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ABSTRACT

This study's purpose was to assess the prevalence of weight bias in the hiring of female applicants among students attending Southern Methodist University. Weight bias in hiring for a CEO position was assessed in 87 total male and female participants by viewing one of two possible applicants' resumés – one slim and one overweight female. Experience and qualifications for each resumé were identical, only the headshots differed. Participants saw either the overweight applicant or the slim applicant, after which they filled out a questionnaire that asked them to indicate whether they would hire the individual and state the reason for their decision. We found no significant difference between which applicant participants chose to hire. Gender did not predict which applicant participants were more likely to hire or reject. These findings contradicted our hypotheses. We had predicted that the overweight female applicant would have been hired less by participants, relative to the slim applicant. Additionally, we had predicted that this weight bias against the overweight female applicant would have a higher incidence in males. Similar studies going forward should focus on providing a truly random sample of participants and use clearer instructions to read to the participant. Experimenters should also consider using in-person interviews instead of resumés, and perhaps a larger sample size to determine if in fact there was a detectable effect present. Remaining limitations and explanations for the results will be presented in the discussion.

1. INTRODUCTION

As humans, we like to think of ourselves as the rational animal. With a larger, more developed prefrontal cortex, humans are able to use reason, reach conclusions and find solutions to problems other animals cannot conceive of (Donahue, Glasser, Preuss, Rilling, & Van Essen, 2018). Often forgotten is the human tendency to be irrational. Irrationality in human behavior is arguably most clearly represented in the biases we hold against other humans. Biases are heuristic in nature, largely implicit, and can be based on race, gender, physical appearance, and socioeconomic status, among other perceivable differences between individuals and groups (Mattan, Kubota, Li, Venezia, & Cloutier, 2019; Woodington, 2010). When it comes to formulating opinions of other people, these biases play a deciding role. By exploring these biases and how they inform our decisions, we can go about lessening their negative impact.

Much has been made in the mainstream U.S. media on the collective racial, gender, and socioeconomic biases negatively affecting individuals. Biases on the basis of attractiveness, however, are rarely mentioned in this context. Bias for attractive faces happens early in our development, as infants, for instance, have been shown to prefer attractive faces. When shown two pictures of faces with differing features, infants tend to stare longer at the symmetrical and attractive faces (Griffey & Little, 2014; Slater, Quinn, Hayes & Brown, 2000). This early bias for attractive faces among infants can be explained by their heuristic capabilities. There is evidence that newborns can quickly form a composite face even from limited exposure, less than one minute in some cases (Walton & Bower, 1993). The infant then uses this composite as a template, albeit unconsciously, thereby influencing its preferences. These prototypes are updated throughout our development, but the subjects of our early exposure form the foundation of our future facial preferences.

There is some evidence that these attractiveness biases increase with age. Although aesthetic tastes play a role in preferences, the different attitudes associated with good looks are specifically outlined in the literature. In a study that involved children from three to 11 years old, the older children held stronger biases in what they thought of their attractive and non-attractive peers (Rennels & Langlois, 2014). These biases included attributing positive traits like friendliness, independence, ambition, and dominance toward their attractive peers and negative traits such as unfriendliness, dependence, and laziness toward their less attractive peers. These same positive and negative trait associations with attractiveness can be observed in older groups as well.

When comparing older adults and younger adults, the "halo effect" was observed among both groups toward their attractive peers, including more positive assessments toward faces that appeared younger than their age (Zebrowitz & Franklin, 2014). Among the attributes associated to these younger looking individuals was better health and competence. With age comes greater exposure and increased bias due to cultural and societal influence. The resulting heuristics skew the perceptions of the groups they represent. Thus, these embedded cultural biases can increase the likelihood of these groups of people being discriminated against. But what happens when information inconsistent with these widely held assumptions is presented?

The answer seems to be that because of these assumptions, physically attractive people are held to a higher

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standard. This can cause problems for the attractive person if they do not live up to their socioculturally assumed reputations. In fact, participants who learned stereotype inconsistent information about attractive individuals were likely to be judged more harshly than their non-attractive counterparts (Wilson & Eckel, 2006). Additionally, non-attractive peers experienced a larger boost in their rating when perceivers were presented with positive information about their reputation with traits such as trustworthiness, compared to the boost the attractive individuals received when perceivers were presented with the same information (Putz, Kocsor, & Bereczkei, 2018).

