No Way Around Weight: A Mixed-Methods Study of How Body Weight May

Unconsciously Influence the Decision to Hire or Not Hire a Teacher

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Dedication

It is with love that I dedicate this dissertation to my nephew, Jack Buzzard. I am proud of the young man that he has become and hope I can inspire him to pursue whatever his heart desires, much like he has done for me.

The world is yours!

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Abstract

Even though society is becoming increasingly more progressive in theory, practice, and policy, educational institutions have been slow to adapt and change. Even with attempts to provide a safe and equitable environment, bias still occurs. Appearance-related forms of discrimination, particularly body weight and attractiveness, have gone unaddressed in the field of education. Until administrators confront implicit biases and reform hiring practices by implementing bias-reducing interview strategies, they will continue to turn away some of the most qualified candidates from the job. This mixed-method study investigates how body weight might influence the decision to hire a teacher. The study utilizes an Implicit Association Test (IAT). Developed in the mid-1900s, IATs quickly became the standard for assessing implicit attitudes, stereotypes, self-concepts, and self-esteem (Greenwald, Poehlman, Uhlmann, & Banaji, 2009, p. 19). These tests measure the strength of association for one of the two concepts in this particular study: thin and fat. The theory behind an IAT is that "this sorting task should be easier when the two concepts that share a response are strongly associated than when they are weakly associated" (Nosek, Greenwald, & Banaji, 2007, p. 267). This mixed-methods study will employ Harvard's Project Implicit IAT for Weight (facial), which is a timed test that associates pictures of thin and fat individuals with positive and negative words, thus measuring preference for one over the other. The questionnaire will collect self-reported data and will assess feelings towards thin and fat individuals. The study will investigate the gap between the administrator's self-reported weight bias and the preference indicated by the score on the IAT.

Although research has revealed the presence of implicit bias and workplace

discrimination against overweight employees, there are few laws and procedures in place

to protect them; however, administrators have a moral and ethical responsibility to

conduct fair evaluations of applicants and hire the best candidate for the position.

Keywords: implicit bias, weight, attractiveness, discrimination

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Chapter 1

Despite the fact that society is becoming increasingly more progressive in theory, practice, and policy, educational institutions have been slow to adapt and change. Universities emphasize the importance of diversity training in public education preparation programs so that practicing teachers and administrators will be prepared to support a diverse population of students (Dilworth & Coleman, 2014). Unfortunately, despite attempts to provide a fair and equitable environment, bias still exists within the education system. Not only is there bias in the way teachers perceive students, but how administrators perceive teachers as well. This is problematic because it is the responsibility of educational leaders, however, to promote inclusion and celebrate differences (Hernandez & Fraynd, 2014). Until administrators confront implicit biases based on appearance and reform hiring practices, qualified candidates will continue to be turned away.

There are several types of appearance bias. Although weight and attractiveness are two distinct categories, there is much overlap between them; in fact, both attractiveness and having a slim figure are advantageous in modern society. Research has revealed links between appearance and several other factors: self-concept, intelligence, competence, success, income, and relationships. Appearance, as it relates to attractiveness, might be as influential as intelligence when it comes to employability (Judge, Hurst, & Simon, 2009). The advantageous nature of beauty traces back to early human evolution. Better treatment based on appearance is linked to other advantages: better social support, increased achievement, motivation, and income (Judge et al.). If

appearance bias goes unchecked during interviews and other hiring practices, it can have a significant adverse impact on the applicant.

The main problem with monitoring implicit-appearance bias is that it is more difficult to identify. A preference for how someone looks is not evident in behavior. Just as being attractive can be advantageous in situations, being unattractive can be disadvantageous; this is especially problematic for individuals when applying for jobs, since being hired is so important for continued future success (Judge et al., 2009).

This research will investigate the association between a practicing administrator's self-reported demographics and feelings about thin and fat individuals as they compare to their preference, or implicit bias, revealed by the IAT. Without being self-aware of implicit bias and the role it may play on decision-making, administrators may be unconsciously disqualifying the best candidate for the job.

Statement of the Problem

If administrators are self-aware that implicit bias exists, they may be more likely to implement bias-reducing strategies during the interview process. Research supports that implicit bias unconsciously, unwillingly, and involuntarily affects perceptions and beliefs about others, often influencing decision-making without the decision-maker realizing it (Greenwald & Krieger, 2006). Weight bias is described as a stigma against individuals with large bodies (Crandall, 1994). It is the fourth largest reported type of discrimination, with a 66% increase between 1995 and 2006 (Crandall, 1994; Andreyeva, Puhl, & Brownell, 2008). Even so, physical size and attractiveness are still not protected characteristics under Title VIII or the American With Disabilities Act ([ADA], Hausman, 2012). Yet, studies have revealed that employers consistently treat obese employees

differently. Puhl and Heuer (2009) attributed this to stereotypes and perceptions of obese individuals as lazy, sloppy, weak-willed, physically and sexually unattractive, and gluttonous.

Intersectionality is the cumulative, compounded discrimination that results from several interrelated or overlapping working identities. Each of those identities are targets of discrimination (Crenshaw, 1991). Since there is a relationship between weight and attractiveness, especially for women, being considered overweight and unattractive can be detrimental for applicants (Rooth, 2009). Hamermesh's and Biddle's (1994) research suggested a 9% penalty in hourly earnings for below-average-looking men and a 5% penalty in hourly earnings for below-average-looking women (p. 1186). In a similar study, Harper (2000) estimated an unattractiveness penalty of 11% and 15% for women and men respectively, with little variation across job types; this supports the theory that the general employer's bias is more impactful than the occupation or field of work they seek (p. 785).

This study examines the extent of practicing administrators' implicit weight biases in relation to the presence of bias-reducing interview strategies. In addition, it investigates the gap between each administrator's self-reported weight bias and the results from Harvard's Weight IAT. The research problem, therefore, is to investigate whether administrators are not only aware of their own implicit bias, but, if they are also implementing any bias-reducing strategies to ensure appearance bias does not influence their hiring decisions.

Conceptual Framework

Although bias was initially perceived as obvious and observable, research continues to reveal that unconscious implicit bias is just as prevalent. The theory of intersectionality examines the extensive potential for discrimination of those who associate with several groups or identities (Crenshaw, 1991). Although this study focused primarily on weight, there is a relationship between physical weight and attractiveness. Intersectionality, however, recognizes that other factors may compound a candidate's risk of suffering from discrimination. As targeted identities are added, individuals are more subjected to explicit and implicit bias. For this study, it was difficult to generalize for all thin or fat candidates because other unknown factors may contribute.

Statement of the Purpose

The review of literature reveals that previous studies have been conducted in other areas and that implicit bias often influences decision-making; however, there is little research conducted within the field of education and even less about hiring school personnel. Most of the research remains focused on racial discrimination, with less attention on other forms of discrimination, particularly those related to physical appearance (Kuran & McCaffery, 2004). Kuran and McCaffery (2004) described the lack of research related to appearance discrimination, formerly dubbed "lookism", as a catalyst for whether "the priorities of researchers are in line with the perceptions of subjects" when it comes to research on bias and discrimination (p. 714). Many researchers have focused their interests on the advantages of a thin, attractive appearance, without delving into the disadvantages of being overweight or obese.

