-0.03
Black Men	Wage (Average SE)	5.33	5.81	6.25	6.62	6.93	7.15	7.29	7.32	7.26
	Self-Esteem	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08
Hispanic Men	Wage (Average SE)	8.25	8.13	8.00	7.86	7.71	7.56	7.39	7.22	7.05
	Self-Esteem	-0.12	-0.12	-0.11	-0.10	-0.08	-0.07	-0.05	-0.02	0.00

Predicted Values for Men's Self-esteem and Hourly Wages in 1988 by Weight Level and Ethnicity

Note. Bolded predicted values indicate the point at which increases in weight are predicted to lead to decreases in the outcome (either hourly wages or self-esteem). BMI's are based on a 5' 10'' man (average height of the men in the sample). S.E. stands for self-esteem. Self-esteem was mean centered. The wages are based on the full model, where I controlled for self-esteem and health limitations.

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Table 11

Predicted Values for Women's Self-esteem and Hourly Wages in 1988 by Weight Level and Ethnicity

		Under	Underweight		ormal Weig	ght	Overv	Overweight		Obese	
Weight	BMI	13.73	16.22	18.71	21.20	23.69	26.17	28.66	31.15	33.64	
	Z-Score	-2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00	
	Pounds	80	94.5	109	123.5	138	152.5	167	181.5	196	
Other Women	Wages	7.55	7.30	7.06	6.84	6.63	6.44	6.26	6.09	5.93	
	Self-Esteem	0.03	0.00	-0.01	-0.03	-0.02	-0.03	-0.04	-0.04	-0.04	
Black Women	Wages	5.06	5.35	5.61	5.82	5.98	6.08	6.13	6.12	6.05	
	Self Esteem	0.05	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.00	
Hispanic Women	Wages	8.37	7.89	7.47	7.12	6.82	6.57	6.37	6.21	6.10	
	Self-Esteem	-0.07	-0.05	-0.04	-0.03	-0.02	-0.02	-0.03	-0.04	-0.05	

Note. Bolded predicted values indicate the point at which increases in weight are predicted to lead to decreases in the outcome (either hourly wages or self-esteem). BMI's are based on a 5' 4'' woman (average height of the women in the sample). S.E. stands for self-esteem. Self-esteem was mean centered. The wages are based on the full model, where I controlled for self-esteem and health limitations.

Summary of Currency Conversion to USD and Descriptives for Monthly Income by Country and Gender