Since these perceptual biases set lower standards for unattractive individuals, positive behavioral traits can more positively influence a perceiver's opinion of them, relative to the influence those same traits have on the reputations of attractive individuals. More importantly, this stereotype-inconsistent information is more likely to stand out than is stereotype consistent information, specifically in situations where complete attentional resources are not available (Allen, Sherman, Conrey, & Stroesner, 2009; Djiksterhuis & Van Knippenberg, 1995). Therefore, in high stress environments where attention is diffuse, this inconsistent information is likely to play a larger role in forming interpersonal perceptions. This can be to the detriment of an unattractive individual since the stereotype-inconsistent information may be challenging to display in a fast moving, superficial environment.

Key perceptual differences within attractive/non-attractive samples become particularly clear when examining gender. For participants judging the sexual attractiveness of celebrities, women tended to factor in social status in their assessment of the male celebrities, whereas men put more weight into physical attributes of the female celebrities (Townsend & Wasserman, 1997). For these reasons, there was more variability in the women's ratings of the male celebrities and more agreement among men regarding the female celebrities. The variability between the women and the agreement between the men were due to the areas by which each gender generally assesses attractiveness according to the study. Perception of a man's attractiveness is derived from his personality traits, while a woman's personality traits tend to be assumed by, and derived from, her physical attributes. Of particular relevance are the effects female attractiveness can have on interpersonal perceptions. For example, middle schoolers were more likely to attribute positive traits to their attractive female peers, and negative attributes to their non-attractive female peers (Rennels & Langlois, 2014). More importantly, the effect of the stereotypes from this study on their female peer assessments was more dramatic than the effect shown for both male and race related biases. In each of these examples, we see evidence of a strong cultural, and of course biological, prioritization of attractiveness in females.

While these findings may give one the impression that the attractiveness literature reads nothing but good news for attractive females, and heaps of bad for their unattractive peers, nuanced interactions between gender and attractiveness can be found, especially in the organizational and employment context. While the 'what is beautiful is good heuristic' was formally introduced in the literature, its authors found evidence that people automatically associate attractiveness as being an indicator of both finding success and of leading happier lives than their unattractive counterparts (Dion, Berscheid, & Walster, 1972); the 'beauty is beastly' effect presents a caveat. This effect demonstrates that attractiveness can actually work against women in certain employment contexts, such as applying for jobs culturally defined as better suited for men (Heilman & Saruwatari, 1979). In such instances, attractive women are deemed ill-suited for these 'masculine sex-typed jobs', as they are referred to by Heilman and Saruwatari (1979), which they define as jobs which are made up of more than fifty percent men.

A separate study found that while attractiveness bodes well for general employment suitability, the advantage for women was strongest when they applied to jobs classified as 'feminine sex-typed' (Johnson, Podratz, Dipboye, & Gibbons, 2010). The attractiveness advantage even helped them edge out their unattractive peers in masculine sex-typed jobs. However, when they sorted masculine sex-typed jobs into two categories: 1) attractiveness is important to the job, and 2) attractiveness is unimportant to the job, they found attractive women to be at a severe disadvantage to less attractive women. In another instance when this phenomenon was tested, the authors presented the same caveat, but added an explanation, that is, that perceived agency plays a role in bringing about this specific discrepancy (Paustian- Underdahl & Walker, 2016). Their explanation proposes that masculinity is associated with agency and assertiveness, while femininity has been associated with passivity. Since attractiveness seems so closely bound to femininity, at least perceptually, the more attractive the female is the less agency she is perceived to have, therefore accounting for her low suitability ratings for these statistically masculine jobs. While these results expose cultural connections between femininity, the role of attractiveness in it, and its perceived incompatibility with masculinity, they raise questions about the standards of female attractiveness.

While physical attributes seem to play a much larger role in standards of female attractiveness than they do in male attractiveness, one characteristic resurfaces in the literature as being incredibly important to female attractiveness: weight. Moreover, it is clear popular culture plays a role in creating these standards, and in some cases pushing them to extremes, for popular media tends to associate female attractiveness with a slender body and a lower general body weight (Re et al., 2011; Spitzer, Henderson, & Zivian, 1999). Low bodyweight is given a disproportionate amount of importance in women's attractiveness by popular culture compared to that which is given to men. This creates a strange cultural relationship to female body size. As mentioned previously, infants have the ability to form prototypes very quickly (Walton & Bower, 1993). Female prototypes appear in films, television shows, and magazines as archetypes, formulated for mass consumption. Once consumed, these popular memes modify and augment the early hard experience-based templates to some degree and can create unrealistic standards for what an attractive woman looks like.