Although it might be unethical, and in some cases illegal to make decisions based on appearance, it is difficult to confirm the reason behind a candidate's dismissal. When administrators are interviewing and hiring teachers, it is likely that implicit bias influences those decisions, but to what extent is unclear. The purpose of this study is to investigate the extent to which an administrator's self-reported demographics and feelings toward fat and thin people compare to the preference, or implicit bias, revealed by the IAT. It also investigates the relationship between the results and administrators' demographics to ascertain whether some types of administrators harbor more appearance bias than others.

Research Questions

The research addressed the following questions:

1. To what extent do administrators prefer a thin applicant to an overweight applicant?

2. To what extent does an administrator's preference towards thin or fat people match their IAT score?

3. To what extent is there an association between the self-reported demographics of an administrator and the results of the IAT?

Nature of the Study and Methodology

Literature has revealed that implicit biases frequently affect decision-making during the interview and hiring process. Because employment is important for continued success, unfoundedly dismissing the most qualified candidate because of implicit bias will likely have a negative effect on both the applicant and the students. This mixed-method study will investigate a relationship between administrators' perceptions of

implicit bias for overweight or underweight applicants as it relates to the administrators' performance on Harvard's Project Implicit Weight IAT. This timed test associates images of thin and overweight individuals with positive and negative words. The timing and accuracy are used to measure the test-taker's preference, or lack of preference, for thin and overweight individuals.

The data will be collected using an online questionnaire created in SurveyMonkey and partnered with an online version of the Weight Implicit Association Test (IAT). The range of preference will be compared to the self-reported results on the questionnaire, which asks participants to reflect on feelings toward fat or thin people. These responses, compared to the results of the IAT, may reveal those implicit biases. Administrators should consider bias-reducing strategies and techniques for future interviews because even if individuals think they are aware of their biases, these implicit biases continue to exist and influence behaviors (Greenwald & Krieger, 2006).

Assumptions

There are several assumptions with a mixed-methods study, especially when a self-report questionnaire is used. There is an assumption that the participants answered all of the questions and that they answered honestly. It is also assumed that participants took the IAT test seriously and that they did not rush through or stop the test prematurely. Although some participants were willing to participate, the majority were not, which impacted the power of the study.

Definition of Terms

Bias - sometimes referred to as *response bias*, is a consistent sensitivity within an individual that frequently influences an approach or belief about others (Greenwald &

Krieger, 2006). According to Greenwald & Krieger (2006), not all bias is inaccurate, unfair, or negative; however, it is most harmful when it is intentional and judgmental because it leads to prejudice and discrimination.

Implicit social cognition - later termed *implicit bias*, is a perception or belief formed without consciously realizing its presence (Greenwald & Banaji, 1995). Implicit bias has been used in psychology to describe the judgements unknowingly made by the mind (Greenwald & Banaji, 1995).

Intersectionality - is the discrimination that results from several working identities, each a target for discrimination, overlapping or joining together (Crenshaw, 1991).

Lookism - termed by Ghodrati, Joorabchi, and Muati (2012), it described discrimination that occurs in the workplace based on physical appearance

Summary

Continued research is greatly needed. Much of the existing research about implicit bias and its impact on decision-making has been conducted in other industries; other forms of appearance bias in education need to be studied. Additionally, other types of measures can be used. Because Harvard's Project Implicit IAT does not cover all types of appearance biases, creating new measures might reveal new gaps or areas for research. Applicants, administrators, and students will benefit from continued research. For applicants, their continued success is linked to their ability to get hired. Administrators are responsible for the academic achievement and general wellbeing of the student population. Student success is dependent on the quality of the teachers.

The need for reform in hiring practices in public education is necessary, but reforming a norm is not an easy undertaking. Mahajan (2007) noted that despite the

difficulty, reform is possible. Society has a responsibility to combat all types of appearance-based discrimination. Even though hiring discrimination only makes up 10% or less of employment discrimination claims, there are still discrimination cases that to do not make it to court (Hausman, 2012). Furthermore, there is a gap in research on discrimination in hiring and the impact it might have on the effectiveness of school districts, as well as on the applicant.

In addition to increasing awareness of potential biases, educational change-makers should reevaluate hiring practices. Implicit bias may be disqualifying or denying the best qualified candidates for the job, which is detrimental since teacher quality is one of the largest contributors to student success. Schools need to become models of the world they are trying to create: one that promotes equality, embraces differences, and willingly and boldly confronts prejudices. Modern forms of discrimination are as harmful as past forms and stigmatization of groups still exists (Mahajan, 2007). Appearance bias must be addressed with the same intensity as race, religion, and socioeconomic status, especially in anti-discrimination legislation. The Chapter 2 literature review develops this concern of employment discrimination, and the long-term impact it may have on the social, emotional, and economic success of an applicant.

Chapter 2

Literature Review

Concerns about how preconceptions and judgements affect hiring decisions are not new; however, the extent to which bias influences decision-making continues to be a topic of research. Appearance bias is particularly difficult to identify and target, but, research reveals that when it comes to areas such as race, gender, and appearance, many interviewers harbor some form of bias (Greenwald & Banaji, 1995). While most would agree that discrimination based on race, gender, and, even appearance are social justice issues, weight bias has yet to be widely discussed (Nutter et al., 2016). This is surprising since research has found weight bias to be on the rise as the fourth most frequently reported form of discrimination (Puhl & Heuer, 2009). In a study on the perceived presence of discrimination, Kuran and McCaffery (2004) found that, when respondents ranked physical appearance, economic status, and ethnicity according to the level of discrimination, physical appearance received a surprising "great deal" on the ranking system, placing it higher on the scale than the other factors (p. 719). The negative perceptions of weight and worth can have a domino effect. Weight bias can be held partly responsible for "reinforcing and privileging slimness in a culture that promotes health at one size" (Bacon & Apharamor, 2011, p. 358). There continue to be social, emotional, and economic consequences for those who do not meet the expectations of weight as placed on them by society.

Background

In 1964, the U.S. Equal Employment Opportunity Commission (EEOC) was created to ensure that employers were not denying applicants because of race, sex, color,

religion, and national origin (EOCC, 1964). Despite the pursuit of equal-opportunity employment, applicants still get turned away from jobs for reasons that have little to do with qualifications, experience, or ability. In fact, a study on discrimination trends in hiring practices revealed that the employment gap between Black and White applicants had barely changed since the 1980s (Quillan, Pager, Hexel, & Midtbeen, 2017). Since the racial gap has been on the EOCC's (1964) radar for decades with little improvement, it is not surprising that other types of discrimination still exist as well.

Bias

The field of psychology has studied the impact of preconceptions, perceptions, and stereotypes, and how those beliefs become rooted in judgements of others. Although social behavior was originally believed to be controllable, Greenwald and Banaji (1995) supported that it acts in an unconscious fashion, where "past experience influences judgement in a fashion not introspectively known by the actor," formed by "attitudes, self-esteem, and stereotypes" (p. 3). Since implicit social cognition, also known as implicit bias, occurs without the individual realizing its presence, it is difficult to identify. For researchers, it can be a daunting task to measure an influence that is often denied, especially when there are negative implications associated with those beliefs.

Greenwald and Krieger (2006) suggested that not only are individuals unaware of these biases, they continue to exist and influence behaviors even when they think they are aware of them. The process continues unconsciously, unwillingly, involuntarily, and without any intentional control. They also described bias as response bias because of its placement of an individual's response on a scale of judgement (Greenwald & Krieger, 2006). Rhodes (2009) agreed that because of the placement on a continuum, there is a

wide range of severity. Response bias may not always be inaccurate, unfair, or negative

in nature, but may simply reveal a consistent sensitivity within those individuals (Rhodes,

2009; Greenwald & Krieger, 2006). That sensitivity can sometimes be a result of the

environment and the individual's past experiences and interactions.