		Average	Women's	Women's	Men's	Men's	Women
		Conversion	Median	Mean (SD)	Median	Mean (SD)	to Men
		Rate to	Income	Income	Income	Income	Median
Country	Currency	1.00 USD	in USD	in USD	in USD	in USD	Ratio
Austria	Euro (EUR; 11 cat.)	1.41	1,485.12	1,633.34 (751.88)	2,333.76	2,378.53 (967.61)	0.64
Bulgaria	Bulgarian Lev (BGN; no cat.)	7.23E-1	361.58	489.72 (430.82)	448.35	626.87 (619.57)	0.81
Dominican Republic	Dominican Peso (DOP; 10 cat.)	2.96E-2	311.17	285.01 (227.73)	311.17	360.35 (376.90)	1.00
Finland	Euro (EUR; no cat.)	1.41	2,828.80	3,353.26 (3,552.45)	3,960.33	5,139.25 (6,875.80)	0.72
France	Euro (EUR; 11 cat.)	1.41	2,050.88	2,218.98 (1,365.32)	2,899.52	3,157.36 (1,901.60)	0.71
Germany	Euro (EUR; no cat.)	1.41	1,688.09	1,819.57 (100.28)	2,241.83	2,601.08 (1,463.99)	0.75
Hungary	Hungarian Forint (HUF; no cat.)	5.62E-3	477.62	488.35 (173.71)	561.90	604.26 (254.84)	0.85
Ireland	Euro (EUR; 11 cat.)	1.41	2,475.20	3,246.51 (2,089.63)	3,889.61	4,353.20 (2,606.92)	0.64
Israel	Israeli New Sheqel (ILS; 7 cat.)	2.60E-1	779.60	1,080.53 (730.80)	1,299.33	1,553.37 (882.19)	0.60
Mexico	Mexican Peso (MXN; no cat.)	9.06E-2	362.37	458.30 (304.36)	543.55	587.13 (365.15)	0.67
New Zealand	New Zealand Dollar (NZD; 10 cat.)	7.18E-1	2,094.33	2,423.57 (1,805.86)	2,094.33	2,575.70 (1,811.00)	1.00
Philippines	Philippine Peso (PHP; no cat.)	2.21E-2	66.30	110.45 (106.65)	110.50	139.47 (106.65)	0.60
Poland	Polish Zloty (PLN; no cat.)	3.87E-1	463.91	541.78 (309.04)	618.54	720.23 (495.16)	0.75
Russia	Russian Ruble (RUB; no cat.)	3.97E-2	257.76	337.77 (311.61)	396.55	514.65 (396.49)	0.65
Slovak Republic	Slovak Koruna (SKK; 10 cat.)	4.34E-2	499.51	606.68 (275.13)	673.26	733.56 (300.47)	0.74
South Korea	South Korean Won (KRW; no cat.)	9.86E-4	1,281.80	1,555.04 (1,503.12)	2,366.40	2,444.40 (1,352.75)	0.54
Switzerland	Swiss Franc (CHF; no cat.)	8.76E-1	3,197.54	3,305.70 (1,992.75)	4,818.21	5,203.90 (2,499.67)	0.66
Uruguay	Uruguayan Peso (UYU; no cat.)	4.52E-2	316.23	420.93 (538.74)	361.40	522.51 (519.51)	0.88

Note. Under the currency column, currency codes and number of salary categories (cat.) are listed in parentheses. If salaries were not categorized into ranges then "no cat." is listed. If categories were used, then the midpoint of the range was entered into the dataset, and was used to calculate the statistics for each gender. Sample sizes for statistics by gender range from 137 to 536. All statistics calculated for both genders can be converted back into the original currency by dividing the statistic with the corresponding conversion rate provided in the table. The average conversion rate is the average of midpoint (average of bid and ask) exchange rates for the years 2007 and 2008, obtained from Oanda.com. Exchange rates under one are denoted in scientific notation. The women to men median ratio was calculated by dividing the median women's salary by the men's median salary. It is the proportion of a man's typical salary that a typical woman makes. Higher numbers indicate a lower gender salary gap. A ratio of one indicates there is no gender salary gap for that country. No country had women's median salary higher than men's median salary.

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Table 13

Average Weight.	Height.	and Body	v Weiaht B	eautv Norms	bv Count	rv and Gender
	i ioigiit,					