Men are not the only gender persuaded by these signals. The effects of such media influence are highlighted when investigating women's own body images. Women's

sense of body dissatisfaction and their development of eating disorders correlates highly with their socioculturally imprinted beauty standards (Swami, 2015; Swami et al., 2010). That is, women in countries or cultures that stress female thinness internalize these ideals. The result is a skewed sense of what an attractive female body ought to look like. In a study recording responses of both male and female participants, mean ideals of an attractive woman's body registered a BMI that was considered underweight by the World Health Organization (Stephen & Perera, 2014). Being that a woman's attractiveness is associated with her body size, positive personality traits associated with attractiveness are likely to be attributed to those women whose bodies fall within the societally accepted range.

But if even healthy women are considered overweight based on culturally mediated attractiveness standards, then women on the opposite end of the weight continuum are in especial danger of falling victim to these biases. Differences between men and women in weight discrimination thresholds have been demonstrated. Comparing male and female political candidates, the females tended to experience weight discrimination more harshly because of this lower threshold (Roehling et al., 2014). Evidence suggests that these weight-related stereotypes are more socially acceptable to hold and thereby more influential in their visible effects (Latner, O'Brien, Durso, Brinkman, & MacDonald, 2008). The social acceptability of weight-related stereotyping is likely due to the volitional nature we associate with weight gain. The tendency to blame the overweight individual for their weight is a justification and a perpetuator of weight-related discrimination. Given that the standard attractive woman's weight is so low, extremely overweight women are all the more likely to experience weight-related discrimination.

In spite of their social acceptability, obesity stereotypes are far from innocuous; in fact, they are particularly damning to the people they affect. A study comparing lean and obese individuals showed that participants associated obese individuals with low social status and considered them to be less warm, less inviting and less competent (Vartanian & Silverstein, 2013). Sloppiness and laziness were two additional pejorative personality traits more commonly associated with the group of obese men and women. In a separate study, disgust and contempt were additional prejudices held against obese groups (Vartanian, Thomas & Vanman, 2013). Importantly, men showed greater intensity in these negative emotions toward extremely overweight individuals.

Previous mention of attractiveness bias in employment was not specifically investigating weight's role in the matter. Given the robust sociocultural importance attributed to weight in female attractiveness, it plays a determining role in a number of these judgements. With 66.9% of adult women in the U.S. being either obese or overweight as of 2014, there are ample opportunities for such discrimination on this basis (NIDDK, 2014). Moreover, 26% of adult women fall within the overweight category. Assuming these two estimates to be fairly representative over the past ten years, one would expect a higher number of obese and overweight women represented in high-level positions than there are. Examining U.S. Fortune 100 and Fortune 1000 CEOs, overweight women were underrepresented by at least 17 percent (Roehling, Roehling, Vandlen, Jeffrey, Blazek, & Guy, 2009). According to the same study, overweight females make up somewhere between 5% and 22% of these high-level CEOs, while overweight men make up 45% to 61% of CEOs from these companies. Perhaps this discrepancy is not wholly attributable to weight bias, but there seems to be a correlation that warrants close investigation of weight discrimination in employment contexts. Studies looking at the relationship between weight and job success shed more light on this issue.

Qualifications are an important part of the employment process, but biases regarding physical appearance may be more predictive of employment and job success. A study examining Implicit Association Test (IAT) scores of hiring mangers toward obese individuals and their relationship to actual hiring outcomes found that the greater a hiring manager's negative implicit associations were against obese individuals, the greater the predictive power the researchers had that the managers would not invite these applicants for an interview, opting instead for a thinner individual (Agerström & Rooth, 2011). While in-person interviews can be especially potent in activating these negative associations, a headshot can be sufficient to trigger these stereotypes. Another study manipulated male and female faces digitally, thereby increasing their BMI, after which they had participants rate their "hireability" (Nickson, Timming, Re & Perrett, 2016). A low hireability rating accompanied a proportionately increased BMI, with the correlation being greater for the female faces.