Kwan and Trautner (2011) developed a pedagogical model for teaching about

appearance bias. They examined how attractiveness is important in shaping how

individuals see themselves, see others, as well as interact with them. Additionally, the

model addresses the need for not only knowing about the types of biases but assessing

how personal biases might be shaping the way individuals see the world (Kwan &

Trautner, 2011, p. 17).

Intersectionality

Since bias can be formed by past experiences, perceptions, or stereotypes, several

factors working either independently or in conjunction with others, can lead to

discrimination. Crenshaw (1991) originally proposed intersectionality as an alternative to

the identity politics of that time since many individuals experienced not one form of

discrimination during the course of a lifetime, but several. Crenshaw (1991) felt identity

politics failed to address the relationship between several different working identities,

which is problematic since the discrimination is shaped by them. These identities can

create conflicts within themselves or with others, since there is no longer one central,

targeted identity, but several identities. Because discrimination is not limited to a single

identifying characteristic, biases can vary and be numerous (Crenshaw, 1991). Collins

(2012) embraced a similar idea about identity politics; those systems that were formerly

viewed as different forms of oppression were actually interconnected, resulting from the "interrelationships" between "social inequality, power, and politics" (pp. 449-450).

Intersectionality reveals a need for bias-monitoring strategies since it is several identities, all working in unison, that influence and form the outside world's perception of an individual. The several grounds of identity should be examined because of the many moving parts that construct the social world and the way people see each other (Crenshaw, 1991).

Goldberg (2011) explained, "More complicated still are the situations in which an individual claims discrimination based on more than one protected category" because those who make intersectional claims do not argue that they are being discriminated against because of one sole factor, but because of a particular combination of traits or characteristics (p. 765). Unfortunately, it can be increasingly more difficult to file a claim against a combination of discriminated traits, so there is pressure to compromise and settle on just one trait.

Intervention strategies that focus on only one or two traits, without addressing how they interact with one another, often fail (Crenshaw, 1991). Just like the forms of discrimination interact differently, they do create different obstacles and uniquely so for different people (Crenshaw, 1991). Crenshaw (1991) asserted that "intersectional subordination need not be intentionally produced; in fact, it is frequently the consequence of the position of one burden that interacts with preexisting vulnerabilities to create yet another dimension of disempowerment" (p. 1249).

Crenshaw (1991) explained that society is formed by several working layers, which she later identified as three different types of intersectionality:

- structural intersectionality

- political intersectionality

- representational intersectionality.

Structural, Representational, and Political Intersectionality

Crenshaw (1991) described structural intersectionality as systematic influences that increased the likelihood of other structural issues and, thus, new forms of discrimination. For example, Crenshaw (1991) discussed how the systematic discrimination of women of color created other problems like discriminatory employment practices, discriminatory housing practices, and, as a result, higher unemployment rates (p. 1246). Most of these experiences resulted from a "manifestation of the subordination" (Crenshaw, 1991, p. 1245). Intersectional subordination, according to Crenshaw (1991), does not need to be intentional; instead, one is usually a result of another that interacts with "preexisting vulnerabilities" to create "yet another dimension of disempowerment" (p. 1249). These practices can be viciously cyclical as these types of discrimination do not just intersect but create an ongoing cycle of disadvantages.

Crenshaw's (1991) political intersectionality discussed how each of two identities can hold its own political view. When there are opposing viewpoints, one can sometimes invalidate the needs of the other group (p. 1252). If one identity does not embrace the other, it might actually reinforce the discrimination of the other group. Representational intersectionality results from society's representation of a certain group. Crenshaw (1991) described representational intersectionality as a way in which images are produced and how critiques of representations can further marginalize individuals within that group. It argued that multiple types of subordination can be equally reinforcing (Crenshaw, 1991).

Crenshaw (1991) described the devaluation of women of color as a continuation of how they have been represented by society. Discriminatory, stereotypical representations of marginalized groups further reinforce negative beliefs about that group.

Identity

Crenshaw (1991) claimed that "the appeal to community standards does not undercut a concern about racism; rather, it underscores that concern" (p. 1288). Discrimination can have a negative impact on individuals and the way they view their own working identities. Self-identification can be formed at an early age when children are most impressionable (Gibson, 2017). Individuals are more likely to prefer the identities for which they have ownership, which results from their experiences and whether they perceive that identity to be inclusive or exclusive (Gibson, 2017). Self-identification can be linked to self-concept, especially as children and young adults develop. Epstein (1973) suggested that self-concept be viewed as a "theory that a person holds about himself as an experiencing, functioning being in interaction with the world" (p. 23). Furthermore, self-concept can be conceptualized as an "organization (structure) of various identities and attributes, and their evaluations, developed out of the individual's reflexive, social, and symbolic activities" (Gecas, 1982, p. 4). Judge et al. (2009) described self-concept as a product of not only how that individual sees himself or herself, but also what he or she believes others think of him or her. The influence of self-concept is linked to educational achievement and, subsequently, occupational success and income (Judge et al.)

Carbado and Gulati (2000) described how individuals make on-the-spot adjustments to make themselves more acceptable. In order to feel comfortable in a workplace, individuals often conform, even without realizing it. They describe the strategies often used as a means to assimilate into the work place. Individuals carefully select clothes, language, and other personal choices to fit in to the workplace environment without unnecessarily standing out (Carbado & Gulati, 2000).

Identity and Job-Seeking

The attraction-selection-attrition framework describes a process in which organizations tend to look for those like themselves, much like applicants look for organizations that match them; this is a process termed homogenization (Bretz, Ash, & Dreher, 1989). Björklund, Backström, and Wolgast (2012) further explained the homogenization process as a result of applicants looking for groups that match their own personal interests, traits, and values, organizations employing applicants that match them in return, and those who do not match often leaving in search of a better fit.

Role of Identity During Interviews

When interviewing for a position, not only does discrimination pose a threat to employment, but also self-concept. Especially for those with several working identities, there is often a disconnect between the personal and the public interpretations. Many marginalized group members conceal their identities because of negative experiences, devaluation, and destigmatization (Madera, King, & Hebl, 2012). Tice (1992) investigated bias scanning, a "self-perception process in which behavior calls the individual's attention to certain aspects or potentialities of the self, which are then highly accessible and therefore exert a powerful influence on subsequent self-assessment" (p.

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435). When interviewing, an applicant may be more inclined to internalize one or more of those working identities to fulfill a particular role in the public setting (Tice, 1992). The genuineness of an interview is often compromised out of fear of perceived biases. Past experiences of biased or unfair treatment, coupled with the expectation of future bias, influence the way an applicant approaches an interview; furthermore, it often affects the applicant's ability to interview well (Tice, 1992). In fact, an applicant would be more inclined to give an accurate representation if the interviews were visually anonymous, which is one alternative hiring strategy that aims to reduce bias.