	Average	Average	Average	Average	Body Weight	Body Weight
	Women's	Women's	Men's Weight	Men's Height	Beauty Norms	Beauty Norms
Country	Weight (kg)	Height (cm)	(kg)	(cm)	for Women^	for Men^
Austria	64.46 (11.49)	171.00 (6.35)	81.07 (13.78)	178.52 (6.54)	2.35 (0.70)	2.20 (0.70)
Bulgaria	66.48 (12.01)	164.94 (6.73)	79.55 (11.05)	175.67 (7.16)	2.24 (0.66)	2.46 (0.67)
Dominican Republic	63.29 (11.69)	161.46 (11.28)	73.96 (13.53)	169.08 (9.96)	2.54 (0.72)	2.50 (0.66)
Finland	69.74 (14.41)	165.16 (6.05)	83.09 (12.22)	178.60 (6.66)		
France	61.84 (10.64)	164.05 (6.30)	78.20 (11.30)	176.10 (6.18)	2.44 (0.54)	2.64 (0.50)
Germany	66.79 (12.41)	165.75 (6.22)	83.88 (15.02)	178.77 (6.75)		
Hungary	66.66 (12.49)		81.21 (14.01)		2.34 (0.75)	2.47 (0.73)
Ireland	66.81 (12.25)	164.98 (7.53)	83.10 (12.65)	177.47 (8.40)	2.65 (0.69)	2.72 (0.63)
Israel	64.70 (12.28)	164.35 (6.49)	79.48 (13.21)	176.03 (7.94)	2.19 (0.63)	2.41 (0.65)
Mexico	64.71 (10.02)	160.41 (6.69)	74.78 (12.60)	169.21 (9.18)	2.42 (0.68)	2.32 (0.63)
New Zealand	71.29 (17.67)	164.49 (7.93)	88.18 (18.10)	178.01 (7.45)	2.49 (0.57)	2.55 (0.52)
Philippines	54.26 (10.84)	157.18 (5.02)	60.84 (10.08)	164.78 (6.36)	2.41 (0.67)	2.54 (0.67)
Poland	64.20 (10.84)	164.23 (5.86)	82.16 (12.60)	176.94 (7.50)		
Russia	68.71 (14.53)	164.43 (6.26)	77.52 (12.16)	175.65 (7.49)	2.42 (0.60)	2.44 (0.61)
Slovak Republic	68.39 (12.20)	166.11 (5.39)	82.09 (13.01)	177.54 (7.40)	2.34 (0.66)	2.52 (0.63)
South Korea	54.32 (7.36)	159.38 (4.76)	69.41 (9.48)	171.83 (5.59)	2.09 (0.56)	2.08 (0.53)
Switzerland	64.90 (11.74)	165.40 (6.84)	80.69 (13.36)	177.42 (7.37)		
Uruguay	65.06 (12.28)	162.55 (7.11)	78.72 (14.45)	174.51 (7.2 <mark>6</mark>)	2.60 (0.63)	2.18 (0.58)
Total Sample	65.27 (12.86)	163.94 (7.36)	78.63 (14.07)	174.99 (8.46)	2.42 (0.66)	2.45 (0.64)

Note. For statistics by country, the sample sizes for each for weight and height averages range from 88 to 544 and the sample sizes for the beauty norms range from 321 to 1,009. The total sample sizes range from 5,250 and 5,530 for weight and height statistics and are 8,874 for women's beauty norms and 8,846 for men's beauty norms. Standard deviations are in parentheses. Some countries' surveys did not include beauty norms items and Hungary's survey did not acquire about height. Body weight beauty norms are averages (from both men and women) of the selection of a set of four images depicting women, for beauty norms for women, and four images depicting men, for beauty norms for men. Each set was coded from 1 to 4, with higher numbers indicating heavier body weight norms. See *Appendices A* and *B* to view images (images are in the reverse coding scheme).