While overweight individuals, especially women, are presented with obstacles during the employment process, stereotypes can present difficulties long after successfully advancing past the hiring process. In a study investigating umbilical waistline circumference's relationship to both task and interpersonal performance ratings in executives, researchers found larger waistline measurements to be predictive of lower ratings in both categories (King et al., 2014). Results indicated a statistically insignificant difference on the basis of gender alone, but factoring age into the interaction revealed older women experience the worst of this weight discrimination. With weight biases negatively affecting even these high-status positions, which were thought enough to assuage or counterbalance these negative associations, competition can be made especially steep for women in employment contexts. There is also evidence that these biases are influenced by job type. Jobs that are considered public, or highly visible, decreased the likelihood of hiring an overweight woman (Bartels & Nordstrom, 2013; Finkelstein, Frautschy Demuth & Sweeney, 2007). In each of these cases, participants considered an average weighted female more suitable for such a job, while the private, or low visibility job was more suited to the overweight female. Given the personality traits associated with, and emotions and attitudes toward the obese, people in hiring positions were in turn reluctant to hire an obese woman for a representative role in their company.

In a study examining similar attitudes, participants associated obesity with lower social status (Vartanian & Silverstein, 2013). An employer that holds these associations sets up a self-fulfilling prophecy in

which obese women are hired less frequently for jobs which they seem ill- fitted for, thereby creating another obstacle to raise their social status. On the basis of these negative perceptions, employers are more likely to choose a thin or average-weighted female for a high-status job that requires frequent visibility as a representative of the company. While women are known to hold weight stereotypes against other women, the effects of overweight female bias tend to be particularly strong in men (Vartanian et al., 2013). Therefore, when men are making hiring decisions, their choices reflect stronger biases against overweight and obese female applicants, and in favor of attractive/thin applicants compared to those reflected by women.

The current study seeks to investigate the prevalence of weight bias in hiring for female applicants. Participants will be chosen from the student body of Southern Methodist University. As participants occupy the role of a hiring manager, they will be given the chance to hire or not hire a female applicant for the position of CEO. They will be handed an applicant's resumé which includes a small, but clear headshot in the top right corner. The headshot will feature either an obese-unattractive female applicant, or a thin-attractive female applicant; both resumés are identical in experience, education, credentials, and name. The only difference between them is the picture of the applicant's face, and each participant will see either the obese applicant, or the slim applicant, but not both. The first hypothesis is that participants will hire the thin female applicant for the CEO job more, due to positive biases associated with this conditioned standard of female attractiveness, while the obese female applicant will be accepted for the job less due to the negative associations that accompany female weight related bias. The second hypothesis is that males will outnumber females in the amount of rejections against the obese applicant. This study's purpose is to evaluate whether the existing literature is reflective of the decisive role physical appearance plays in hiring decisions of female job applicants.

2. METHOD
A. Participants

Each experimenter was given the task of recruiting at least two males and two females for the study. The resulting sample consisted of 44 male (age range: 18-32) and 43 female (age:18-30) Southern Methodist University students. There were no strict limitations set on how participants were recruited; therefore, a majority of the participants were acquaintances or friends. Remaining participants were strangers that we approached on campus according to their availability. Twenty-one males saw the slim model and 23 males saw the overweight model, while 20 females saw the slim model and 23 females saw the overweight model.

B. Materials

The study included four separate documents. Two of the documents were resumés, both of the applicants named 'Sophia Robinson.' One resumé featured the headshot of a slender female applicant, while the other featured the headshot of an overweight female applicant. Aside from the headshots, both resumés had the same information, which included college education, previous job experience, and accolades and accomplishments from previous occupations. Information on the resumé was derived from a real LinkedIn profile of a current CEO, so that credentials were on par with those required for the job. The title 'CEO' was edited to read 'CFO,' and the name of the individual was changed for the sake of anonymity. The third document was a set of instructions that the experimenter read to each participant. The instructions informed participants that their hiring decision was to be wholly based on the resumé, and participants were told that this was a study investigating the effectiveness of resumés. The fourth document was a questionnaire which required participants to state their age, gender, major, whether they would or would not hire the applicant, and to explain in a sentence or two what determined their decision.

C. Procedures

Each experimenter was given a resumé with the headshot of either the overweight applicant or the slim applicant, the set of instructions and the questionnaire. The group to which each experimenter was assigned, overweight or slim, was determined via the head experimenter based on the row of desks in which we were seated at the time of the study's assignment, alternating left to right between the two conditions. Therefore, if we were in row one, we were tasked with administering the overweight applicant's resumé, and if we were in row two, the experimenters residing in that row were to administer the slim applicant's resumé.