Range of Discrimination

Mason (2012) described the spectrum of discrimination: "meritocratic discrimination" as the most mild, Thurow's "statistical discrimination" within the middle range (1975, as cited in Mason, 2012), and "prejudicial discrimination" at the far end, as the most intentional and the most hurtful (pp. 413, 417, 418). Prejudicial discrimination overlooks qualifications because of the stereotype; it creates a blindness that does not allow an employer to look beyond the physical (Mason, 2012). Although the range can be used to help understand discrimination, it should not be used to identify discrimination. This is because there is no consistent measure for discrimination and "not all discrimination is created equal"; rarely does discrimination look the same and rarely are the implications or consequences the same (Mason, 2012, p. 418).

Look-based discrimination can occur unconsciously and unintentionally, but it is often prejudicial and intentional. Look-based discrimination is one of the most difficult to prove in court, although look-based laws would be beneficial for a countless number of applicants who are unjustly passed over for a job, simply because they do not appear a

certain, agreeable way (Adomaitis, Raskin, & Saiki, 2017). Roach-Higgins and Eicher (1992) delineated the similarities and differences between beauty, appearance, and dress, to better explain look-based discrimination. They define dress as a sensory system that influences how individuals interact with space; it is controllable and influenced by personal preferences. It can also portray an intentional portrait; dressing in a suit and tie may give the impression that the individual has an important, high-status job (Roach-Higgins & Eicher, 1992). Appearance is the "undressed body" and does not involve the choice that dress does; an individual cannot change how he or she appears without taking extreme measures like cosmetic surgery (Roach-Higgins & Eicher, 1992, p. 9). Unlike the others, beauty is prescribed (Mahajan, 2007; Roach-Higgins & Eicher, 1992). It is more closely linked to societal norms and can vary between regions, cultures, and people. It can also evolve or change over time as society and its needs and trends change.

Attractiveness and Darwinian Mate Value – Biological Signaling Theories

According to Gangestad and Scheyd (2005), there are evolutionary reasons behind why individuals find other individuals attractive. They claimed that attractiveness is reflected in both the traits of the perceiver and whether the other individual has the favorable traits that are desired or not (Gangestad & Scheyd, 2005, pp. 525-526). Traditional understandings of attractiveness focused on qualities that might make a mate more suitable, or attractive, for reproduction purposes. They described two main benefits that an attractive mate might provide a suitor: genetic benefits for the offspring and material benefits for the suitor (Gangestad & Scheyd, 2005, p. 527).

Kirkpatrick's and Ryan's (1991) sensory bias model suggested that there is a bias to prefer qualities that can be advantageous for reasons beyond mating (as cited in

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Gangestad & Scheyd, 2005, p. 529), against specific physical features which encourage them to pursue a series of opposing features (as cited in Gangestad & Scheyd, 2005, p. 529).

Weight and Attractiveness

Kwan and Trautner (2011) found it surprising that despite extensive research on how biases about what is attractive or beautiful shape the perceptions of others, there are few "pedagogical reports" on the topic (p. 17). Just as there is evidence that being attractive can be advantageous, there are also clear disadvantages for those who do not fit the mold or confirm to society's standards of beauty; this is especially true for women who do not meet the thin ideal (Kwan & Trautner, 2011). Studies conducted by Basow and Braman (1998) and Tiggemann and Lewis (2004) also linked personal body choices like leaving hair on legs and underarms with negative perceptions and attitudes; women who adhere to these personal habits have been considered less intelligent, less happy, and less sociable than their less-hairy counterparts (Kwan & Trautner, 2011). Wooky, Graves, and Butler (2009) described main characteristics of an attractive individual as one having symmetrical features and a desirable body weight, noting that there are clearly different standards for women than men.

Attractiveness and Intelligence

According to Talamas, Mavor, and Perrett (2016) the face provides cues to "hormones, health, and sleep status" (p. 4). These cues or characteristics are similarly associated with attractiveness. Talamas et al. found in their study, however, that more attractive faces were perceived to be more intelligent, more academically capable, and more conscientious. They also found high correlations between the perceived level of

attractiveness and the perceived level of intelligence, conscientiousness, and academic performance (Talamas et al., p. 11). The authors attributed this to what Dion, Berscheid, and Walster (1972) deemed the attractiveness halo. Talamas et al. described it when "desired personality traits are ascribed to attractive people over unattractive people" and how it can then influence perceptions about other qualities like health and attractiveness (p. 2) For candidates, the first impression is exceptionally important since it can immediately influence the opinions formed about others (Talamas et al.).

Researchers Jackson, Hunter, and Hodge (1995) questioned the relationship between attractiveness and intelligence in their meta-analysis review of a study by Feingold (1992). Discussing status generalization theory and its attractiveness-competence relationship, they examined the relationship between attractive and both perceived and measured intelligence in children and adults, unlike Feingold (1992) who included little research on children or the relationship itself (Jackson et al.). They also examined implicit personality theory and expectancy theory perspectives contributed by not only by Fiengold (1992), but also Eagly et al. (1991, as cited in Jackson et al.). Eagly et al. (1991) believed that attractiveness would be stronger when there was less information available about an individual, yet more weak due to variations in perceptions of competency and cultural influence (as cited in Jackson, pp. 110-111).

Attractiveness and Trustworthiness

Not only does attractiveness influence the way employers perceive intellect but also the extent to which they trust prospective employees. It can be a challenge to build a relationship without trust, especially in a work setting. According to Cosmides and Tooby (1992, 2000), facial trustworthiness can influence experiences in several ways. There are

societal risks for taking a leap of faith and trusting an outsider; there are consequences for

trusting an untrustworthy individual and missed opportunities when trustworthy

individuals are not given the opportunity to prove themselves (as cited in Bzdok et al.,

2011, p. 3). Bzdok et al. noted that positively judging trustworthiness encourages "direct

investment in cooperative social exchange," whereas judging for attractiveness is an

interpretation of a partner's "genetic fitness" to assume responsibilities for successfully

maintaining a family (p. 11). In contrast, the perception of negative traits like

untrustworthiness and unattractiveness cause a "more tangible direct avoidable response"

because they lack beneficial long-term outcomes (Bzdok et al., p. 11).

Attractiveness and Health

Zebrowitz and Rhodes (2004) attempted to study the extent to which the face can

be a representation of an individual's health. In their application of such research,

Talamas et al. (2016) noted that "given the relationship between actual health, actual

cognitive performance, and perceived attractiveness," the facial cues might suggest

"attractiveness and cognitive ability, leading to correlations between attractiveness and

perceived competence" which can be problematic and lead to misinterpretations of health

(p. 5).

Weight and Health

Weight- and health-care costs are often related. Wang (2008) asserted that "direct

health costs of overweight and obesity ... account for nine percent of medical

expenditures" in the United States (p. 1904). Furthermore, from the perspective of

potential employers, there is also an economic burden. These are called morbidity costs

and can include "decreased productivity, restricted activity, absenteeism, and bed days"

(Wang, 2008, p. 1906). Mason (2012) claimed that it was the self-reported experiences of individuals that reveal the negative perceptions that society has about overweight individuals and how it has become a basis for stigmatization and discrimination (p. 415).

Another possible explanation for weight discrimination could be related to the applicant's health and how it might affect a company: an overweight applicant may cost higher insurance premiums or may incur additional costs because of special accommodations or high absenteeism (Roehling, 1999). There is a tendency to perceive overweight applicants as generally unhealthy, which, in addition to the health-related expenses, may also limit their ability to perform some of the daily operations of the job. Furthermore, Schmier, Jones, and Halpern (2006) found that overall, overweight employees use more sick time and are more likely to be injured or file for disability.