Table 14

Men's Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Married [†]		.00	.03	.27	55	.08	17	.02	04	31	38	09	08	43	.14	31	45
2. Children [†]	.34		57	36	.34	.63	.01	83	15	37	.24	66	65	07	.02	.04	.02
3. Age (yrs.)	.37	08		.30	22	59	.08	.76	.40	.24	30	.66	.67	.06	.38	.11	.26
4. Public Sector [†]	.11	02	.13		08	58	18	.45	.38	.57	14	.43	.42	01	.14	.17	19
Education yrs.	14	01	17	.01		.40	.26	29	.07	.12	.52	12	15	.04	29	.10	.33
6. Work Hours	.04	.09	03	12	02		.15	69	28	58	.53	59	58	26	56	28	.10
7. Health	07	.05	25	02	.07	.03		.15	.34	06	05	.18	.17	02	15	05	.01
8. Height (cm)	01	08	06	.03	03	04	.07		.30	.39	35	.91	.89	.02	.11	.07	.08
9. White-collared [†]	.03	00	01	.17	.11	04	.10	.10		.40	24	.19	.18	27	22	.15	30
10. Union [†]	.07	01	.14	.24	03	08	06	.05	.03		.07	.36	.34	.16	24	06	14
11. Urban [†]	07	01	04	.02	.07	.05	.03	07	.11	.00		22	21	.25	53	22	.41
12. Weight (kg)	.11	03	.15	.05	07	.00	05	.51	.04	.08	08		1.00	.21	.22	.09	.40
13. Weight ² (kg ²)	.10	02	.14	.05	07	.01	06	.46	.03	.08	07	.98		.24	.23	.08	.43
14. Ideal Woman	.09	02	.18	.04	03	03	06	01	06	.06	.01	.12	.11		.45	10	.45
15. Ideal Man	.06	01	.10	.04	03	04	05	.06	04	.04	05	.20	.19	.43		.04	21
16. log (USD)	.11	10	.13	.08	09	03	.11	.35	.29	.19	08	.24	.21	02	.02		.22
17. Log (Std. Income)/	.18	.10	.10	.05	06	.20	.09	.10	.26	.08	.13	.11	.10	01	.02	.51	
Salary Ratio*																	
М	.56	.49	40.25	.28	16.56	43.99	3.53	174.99	.52	.25	.45	78.63	6831	2.45	2.45	6.93	0
SD	.50	.50	12.35	.45	18.47	12.87	1.04	8.46	.50	.43	.50	14.07	2430	6.93	.64	1.22	.99

Note. * p < .05, ** p < .01. Below the diagonal are correlations at the individual level (level-1) and above the diagonal are correlations at the country level (level-2), that is correlations between countries' averages. Sample sizes for means and standard deviations range from 8,874 to 11,482. Sample sizes for level-1 correlations range from 7,588 to 11,482. Samples sizes for level-2 correlations are 13 or 14 for any correlation including the ideal man or ideal woman (when aggregated at level-2, ideals are beauty norms for the country), 17 for any correlation including union, height, work hours, or married, but not including ideal man or ideal woman, and 18 for all other level-2 correlations. [†]Indicates a dichotomized variable (1 = yes, 0 = no). Means of dichotomized variables are proportions. Standardized income is standardized by country, using the means and standard deviations of the males from each country.