Each experimenter was then tasked with recruiting at least two male and two female participants at their own discretion, under the condition that they be SMU students. Therefore, this was done non-randomly, the limitations of which are listed in the discussion section. Experimenters read participants the instructions in-person, then, depending on the application they had been given by the head experimenter, were presented with either the overweight or slim applicant's resumé. Participants were given one to two minutes to read over the resumé and an additional one to two minutes to fill out the questionnaire. Data was collected and 'Yes' or 'No' decisions were tallied for both the overweight and the female applicant while also taking into account the participant's gender. The lead experimenter then ran a chi-square analysis to determine whether there were significant differences between weight and participants' willingness to hire, and whether males or females were more likely to give a particular answer for either the slim or overweight applicant.

3. RESULTS

Our study's purpose was to investigate the effect of weight bias on employment outcomes in a population of college students. Analysis of the hiring decisions yielded no significant differences between the overweight and the slim applicant, $X (3, N= 87) = 0.818$, $p = .85$. These results show a failure to reject the null hypothesis, meaning that it is highly unlikely that there is a meaningful relationship between weight and hiring outcome in our study. This contradicts our hypothesis that participants would hire the slim applicant more often than they would the overweight applicant. Our second hypothesis, that the weight bias would

be stronger in men, was also contradicted by our results, as there were no significant differences between males and females in this regard.

4. DISCUSSION

Based on previous findings from research on female weight and attractiveness bias, we hypothesized that the slim applicant would have more success in getting hired for the job, and men would be more likely than women to hire her over the overweight applicant. Our findings did not support either of these hypotheses. In our study, there was no discernible relationship between weight and participants' hiring decisions, including at the level of gender. The most common reason among participants for hiring either applicant was their qualified level of experience. If there was any weight bias present in these cases, it is possible that an experienced resumé overshadowed any effect it had on participants' decisions, or participants did not consider weight an important hiring criterion.

Explanations for not hiring either applicant included issues with the format of the resumé and some needing an in-person interview before they could make a decision. Participants that rejected either applicant stated that she was too young to be a CEO, even though age was not explicitly stated, so it is unclear whether participants gathered the applicant's age from their picture, or whether they deduced it from the graduation year on the resumé. Regarding the format of the resumé, most participants who were business majors were unsatisfied with it, explaining that they were taught to structure their resumés differently by their professors. The participants that refused to make an affirmative hiring decision solely based off the resumé acted in direct opposition to the rules they were given by the researcher. If this study were to be repeated, it would benefit the experimenters to stress this part of the instructions verbally, at the same time changing the presented reason for the study. Our cover reason, that we were 'studying the effectiveness of resumés, may have caused some participants to focus on the structure and format of the resumé itself, rather than the content and qualifications presented in it. In-person interviews instead of a paper resumé may be preferable, as it would bypass both of these issues. An in-person interview may elicit more emotional responses from the participants relating to weight bias. There is some mention that umbilical waist circumference triggers weight-based stereotypes (King et al., 2014). A small headshot on a resumé distances participants from the relatively stronger emotional reaction that direct contact with an applicant is likely to elicit.

Although there were no significant differences in the amount of 'no's' between the slim

and overweight applicant, the 'no's' for the overweight individual were accompanied by a much lengthier explanation. One interpretation for this finding is that the overweight individual elicited a higher emotional response in participants than the slim applicant did, or that participants felt a greater need to justify their negative decision. In any case, a clear explanation for this finding remains ambiguous. Instead of a binary yes or no scale, studies in the future would benefit from using a Likert Scale of 'hireability', similar or identical to the one Nickson, Timming, Re &

Perrett (2016) used in their study. A scale of 'hireability' uses different grades like those in a Likert Scale, and would detect quantifiable differences between participants' perception of the slim applicant and the overweight applicant if they are present.

Other studies have demonstrated a case for the 'beauty is beastly' effect, so it is possible that the slim applicant was considered attractive by the participants which caused her suitability for the position to suffer. The position of CEO is a masculine sex-typed job according to the operational definition provided in the literature (Johnson, Podratz, Dipboye, & Gibbons, 2010). In fact, men make up well over the 50% requirement to be considered such, measuring at an estimated 72.4% of the demographic (U.S. Bureau of Labor Statistics, 2020). Whether attractiveness is considered an important trait in a CEO is another question, but if one were to assume attractiveness is in fact important to this masculine sex-typed job, then overweight and obese female applicants suffer the consequences and would show up less in these positions.