Tebo (2005) challenged the perception that a person's physical size and weight are accurate representations of their health. Law professor Paul F. Campos claimed that "It's simply not true. Those are just ready-made rationalizations for discriminating against people whose size they find unappealing" (as cited in Tebo, 2005, p. 17).

Weight, Attractiveness, and Gender

Although overweight individuals experience discrimination, overweight females report more discrimination than males. According to Kristen (2002), women experienced more work-related discrimination in hiring, pay, and terms of employment. On average, obese women earn almost $7,000 less than their peers, which can have a negative impact on both the individual and the economy (Hausman, 2012). Furthermore, women of color are more affected by weight discrimination than their White peers (Kristen, 2002).

When interviewing for a job, social comparison theory may influence the outcome. It claims that individuals are more likely to compare themselves to others, in order to achieve a sense of validation, which is increasingly problematic in the context of weight bias (Festinger, 1954). Research also revealed the relationship between weight and the societal standards of attractiveness. Rhodes (2009) described women and the obsession with appearance as evident in body-image and self-esteem issues, with a consistent rise in cosmetic procedures. Rhodes (2009) claimed that the fascination with having an attractive appearance starts for women at a young age and continues into adulthood; it can influence everything from likeability, romantic relationships, academic performance, job performance, and legal convictions. Furthermore, without having legal protections in place, those who are victims of appearance prejudice might feel inclined to undergo dangerous cosmetic procedures, succumb to psychological disorders, or engage in self-harm or develop physical disorders of anorexia and bulimia (Adomaitis et al., 2017).

How women dress also influences their opportunities more than how males dress. When women entered the workforce, dressing for success became necessary for females to be able to "communicate messages of competence, power, and status" (Adomaitis et al., 2017, p. 76). An entire body of research has been dedicated to how business apparel influences perceptions. Research supports women in business suits are consistently believed to represent honesty, integrity, and an admirable reputation, while business dress, in general, adds credibility, status, positive leadership qualities, and professionalism (Adomaitis et al.).

Weight bias tends to shift as ideal body standards for weight and attractiveness shift. This applies for both men and women, but in regard to intersectionality, weight bias is "deeply gendered" as "body size matters *differently* for men and women" (Nutter at al., 2016; Vartanian & Novak, 2011; Van Amsterdam, 2013, p. 159). This is evident in a booming cosmetic industry marketed to women with fix-all products like diet pills, wrinkle creams, and cosmetic surgeries (Rhodes, 2009). Rhodes (2009) noted that the nation spends more money on cosmetics (appearance) than reading materials (intelligence). Though research describes a relationship between appearance and wages, it is a great determinant: gender-pricing and the cost of cosmetic products and procedures cause women to spend significantly more money to look good enough to compete with male counterparts (Adomaitis et al., 2017). Not only are women making less money, but they are spending more money in an effort to compete and attempt to level the playing field.

Gender and Race

Although women are treated differently than males, research suggests a discrepancy between females as well. Intersectionality is increasingly evident in the experiences of Black women who are discriminated against more frequently and in different ways than their White counterparts. An "indifference of society to the intersection of so many" is what puts individuals at an increasing risk of discriminatory practices and "shove[s] them further down the socioeconomic ladder" (Whitesel, 2017, p. 428). As a result, the race gap not only still exists, but continues to grow. Reid and Padavic (2005) applied human capital theory when they predicted that it is the lower-skill

level that serves as the primary influence for reduced entry rates, higher exit rates, and a White employer's assumption and preference for hiring other White applicants (p. 1244).

Reid and Padavic (2005) explained that because of high unemployment rates in the young Black female population, there could be a reversal of the previous trend, where White women were a minority in the female labor market (p. 1242). Reid and Padavic (2005) called for research to examine the "race differences in access to job features important to retention, such as training, authority, and promotion opportunities" (p. 1256). Reid and Padavic (2005) encouraged employers to reflect on and adapt evaluation procedures to hire and retain women of color. Their suggestions included revising evaluation procedures to ensure that "practical and cognitive skills" take precedence over valued, yet irrelevant "cultural skills" with little impact on performance (Reid & Padavic, 2005, pp. 1256-1257).

Attractiveness, Weight, and Socioeconomic Inequality

Whitesel (2017) described a society that "fears and devalues an individual when black [*sic*] *and* fat intersect within her or his body" because there is a commonly held belief that overweight individuals should have the control and choice to take care of themselves (p. 431). Weight discrimination has a significant social impact on individuals (Mason, 2012). Just as being fit and attractive can be advantageous, being overweight and unattractive can be equally, if not more, disadvantageous. Income discrimination is a primary form of discrimination for overweight individuals. According to Mason (2012), "fatness is often the *cause* of diminished income and life chances, not solely a consequence" (p. 413). Since weight is not static, employers often assume that individuals have control over their body weight. Seeing an unkempt, overweight

individual often gives the image that the applicant is undisciplined. Mason (2012) found that discrimination against the very obese was much higher than those who were strictly overweight; furthermore, the consequences were significantly higher for women than men.

First Impressions

According to Willis and Toldorov (2006), a first impression is formed as quickly as a 1/10-second glimpse. The resumé is frequently the first impression that an employer gets about an applicant. It serves as a bridge from applying, to earning the opportunity to interview. The impressions gathered from a resumé might include language and communication skills, experience, and potential. The interview reveals the applicant's personal communication skills and allows them the opportunity to inquire about and engage them in discussion about their experience.

Function of Resumes and Interviews

Removing the candidate and any identifiers are ways to reduce implicit bias. According to Hausman (2012), the best approach to reduce bias is to keep it from occurring at all. Not only should all identifying information be removed from resumes, but interviews, Skypes, and phone calls should not be made. Some research claims that interviews do little for administrators who seek to hire the most qualified candidate; in fact, they likely create more problems than they provide insight about a candidate's ability to fulfill the responsibilities of the position. The advantage of a resume without personal identifiers is quickly negated by the personal interview (Hausman, 2012).

Even when an applicant is applying for positions that value interpersonal skills, like teaching positions, evidence from psychologist Daniel Kahneman suggested that

"interviews are ineffective even for gauging personal qualities such as leadership potential" (as cited in Hausman, 2012).

Effects on Interviews

An interview can be the stepping-stone or barrier to success. In a study by Rooth (2009), results revealed that applicants with average looks, described as normal weight and average attractiveness, were 20% more likely to get a callback than those with unfavorable looks, described as obese and unattractive (p. 729). Rooth's (2009) research suggested that an applicant with an average appearance would be called in for an interview in four out of every 10 jobs they apply for, but, an individual with less favorable looks needs to apply for 12 jobs to receive the same four callbacks (p. 729). Applicants with the same qualifications, but unequal attractiveness are already at a disadvantage when applying for positions.

Impact of Hiring Practices

Ethical hiring practices are of great importance because the interview can have a positive or negative influence on a career path. Bendick and Nunes (2012) described that the interview alone results in employment, and employment leads to a new job title, income, the opportunity for growth, and lifelong development. Additionally, an interview has the potential to build employer-applicant social skills, knowledge of job titles and roles, and confidence in a chosen career path (Bendick & Nunes, 2012). Few interviewers are aware of the impact that the interview process alone can have on the quality of life. Well-planned, structurally-sound interviews can reduce bias; however, short of anonymous hiring, which presents unique challenges of its own, the research supports that implicit bias can only be reduced, not removed (Madera et al., 2012; Bendick &

Nunes, 2012). Hausman (2012) compared anonymous hiring to affirmative action, with one stark difference: while affirmative action trades qualifications for diversity, the action of anonymous hiring only yields better-suited, more qualified candidates for the job, without compromise in other areas.