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Table 15

Women Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
 Married[†] 		25	.51	.38*	77*	06	12	.10	02	04	47	09*	06	53	.20	.05	46
Children[†]	.19**		73*	42	.48	.49*	.01	69*	47*	32	.24	47*	48*	.07	.09	61**	06
3. Age (yrs.)	.23**	21**		.61*	57*	50*	.03	.64**	.40	.29	34	.55*	.57*	09	.22	.53*	.13
 Public Sector[†] 	.07**	04**	.15**		32	45	22	.57*	.52*	.71**	35	.60**	.60**	01	.24	.43	23
5. Education yrs.	16**	00	19**	04**		.41	.05	28	10	.04	.61**	02	03	.31	14	28	.47
6. Work Hours	08**	03*	10**	10**	.02		38	64	70**	39	.48	47	47	31	41	78**	.13
7. Health	01	.04**	24**	04**	.06**	03		.20	.44	10	09	01	03	.15	.01	.46	.09
8. Height (cm)	.01	03*	07**	.03*	.01	05**	.08**		.63**	.37	40	.77**	.74**	.08	.21	.61**	.15
9. White-collared [†]	.03*	04**	07**	.14*	.06**	05**	.15**	.09**		.44	32	.51*	.48*	06	.04	.87**	11
10. Union [†]	.05**	04**	.13**	.31**	03*	02	05**	.02	.06**		.07	.52*	.53*	.27	02	.46	09
11. Urban [†]	14**	04**	06**	07**	.10**	.10**	00	04**	.06**	00**		11	10	.17	58*	38	.37
12. Weight (kg)	.08**	06**	.25**	.10**	08**	02	17**	.31**	05**	.12**	04**		1.00**	.36	.33	.35	.47*
13. Weight ² (kg ²)	.06**	06**	.23**	.10**	08**	02	17**	.28**	05**	.12**	03*	.98**		.36	.34	.34	.48*
14. Ideal Woman	.03*	.00	.18	.03*	01	05**	07	02	05**	.04*	00	.28**	.27**		.45	03	.45
15. Ideal Man	.05**	.03*	.08*	.02	02	06**	02*	.04*	.01	.01	09**	.15	.15**	.45**		.09	.21
16. Log (USD)	.07**	17**	.14**	.14**	13**	09**	.21**	.17**	.**30	06**	06**	.03	.03	07**	.05**		14
17. Log (Std. Income)/	.02	09**	.05**	.12**	02	.26**	.11**	.07**	.25**	.16**	.16**	.00	00	06**	02	.54	
Salary Ratio*																	
Mean	.51	.51	39.72	.39	18.03	37.63	3.38	163.94	.81	.25	.46	65.27	4426.00	2.40	2.45	6.68	.73
SD	.50	.50	11.93	.49	20.09	13.25	1.05	7.36	.39	.43	.50	12.86	1906.00	.64	.64	1.18	.13