Indeed, this is the case. In a study examining CEOs of Fortune 100 and Fortune 1000 companies, we see overweight females making up between 5% and 22% of these high-status positions, while obese women made up only 5% of this demographic (Roehling et al., 2009). Overweight and obese men are comparatively better represented in these positions, with the same scaling effect happening as we move from overweight to obese. So, while weight-based stereotypes affect men too, they lead to more negative outcomes for overweight women, especially when looks and gender factor into the job's perceived requirements. Perhaps we should have included questions which assessed participants' thoughts on these matters. For instance, some questions could have asked our participants how important they believed gender and appearance were to the role of CEO, because it is unclear to what degree college students know what the responsibilities and expectations of a CEO are. Of course, questions like these could be problematic in betraying the study's aim, therefore eliciting participants to respond differently than they would have had they not been given these clues to the study's true purpose. However, these questions could be included among other questions as a means of camouflage. Either way, given what we know about the interactions between gender, attractiveness, and sex-typed jobs, there should have been a noticeable advantage for the slim applicant in these hiring decisions.

With all of this in mind, there is a strong likelihood that the methods employed in this study are to blame for the lack of support shown for our hypotheses, as they at times strayed from the rigors expected from true scientific inquiry. The limitations in our research included the lack of concern shown for demand characteristics, issues relating to our sampling methods and sample size, as well as our non-standardization of the pictures used for the resumés. First, to address the issues relating to demand characteristics, participants respond to any present cues that come from the researchers and/or the materials they provide to guide desired behavior (Orne, 1962). Had blinds been incorporated, the only clear cues presenting relevant issues relating to the study's validity would have been the headshots on the resumés. In the case of the overweight

applicant's headshot, the weight variable was clearly identifiable, and likely cued the participants in on the fact that weight was a variable under investigation, with gender to a lesser extent. In the case of the slim applicant, it is reasonable to assume that participants figured gender to be the main variable under investigation.

While these cues likely presented immediate problems with the internal validity of the study, even more problematic is the fact that the researchers were aware of the study's hypotheses before the data was gathered. Since this was the case, and since researchers could use friends and acquaintances to gather the data, more cues, perhaps more explicit than normally

acceptable, were available for participants to pick up on to tailor their behavior accordingly. Although the usual issue with demand characteristics is that they threaten internal validity by influencing the participants to affirm the hypotheses of the study, our hypotheses were not supported by the results. Even so, with friends and acquaintances making up a portion of the participants, there is a likelihood that more information about the study's purpose was disclosed than should have been.

With this information in the hands of the participants, and with a topic as serious as stereotypes and biases at hand, they could have acted either in accordance with the expectations of the researchers by hiring the way they were expected to, that is, by hiring the slim applicant and rejecting the overweight applicant, or they could have acted in accordance with what they thought was right, actively inhibiting any implicit biases they might be holding, hiring the overweight applicant and rejecting the slim applicant. What occurred as a result of these demand characteristics is not clear, but this branching of possibilities presents a host of problems relating to the validity of the study. In the future, researchers should be unaware of the research hypotheses, blinded, to avoid this issue. Additionally, the pictures included on the resumés were of two different women. If this study were to be repeated in the future, the overweight applicant's headshot should be generated from the slim applicant's headshot, or vice versa. This would account for any variability in attractiveness between the headshots, excluding weight, if that were to play a factor.

As stated above, a majority of the experimenters in the study gathered participants via convenience sampling. Non-probability sampling causes issues related to representativeness within the SMU population, and any other population we wish to make our results generalizable to. An improved version of this study would include simple random sampling, or some other method of probability sampling. An additional shortcoming may stem from our small sample size. This may have been why we found no discernible relationship between weight bias and hiring decision. Another reason for the non-discernible relationship between weight bias and hiring decision may be due to our small sample size. As sample size increases, the ability to detect a relationship between the variables under investigation increases. This greater sensitivity to determine if there is in fact an effect to be detected is also known as power. Carrying out this study again with a larger sample size, and therefore, greater power, even with all of its other methodological imperfections, other researchers may find a

relationship between weight and hiring decision. With these changes in mind, future researchers may find results that contradict those presented here, as there is a wealth of literature on the prevalence of weight bias in hiring, especially concerning females, to support the claim.