Improving Interviews

Revising the interview process is the first step to improve hiring practices. Madera and Hebl (2013) aimed to target bias and stigmatization with implicit and explicit bias-reducing strategies. In their research, they found that when interviewers tried to suppress thoughts and judgements about candidates, the suppression techniques often had an adverse effect. Those negative feelings often increased as a result. Instead of trying to actively control or repress these perceptions, Madera and Hebl (2013) found that having a rigid, well-planned, and well-structured interview with previously prepared questions was the more effective way to remove bias from the process. The more unstructured the interviews, the more they became a breeding ground for bias (Madera & Hebl, 2013).

Recommendations

In order to achieve true equality, "it is essential to consider the overlap among racist, sexist, classist, ageist, sizeist, and ableist visions of who may be worthy and unworthy of human regard and to consider who assumes the responsibility for determining that 'regard'" (Whitesel, 2017). Before doing so, those responsible for decision-making must be willing to evaluate their own biases and implement best practices. It is the responsibility of decision-makers to enforce policies and practices to ensure equitable interviewing, hiring, and promoting within the workplace (Wooky et al., 2009). Institutions should be aware of implicit bias and develop public policies and

practices to enforce equitable hiring and promote workplace safety (Rhodes, 2009).

Institutions should be willing to question hiring practices and develop strategies for more

equitable interviews. Unfortunately, discrimination still exists because bias, particularly

implicit appearance bias, is difficult to identify, target, and resolve, despite its frequency.

Additionally, despite the historically unequal gaps in the workplace, once confronted,

many stakeholders deny that any form of bias exists. Organizations should implement

bias-reducing interview strategies to ensure all qualified candidates are given a fair and

equal opportunity for a callback. Hausman (2012) claimed that "any anonymous hiring

program would have the effect of masking applicants' weight, attractiveness, and size….

[which] have a large impact on employment success" since obese individuals are 40% to

50% more likely to report discrimination (p. 1363).

Research should extend beyond the health field and into other institutions,

especially education. It should also investigate weight bias as applicants apply for

positions within a field in which they are already employed; experience and seniority

may be factored in differently, making appearance less influential in decision-making.

Most of the current research investigates entry-level applicants. It would also be

beneficial to investigate different employee types, as well as how many years they have

been in that position, and whether it is a position of power or not.

Legal Implications

Appearance discrimination infringes of an individual's rights to equal access and

opportunity. America's social justice issue is not simply one discriminatory practice that

acts alone, but how it intermingles race, socioeconomics, sex, gender identity, and

disabilities (Whitesel, 2017, p. 432). Unfortunately, since implicit bias happens

unconsciously, it creates a type of discrimination that is not only unintentional, but different to identify. Even intentional appearance discrimination is difficult to identify. In a Supreme Court decision, it was determined that if there is no clear intent to discriminate, it cannot be prosecuted by law; furthermore, intent cannot be argued without evidence (Wal-Mart Stores, Inc. v. Betty Dukes et al., 2011). Hausman (2012) claimed that Title VII of the Civil Rights Act of 1964, created to end workplace discrimination, was unable to prevent or protect individuals from unconscious bias and how it influences behaviors. Kristen (2002) examined the problems with passing weight-related anti-discrimination laws as appropriate protections for overweight individuals. Hausman (2012) recommended a more ordinary approach: since employers can only hire based on what they know, Title VII should encourage employers to adopt an anonymous hiring process. Lobbying groups like the Obesity Action Coalition, along with other civil rights groups, make efforts to pass anti-discrimination legislation to protect applicants and employees from workplace discrimination (Hausman, 2012).

Puhl et al. (2015) studied the discrimination policies of four different countries to assess how much public support there was for policies specifically targeting weight discrimination. They found that many of the participants from Canada, the Unites States, and Australia felt there was a need for weight discrimination policy. They also found that at least two-thirds showed support for policies that would "make it illegal for employers to refuse to hire, assign lower wage, deny promotions, or terminate qualified employees because of body weight" with "women and participants of higher body weight express[ing] more support for nondiscrimination measures" (Puhl et al., p. 692).

Other Areas

Anonymous hiring is used in few areas. Hausman (2012) described symphonic orchestras that have held blind auditions at times so that the focus remains on what the musician sounds like, not looks like. Even shows like *The Voice* recognize that appearance can impact opportunities for success. When submitting articles to academic journals, the author's anonymity remains protected as well. This ensures that the selection process only considers the article for its merit and scholarly contribution and little else (Hausman, 2012).

Chapter 3

Methodology

In business, a plethora of research has been conducted on discrimination during job interviews. In education, however, little research has been conducted on the influence of body weight on employability. The research that has been conducted on bias and discrimination when applying for a job has been primarily conducted on observable characteristics like skin color or gender; the relationship between weight and attractiveness, however, is more subjective. School districts strive to increase diversity, but rarely does the personnel adequately represent the demographics of the school district. The need for appearance-related research about implicit bias and how it affects employability is clear.

This mixed-methods study intended to compare whether the results of the Implicit Association Test (IAT) reflect the self-reported items. Although it would be interesting to know what strategies are already in place within the school district to minimize the impact of implicit bias, it would challenge the privacy of the study.

Research Design and Procedure

Mixed-method research was used to investigate how the demographics and self-reported feelings compare to the score received on the IAT, which is indicative of preference or bias. Qualitative and quantitative data can complement each other, especially within the social sciences, with results that answer both types of research questions (Wellington & Szczerbinski, 2007). Before any research was conducted, permission was granted by the Youngstown State University (YSU) Institutional Review Board (IRB) committee. Data were collected using a self-report survey, an explicit

measurement. Weight bias was measured and assessed using the Harvard Project Implicit Weight IAT test, an implicit measurement instrument. It investigated whether participants consistently viewed themselves differently on the explicit measurement than is revealed by the IAT. Since this study aimed to better understand individuals and their beliefs about others, it was a descriptive, non-experimental study (Wellington & Szczerbinski, 2007).

Research Questions

The investigation was guided by these three research questions:

1. To what extent do administrators prefer a thin applicant to an overweight applicant?

2.   To what extent does an administrator's preference towards thin or fat people match their IAT score?

3. To what extent is there an association between the self-reported demographics of an administrator and the results of the IAT?

Participants and Sampling

The target population for this study was practicing administrators involved in the process of interviewing and hiring of teachers. Although the goal was to achieve a diverse range of administrators, the participation in the study was representative of leadership statistics; White males make up the majority of administrators. Since they already make up the majority of the participant pool, the participants were expected to be only somewhat diverse. The racial representation is also indicative of leadership statistics; the amount of Black participants (11.4%) closely reflects the national average of Black administrators (10.6%) (U.S. Department of Education, 2015-16).