Note. Below the diagonal are correlations at the individual level (level-1) and above the diagonal are correlations at the country level (level-2), that is correlations between countries' averages. Sample sizes for means and standard deviations range from 8,874 to 11,482. Sample sizes for level-1 correlations range from 7,588 to 11,482. Samples sizes for level-2 correlations are 13 or 14 for any correlation including the ideal man or ideal woman (when aggregated at level-2, ideals are beauty norms for the country), 17 for any correlation including union, height, work hours, or married, but not including ideal man or ideal woman, and 18 for all other level-2 correlations. [†]Indicates a dichotomized variable (1 = yes, 0 = no). Means of dichotomized variables are proportions. Standardized Income is standardized by country, using the means and standard deviations of the males from each country.

Male Multi-Level Results for the Standardized Log of USD

Variable	Model 1	Model 2	Model 3	Model 4	Model 5		
Intercept	-4.42 E-1 (5.01 E-2)**	-4.08 E-1 (5.18 E-2)**	-3.80 E-1 (5.33 E-2)**	-3.51 E-1 (6.64 E-2)**	-3.69 E-1 (5.41 E-2)**		
Married	1.83 E-1 (3.34E-2)**	1.78 E-1 (3.38 E-2)**	1.70 E-1 (3.38 E-2)**	1.64 E-1 (3.84 E-2)**	1.68 E-1 (3.38 E-2)**		
Children	1.37 E-1 (3.10 E-2)**	1.37 E-1 (3.12 E-2)**	1.37 E-1 (3.11 E-2)**	1.06 E-1 (3.54 E-2)**	1.37 E-1 (3.11 E-2)**		
Age	1.27 E-2 (1.32 E-3)**	1.22 E-2 (1.35 E-3)**	1.19 E-2 (1.35 E-3)**	1.07 E-2 (1.53 E-3)**	1.12 E-2 (1.35 E-3)**		
Public Sector	-9.40 E-2 (3.29 E-2)**	-9.47 E-2 (3.31 E-2)**	-9.28 E-2 (3.30 E-2)**	-1.28 E-2 (3.83 E-2)**	-9.37 E-2 (3.30 E-2)**		
Education yrs.	7.68 E-2 (4.42 E-3)**	7.60 E-2 (4.47 E-3)**	7.60 E-2 (4.47 E-3)**	8.24 E-2 (5.12 E-3)**	7.58 E-2 (4.46 E-3)**		
Work Hours	1.58 E-2 (1.12 E-3)**	1.55 E-2 (1.13 E-3)**	1.55 E-2 (1.13 E-3)**	1.41 E-2 (1.23 E-3)**	1.54 E-2 (1.13 E-3)**		
Health	9.72 E-2 (1.44 E-2)**	9.97 E-2 (1.46 E-2)**	9.86 E-2 (1.46 E-2)**	9.73 E-2 (1.62 E-2)**	9.86 E-2 (1.46 E-2)**		
Height	9.60 E-3 (1.86 E-3)**	6.56 E-3 (2.10 E-3)**	4.92 E-3 (2.15 E-3)*	3.25 E-3 (2.43 E-3)	4.67 E-3 (2.15 E-3)*		
White-collared	2.87 E-1 (3.14 E-2)**	2.91 E-1 (3.16 E-2)**	2.88 E-1 (3.16 E-2)**	2.40 E-1 (3.44 E-2)**	2.89 E-1 (3.49 E-2)**		
Union	1.68 E-1 (3.47 E-2)**	1.67 E-1 (3.49 E-2)**	1.69 E-1 (3.49 E-2)**	1.64 E-1 (4.01 E-2)**	1.69 E-1 (3.28 E-2)**		
Urban	1.98 E-1 (2.99 E-2)**	1.88 E-1 (3.02 E-2)**	1.90 E-1 (3.02 E-2)**	2.49 E-1 (3.44 E-2)**	1.68 E-1 (3.44 E-2)**		
Weight		4.17 E-3 (1.12 E-3)**	6.49 E-3 (1.36 E-3)**	7.64 E-3 (1.54 E-3)**	8.82 E-3 (1.54 E-3)**		
Weight Squared			-1.20 E-4 (3.30 E-5)**	-9.00 E-5 (3.80 E-5)*	-1.7 E-4 (4.70 E-5)**		
Beauty Norms				-3.60 E-2 (3.09 E-1)			
Norms*Weight				-4.64 E-3 (7.38 E-3)			
Norms*Weight ²				1.67 E-4 (2.23 E-4)			
Urban*Weight					-4.51 E-3 (2.13 E-3)*		
Urban*Weight ²					9.70 E-5 (6.30 E-5)		
-2Log Likelihood	10171.3	9974.0	9961.5	7574.7	9956.4		
Chi-Square	76.17	78.52	81.01	65.60	82.16		
Sample Size	3996	3924	3924	2983	3924		