5. REFERENCES

[1] Agerström, J., & Rooth, D. (2011). The role of automatic obesity stereotypes in real hiring discrimination. *Journal of Applied Psychology, 96(*4), 790–805. doi: 10.1037/a0021594

[2] Allen, T. J., Sherman, J. W., Conrey, F. R., & Stroessner, S. J. (2009). Stereotype strength and attentional bias: Preference for confirming versus disconfirming information depends on processing capacity. *Journal of Experimental Social Psychology, 45(*5), 1081-1087. doi: 10.1016/j.jesp.2009.06.002

[3] Bartels, L., & Nordstrom, C. (2013). Too big to hire: factors impacting weight discrimination. *Management Research Review, 36(*9), 868–881. doi: 10.1108/ MRR-06-2012-0134

[4] Dijksterhuis, A., & Van Knippenberg, A. (1995). Memory for stereotype-consistent and stereotype-inconsistent information as a function of processing pace. *European Journal of Social Psychology, 25*(6), 689-693. doi: 10.1002/ejsp.2420250607

[5] Dion, K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology, 24*(3), 285-290.

[6] Donahue, C., Glasser, M., Preuss, T., Rilling, J., & Van Essen, D. (2018). Quantitative assessment of prefrontal cortex in humans relative to nonhuman primates. *Proceedings of the National Academy of Sciences of the United States of America, 115*(22), E5183– E5192. doi: 10.1073/pnas.1721653115

[7] Finkelstein, L., Frautschy Demuth, R., & Sweeney, D. (2007). Bias against overweight job applicants: Further explorations of when and why. *Human Resource Management, 46*(2), 203–222. doi: 10.1002/hrm.20157

[8] Griffey, J., & Little, A. (2014). Infant's visual preferences for facial traits associated with adult attractiveness judgements: Data from eye-tracking. *Infant Behavior & Development, 37(*3), 268–275. doi: 10.1016/j.infbeh.2014.03.001

[9] Heilman, M. E., & Saruwatari, L. R. (1979). When beauty is beastly: The effects of appearance and sex on evaluations of job applicants for managerial and non-managerial jobs. *Organizational Behavior and Human Performance, 23*(2), 360-372. doi: 10.1016/0030-5073(79)9003-5

[10] Johnson, S., Podrotz, K., Dipboye, R., & Gibbons, E. (2010). Physical attractiveness biases in ratings of employment suitability: Tracking down the "beauty is beastly" effect, *The Journal of Social Psychology, 150*(3), 301-318. doi: 10.1080/00224540903365414

[11] Latner, J., O'Brien, K., Durso, L., Brinkman, L., & MacDonald, T. (2008). Weighing obesity stigma: The relative strength of different forms of bias. *International Journal of Obesity, 32*, 1145-1152. doi: 10.1038/ijo.2008.53

[12] King, E. B., Rogelberg, S. G., Hebl, M. R., Braddy, P. W., Shanock, L. R., Doerer, S. C., & McDowell-Larsen, S. (2014). Waistlines and ratings of executives: Does executive status overcome obesity stigma? *Human Resource Management, 55(*2), 283-300. doi: 10.1002/ hrm.21667

[13] Mattan, B., Kubota, J., Li, T., Venezia, S., & Cloutier, J. (2019). Implicit evaluative biases toward targets varying in race and socioeconomic status. *Personality and Social Psychology Bulletin, 45*(10), 1512–1527. doi: 10.1177/0146167219835230

[14] National Institute of Diabetes and Digestive and Kidney Diseases. (2014). *Overweight and Obesity Statistics*. https://www.niddk.nih.gov/health-information/health-statistics/ overweight-obesity

[15] Nickson, D., Timming, A., Re, D., & Perrett, D. (2016). Subtle increases in BMI within a healthy weight range still reduce women's employment chances in the service sector. *PLoS One, 11*(9), e0159659. doi: 10.1371/journal.pone.0159569

[16] Orne, M. T., (1962). On the social psychology of the psychological experiment: With particular reference to demand characteristics and their implications. *American Psychologist, 17,* 776-783.