Stratified sampling. The representative sampling primarily included assistant principals, principals, and superintendents. Although some respondents chose not to respond to the question about occupational role, it had been made clear that they could only participate if they were directly involved in the interviewing and hiring process. It was difficult locating and securing a random sample because of the certain characteristics that are being sought. Since the sample was practicing administrators, a minority group, stratified random sampling was used. This sampling technique organizes the population into smaller subgroups; then, from each subgroup, a simple, random sample is selected (Trochim & Donnelly, 2008). This ensured that there was a large enough sample for analyses, even though the research investigated a minority population (Field & Hole, 2003; Trochim & Donnelly, 2008). The goal was to receive as much participation as possible so that the research did not appear underpowered. The data would be less likely to be statistically significant if the sample size was too small. A power analysis helped determine this goal (Rudestam & Newton, 2015). Even so, despite an adequate sample size of 118, there were still limitations because of the low completion rates of only 44 full participants.

Purposive and convenience sampling. Purpose sampling was used to reach out electronically to request participation. Purposive sampling, which is selecting a sample with clear purpose, was used. A mass email requesting participation was sent to the Trumbull County Educational Service Center, as well as the Mahoning County and Cuyahoga County Educational Service Centers. This initial communication requested their assistance in distributing the research. Of the three service centers contacted, only

one was willing to distribute the research study using their Listserv database of administrations.

The email also included a link to the SurveyMonkey, which led them to the Harvard Implicit Weight IAT. Networking through peers and graduate students in the Beeghly College of Education at Youngstown University was also used to reach administrators. Utilizing resources that were already available allowed for a greater reach. Networking and referrals can also increase the list of contacts, as needed (Maxwell, 2003).

Sample size. Rudestam and Newton (2015) suggested using the Internet to identify and reach out to prospects. Only one service center permitted the use of their ListServs to send out details of the study and requests for participation. The goal was to meet or exceed the intended sample size of 100 electronic participants because of the ease and accessibility of an online test.

Instruments and Data

Harvard's Project Implicit program develops tests to assess the influence of implicit bias. The Weight (facial) Implicit Association Test (IAT) makes up the qualitative portion of this mixed-methods' study. Data were collected two ways but concurrently. Technology allows for a quick and cost-efficient collection of data. It is also unobtrusive since it can be completed at the convenience of the participant. The study was distributed instantaneously, and the responses were collected, downloaded, organized, and later coded. This made for easier and simpler data management and data entry (Wellington & Szczerbinski, 2007).

Biographical information and the reports of a self-reported questionnaire were collected prior to the participants completing the online Weight IAT. The Weight IAT assesses the potential appearance-related bias so that it can be compared to the self-reported information and potentially reveal the presence of bias. To maximize reliability and validity, the questionnaire used was the same one utilized by Harvard. Its precise language should have reduced confusion or interpretation issues and been easy to navigate. Ambiguous terms were avoided, as they would have required a separate definition or explanation.

Since the measures were self-administered, there was little need to administer the test in person. The questionnaire and online test were piloted to ensure it was fully functional and that the directions were clearly stated (Rudestam & Newton, 2015). There were no modifications to the test or the questions.

Rudestam and Newton (2015) noted that even though there may be bias related to computer skills, there is still an advantage of collecting "geographically heterogeneous samples" that may not be possible otherwise (p. 104). Participants are also more inclined to participate, and, more importantly, participate honestly, if they feel anonymous.

Millisecond software (www.millisecond.com) was used to prepare and send the study. A two-month web subscription was paid for through research funds. The software hosted and ran a version of Harvard's Implicit Project Weight IAT. Administrators received an email with a link to the SurveyMonkey questionnaire. At the end of the SurveyMonkey, there was an additional link that forwarded them to the IAT. The Weight IAT is a timed-test that measures positive and negative word associations when looking at pictures. It took participants approximately ten minutes to complete it. There were two

sections of the test; one was matched or similar (positive word with thin face) while the other was opposite (negative word with overweight face). The difference between the two results revealed the preference and strength of preference toward thin or fat individuals.

The mixed-methods' design and use of technology allowed for data to be collected from several locations at once. The quantitative and qualitative collection was concurrent since the qualitative results provided insight about the self-reported beliefs about thin and fat people, while the IAT revealed the strength of that preference (Creswell & Plano Clark, 2010; Trochim & Donnelly, 2008).

Procedures

Even qualitative perception studies can provide quantifiable results. This mixed-methods' design used Sequential Explanatory, which has several different stages. The survey accompanied the Weight IAT test. Results from both were collected for analysis. Although efforts were taken to minimize threats to validity and reliability, outside influence and interference were impossible to rule out.

Trumbull, Mahoning, and Cuyahoga Counties' educational service centers were intended resources to distribute the survey. Networking through YSU was also used to reach out to practicing administrators. The goal was to streamline communication to practicing administrators and other hiring decision-makers. Email was used to distribute the questionnaire and the electronic version of the test programmed by Millisecond Inquisit, a company that specializes in software for psychological research. Incentives were not offered.

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An approved consent statement was provided. It clearly stated the purpose of the study. Participants were also reminded that participation in the study was optional and could be terminated at any time.

Validity and Reliability Threats

Both qualitative and quantitative research is subject to evaluation apprehension, where the participant has feelings of anxiety and may be hesitant to participate (Maxwell, 2013). Self-reported data, which were collected immediately before the test was administered were subject to self-report bias and sampling error. There was an emphasis on the anonymity of the survey, test, and all the results. Identifiers replaced participants' names and the names of school districts were not collected. Using stratified random sampling reduced some of the random sampling error, even though it can be more time consuming (Maxwell, 2003). Data were stored online and were password protected.

Participants were made aware that their privacy was respected. They were encouraged to provide honest responses, free of judgment. Additionally, Maxwell (2013) described the risk of drawing inaccurate or entirely incorrect conclusions a result of "distorted" experiences and perceptions (Maxwell, 2013, p. 81). For the quantitative results, a validity check on SPSS was beneficial.

Data Analysis

The data analysis for the explicit measures, the self-reported answers, was presented first. It was followed by the statistical analysis of the IAT data. The analysis compared the means of the thin and fat explicit measures.

A descriptive analysis was conducted on the information that was provided by the participants to identify the mean and standard deviation of Age and BMI of the

participants. Cross tabulations were used to reveal relationships between categorical variables. An Analysis of Variance (ANOVA) was used to analyze the responses of participants on categorical items and the IAT score, a normally distributed continuous value. The purpose of a correlational analysis is to reveal differences between the means of each group. Levene's Test of Homogeneity of Variance was also conducted to assess whether homogeneity was tenable.

Researcher Role

It was often assumed that as a petite female going into education, the best place would be in the elementary classroom. To an outsider, the thought of someone of that stature having taught senior-level English for 10 years can be shocking. Constantly explaining the motives behind the decision to teach high school students, as well as defending the idea that appearance and physical presence do not hinder the ability to effectively lead a classroom can be exhausting. Whether appearance and stature can be beneficial or detrimental to securing a job depend on the individual as much as the responsibilities of the position. Being perceived as thin and attractive may be beneficial as a teacher, but being physically small, less strong, and without a dominant physical presence might be detrimental for an applicant for an administrative position. Just as there is an assumption that preparation programs should not groom candidates based on appearance, should school administrators should not allow appearance and perceptions to trump an applicant's qualifications.

Limitations

The feasibility of the study was considered. It could be completed within a reasonable time, less than ten minutes total, and was financially practical. It was ethically

low-risk and did not require an excessive amount of cooperation or time (Trochim &

Donnelly, 2008). Field and Hole (2003) noted the importance of increasing validity and

reliability when working with any form of questionnaire. More reliable studies are more

likely to reveal higher correlations (Field & Hole, 2003). When a survey includes any

kind of self-reported measure, there is the chance that a participant will not be entirely

honest. Additionally, since some of the questions challenged the individuals' beliefs'

system, there was a chance of evaluation apprehension, or test anxiety. Another concern

was social desirability, which is when participants respond a certain way to appear a

certain way (Field & Hole, 2003).