Note: Hungry was not included in any model and Germany was not included in model 4, because of missing variables. * p < .05, ** p < .01.

Table 17

Female Multi-Level Results for the Standardized Log of USD

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	
Intercept	-4.24 E-1 (5.23 E-2)**	-4.19 E-1 (5.30 E-2)**	-4.15 E-1 (5.35 E-2)**	-4.41 E-1 (6.08 E-2)**	-4.06 E-1 (5.46 E-2)**	
Married	3.98 E-2 (2.89 E-2)	3.99 E-2 (3.38 E-2)	3.93 E-2 (2.97 E-2)	7.51 E-2 (3.45 E-2)*	3.75 E-2 (2.97 E-2)	
Children	-8.41 E-2 (2.89 E-2)**	-8.45 E-2 (2.92 E-2)**	-8.45 E-2 (2.92 E-2)**	-6.31 E-2 (3.34 E-2)	-8.38 E-2 (3.11 E-2)**	
Age	1.00 E-2 (1.28 E-3)**	1.20 E-2 (1.34 E-3)**	1.01 E-2 (1.35 E-3)**	9.24 E-3 (1.59 E-3)**	1.10 E-2 (1.35 E-3)**	
Public Sector	9.51 E-2 (2.93 E-2)**	8.94 E-2 (2.99 E-2)**	8.99 E-2 (2.99 E-2)**	8.47 E-2 (3.51 E-2)*	-8.95 E-2 (2.99 E-2)**	
Education yrs.	7.83 E-2 (4.31 E-3)**	7.78 E-2 (4.38 E-3)**	7.78 E-2 (4.38 E-3)**	8.24 E-2 (5.19 E-3)**	7.78 E-2 (4.38 E-3)**	
Work Hours	2.24 E-2 (1.08 E-3)**	2.22 E-2 (1.10 E-3)**	2.22 E-2 (1.10 E-3)**	2.03 E-2 (1.26 E-3)**	2.22 E-2 (1.13 E-3)**	
Health	7.81 E-2 (1.40 E-2)**	8.08 E-2 (1.44 E-2)**	8.05 E-2 (1.44 E-2)**	6.41 E-2 (1.64 E-2)**	8.02 E-2 (1.44 E-2)**	
Height	5.64 E-3 (1.86 E-3)**	6.20 E-3 (2.00 E-3)**	6.02 E-3 (2.02 E-3)**	6.11 E-3 (2.26 E-3)*	5.99 E-3 (2.03 E-3)**	
White-collared	3.32 E-1 (3.69 E-2)**	3.36 E-1 (3.78 E-2)**	3.36 E-1 (3.78 E-2)**	3.08 E-1 (4.29 E-2)**	3.33 E-1 (3.78 E-2)**	
Union	1.73 E-1 (3.43 E-2)**	1.69 E-1 (3.41 E-2)**	1.69 E-1 (3.51 E-2)**	1.70 E-1 (4.10 E-2)**	1.69 E-1 (3.51 E-2)**	
Urban	2.64 E-1 (2.87 E-2)**	2.58 E-1 (2.93 E-2)**	2.58 E-1 (2.93 E-2)**	3.01 E-1 (3.45 E-2)**	2.44 E-1 (3.28 E-2)**	
Weight		-1.09 E-3 (1.19 E-3)	6.70 E-3 (1.41 E-3)	-1.70 E-3 (1.62 E-3)	8.63 E-4 (1.88 E-3)	
Weight Squared			-2.0 E-5 (4.4 E-5)	-3.00 E-5 (5.3 E-5)	-8.00 E-4 (7.1 E-5)	
Beauty Norms				3.32 E-2 (3.90 E-1)		
Norms*Weight				-17.96 E-2 (3.02 E-1)		
Norms*Weight ²				9.50 E-5 (4.55 E-4)		
Urban*Weight					-2.92 E-3 (2.47 E-3)	
Urban*Weight ²					8.80 E-5 (8.80 E-5)	
-2 Log Likelihood	10658.3	10324.1	8120.6	8029.4	10322.2	
Chi-Square	44.40	41.66	41.35	22.08	41.85	
Sample Size	4236	4092	3173	3143	4092	

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Note: Hungry was not included in any model and Germany was not included in model 4, because of missing variables. * p < .05, ** p < .01.

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Figure 1. Theoretical Explanation for Self-Esteem as a Mediating Mechanism for the Relationship of Weight with Salary. Only variables in bold will be in the statistical model. Non-bold paths provide the theoretical explanation for the bold paths that will be directly tested.



Figure 2. Proposed Quadratic Three-way Interaction between Weight, Gender, and Ethnicity on Self-Esteem.



Figure 3. Proposed Psycho-physio-social Model for the Weight-Salary Relationship. Model will be tested in the United States.



Figure 4. Proposed Quadratic Three-way Interaction between Weight, Gender, and Ethnicity on

the Direct Effect of Weight on Salary.



Figure 5. Proposed Quadratic Three-way Interaction between Weight, Gender, and Country's

Beauty Norms on Salary.



Figure 6. Proposed Quadratic Three-way Interaction between Weight, Gender, and Type of

Community.



Figure 7. Moderating Effect of Ethnicity on Weight for Hourly Wage in 1988 (transformed back to dollar amount) for Men, Controlling for Self-Esteem and Health Limitations.





back to dollar amount) for Women, Controlling for Self-Esteem and Health limitations.



Figure 9. Moderating Effect of Ethnicity on Weight for Mean Centered Self-Esteem for Men.



Figure 10. Moderating Effect of Type of Community on Salary for Men.

Appendix A

Images and the corresponding question for body weight beauty norms from the South Korean English version of the survey. All other countries besides the Philippines (see *Appendix B*) used these images. For all analyses the reverse coding scheme is used, where 1 indicates the thinnest image, and 4 indicates the heaviest image.



Appendix B

Images and the corresponding question for body weight beauty norms from Philippines' survey, the only survey using images with more body coverage. Again, the images were reversed coded for all analyses.