[17] Paustian-Underdahl, S.C., & Walker, L.S. (2016). Revisiting the beauty is beastly effect: Examining when and why sex and attractiveness impact hiring judgements. *The International Journal of Human Resource Management, 27(*10), 1034-1058. doi: 10.1080/09585192.2015.10539363

[18] Putz, Á., Kocsor, F., & Bereczkei, T. (2018). Beauty stereotypes affect the generalization of behavioral traits associated with previously seen faces. *Personality and Individual Differences, 131,* 7–14. doi: 10.1016/j.paid.2018.04.011

[19] Re, D., Coetzee, V., Xiao, D., Buls, D., Tiddeman, B., Boothroyd, L., & Perrett, D. (2011) Viewing heavy bodies enhances preferences for facial adiposity. *Journal of Evolutionary Psychology, 9*, 295-308, doi: 10.1556/JEP.9.2011.4.2

[20] Rennels, J., & Langlois, J. (2014). Children's attractiveness, gender, and race biases: A comparison of their strength and generality. *Child Development, 85*(4), 1401– 1418. doi: 10.1111/cdev.12226

[21] Roehling, P., Roehling, M., Brennan, A., Drew, A., Johnston, A., Guerra, R., … Sears, A. (2014). Weight bias in US candidate selection and election. *Equality, Diversity and Inclusion: An International Journal, 33*(4), 334–346. doi: 10.1108/EDI-10-2013-0081

[22] Roehling, P., Roehling, M., Vandlen, J., Blazek, J., & Guy, W. (2009). Weight discrimination and the glass ceiling effect among top US CEOs. *Equal Opportunities International, 28*(2), 179–196. doi: 10.1108/02610150910937916

[23] Slater, A., Quinn, P., Hayes, R., & Brown, E. (2000). The role of facial orientation in newborn infants' preference for attractive faces*. Developmental Science, 3*(2), 181–185. doi: 10.1111/1467-7687.00111

[24] Spitzer, B., Henderson, K., & Zivian, M. (1999). Gender differences in population versus media body sizes: A comparison over four decades. *Sex Roles, 40(*7), 545–565. doi: 10.1023/A: 1018836029738

[25] Stephen, I., & Perera, A. (2014). Judging the differences between women's attractiveness and health: Is there really a difference between judgments made by men and

women? *Body Image, 11*(2), 183–186. doi: 10.1016/j.bodyim.2013.11.007

[26] Swami, V. (2015). Cultural influences on body size ideals: Unpacking the impact of westernization and modernization. *European Psychologist, 20*(1), 44–51. doi: 10.1027/1016-9040/a000150

[27] Swami, V., Frederick, D., Aavik, T., Alcalay, L., Allik, J., Anderson, D., … Cunningham, J. (2010). The attractive female body weight and female body dissatisfaction in 26 countries across 10 world regions: Results of the International Body Project I. *Personality and Social Psychology Bulletin, 36(*3), 309–325. doi: 10.1177/0146167209359702

[28] Townsend, J., & Wasserman, T. (1997). The perception of sexual attractiveness: Sex differences in variability. *Archives of Sexual Behavior 26(*3). 243-268.

doi: 10.1023/A:1024570814293

[29] United States Bureau of Labor Statistics (2020). *Labor force statistics from the current population survey.* https://www.bls.gov/cps/cpsaat11.htm

[30] Vartanian, L., & Silverstein, K. (2013). Obesity as a status cue: perceived social status and the stereotypes of obese individuals. *Journal of Applied Social Psychology, 43(*S2), E319– E328. doi: 10.1111/jasp.12052

[31] Vartanian, L., Thomas, M., & Vanman, E. (2013). Disgust, contempt, and anger and the stereotypes of obese people. *Eating and Weight Disorders - Studies on*
Anorexia, Bulimia and Obesity, 18(4), 377–382. doi: 10.1007/s40519-013-0067-2

[32] Walton, G., & Bower, T. (1993). Newborns form 'prototypes' in less than 1 minute. *Psychological Science, 4,* 203-205. Retrieved from https://www.jstor.org/stable/pdf/ 40062538.pdf?refreqid=excelsior%3A20b503c8c 950ef469226ded8d66ae4e7

[33] Wilson, R., & Eckel, C. (2006). Judging a book by its cover: Beauty and expectations in the trust game. *Political Research Quarterly, 59*(2), 189-202. doi: 10.1177/106591290605900202

[34] Woodington, W. (2010). The cognitive foundations of formal equality: Incorporating gender schema theory to eliminate sex discrimination towards women in the legal profession. *Law and Psychology Review, 34*. ISSN: 0098-5961

[35] Zebrowitz, L., & Franklin, R. (2014). The attractiveness halo effect and the babyface stereotype in older and younger adults: Similarities, own-age accentuation, and older adult positivity effects. *Experimental Aging Research, 40*(3), 375–393. doi: 10.1080/0361073X.2014.897151