It is the ethical responsibility of the researcher to take precautions and be sure the

participants understand their rights and responsibilities (Field & Hole, 2003). The

participants were informed about the study, what was being measured, and any potential

risks. They were informed that participation was voluntary and that the survey could be

terminated at any time without consequence. They were assured that information

remained confidential and that numerical identifiers were used in place of names,

districts, and any other collected demographics. Since the intent of the experiment was

made clear, it was not necessary to debrief participants; however, appreciation for

participation was expressed.

Summary

Appearance-related forms of discrimination, particularly body weight and

attractiveness, have gone unaddressed in the field of education. The primary challenge

with implicit bias is that because it happens unconsciously, it is difficult to identity.

Research supports that appearance bias is related to employment and success at work, but

anti-discrimination laws in the workplace may never be able to fully protect applicants from appearance-related bias because of its subjective nature. The purpose of this descriptive, non-experimental mixed-methods' study was to investigate the relationship, if any, between the demographics and self-reported responses of practicing administrators and the range of preference indicated by their IAT score. The results could provide insight into the harbored biases of administrators and potential implications for implementing bias-reducing strategies in the interview process

Chapter 4

Results

Administrators should be aware that implicit bias exists and that it may be unconsciously impacting hiring decisions. This research investigated how an administrator's self-reported feelings about thin or fat people compares to the range of preference revealed by Harvard's Implicit Association Test (IAT) for weight. In order to distribute and collect self-reported responses about demographics, characteristics, and feelings toward thin and fat people, a SurveyMonkey questionnaire was distributed to practicing administrators. At the end of the questionnaire, there was a link to the IAT. The IAT was used to determine the participant's unconscious preference toward one or the other, as well as the strength of that preference. The questionnaire and test were distributed to administrators involved in the practice of interviewing and hiring teachers. Responses were collected over the course of two weeks. The purpose was to collect and compare the administrator's self-reported responses to the score on the IAT. This chapter presents the results of mixed-method study as they relate to the following research questions.

1. To what extent do administrators prefer a thin applicant to an overweight applicant?

2. To what extent does an administrator's preference towards thin or fat people match their IAT score?

3. To what extent is there an association between the self-reported demographics of an administrator and the results of the IAT?

Descriptive Statistics

The sample size included 118 individuals with only 44 fully participating

"participants." Descriptive analysis of the participants revealed that $n = 25$ (57%) self-

reported as male, while $n = 19$ (43%) reported self-reported as female. There was less

participation than anticipated when it came to distribute the study. Three educational

service centers were contacted but only one was willing to share the study with a listserv

of practicing administrators. Additionally, several participants started but chose not to

complete process.

Prior to analyzing the data to address the three research questions, descriptive

analyses were conducted on the information provided by the participants. Table 1

provides a description of the participants by age and BMI.

Table 1.

Age and BMI of Participants

Variable	N	Mean	SD	Skewness	Kurtosis	Minimum	Maximum
Age	44	45.68	8.62	0.64	1.10	29	72
BMI	44	30.76	9.74	2.76	10.76	20.5	76.6

As indicated in Table 1, responses indicated that the average age of participants was 46

years old. The average Body Measure Index (BMI) was 31. The BMIs were categorized

by the following levels: underweight (<18.5), normal weight (18.5-24.9), overweight

(25.0-29.9), obese (30.0-40.0), and morbidly obese (>40.0) (Centers for Disease Control

and Prevention, 2017). Table 2 provides a breakdown of participants by race and gender.

Table 2.

Cross Distribution of Race and Gender

	White or Caucasian	Black or African American
Male	21	4
Female	18	1

As indicated in Table 2, responses indicated that 21 of the males self-reported as White, and 4 of the males self-reported as Black. Responses indicated that 18 females self-reported as White, and 1 female self-reported as Black. It is noteworthy that 11.4% of the participants reported to be Black. This is comparable to the representation of the 2015-16 data published by the National Center for Education Statistics; it reported 10.6% of public-school administrators as Black (U.S. Department of Education, 2015-2016).

Table 3 provides the self-reported political identity of the participants.

Table 3.

What is Your Political Identity?

	Frequency	Percent
Strongly Conservative	1	2.3
Moderately Conservative	5	11.4
Slightly Conservative	6	13.6
Neutral	10	22.7
Slightly Liberal	9	20.5
Moderately Liberal	10	22.7
Strongly Liberal	3	6.8

Most participants indicated that their political affiliation was Liberal (49%). Table 4

describes the religious identity of participants.

Table 4.

What is Your Religious Identity?

	Frequency	Percent
Christian: Catholic or Orthodox	20	45.5
Christian: Protestant or Other	20	45.5
Jewish	1	2.3
Not religious	2	4.5
Other religion	1	2.3

As indicated above, 20 (45.5%) participants self-reported as Christian: Catholic or

Orthodox and 20 (45.5%) participants reported as Christian: Protestant or Other. One

(2.3%) participant self-reported as Jewish, two (4.5%) participants as Not Religious, and

one (2.3%) as Other Religion.

Table 5 represents a cross tabulation between the religious affiliation and how

religious they consider themselves.

Table 5.

Cross Tabulation Between Table 4 and How Religious

	Strongly religious	Moderately religious	Slightly religious	Not at all religious
Christian: Catholic or Orthodox	2	9	9	0
Christian: Protestant or Other	5	11	4	0
Jewish	0	0	1	0
Not religious	0	0	0	2
Other religion	0	1	0	0

Table 5 indicates the relationship between the religion reported in Table 4 and how religious they considered themselves. Of those participants that self-reported Christian: Catholic or Orthodox, the majority (90%) considered themselves Moderately Religious or Slightly Religious. Of those participants that self-reported as Christian: Protestant or Other, more than half (55%) considered themselves Moderately Religious while five (25%) identified as Strongly Religious. The one participant that self-reported Jewish felt Slightly Religious and the two participants that were Not Religious identified as Not at All Religious. Table 6 describes the reported occupation of the participants. In order to participate in the survey, participants had to be involved in the interviewing and hiring process of teachers in some capacity. Table 6 indicates those roles.

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Table 6.

What is Your Full-Time or Part-Time Occupation?

Role	Frequency	Percent
Principal	11	0.25
Administrator or Superintendent	19	0.43
No Response	14	0.32

As indicated in Table 6, 11 (25%) participants reported serving in the role of Principal.

Nineteen (43%) participants serve in the role of an Administrator or Superintendent.

Fourteen (32%) participants did not respond.

Table 7 indicates the amount of responses for each degree of feelings toward thin

and fat people.

Table 7.

How Warm or Cold do You Feel Towards Thin and Fat People?

	Towards Thin	Towards Fat
Extremely warm	3	2
Very warm	5	2
Moderately warm	4	3
Somewhat warm	2	2
Slightly warm	1	2
Neither warm nor cold	28	24
Slightly cold	1	8
Very cold	0	1

As indicated in Table 7, 28 (64%) participants reported a neutral response of Neither Warm Nor Cold towards thin people and 24 (55%) participants reported a neutral response of Neither Warm Nor Cold towards fat people. The remaining participants reported in varying degrees with more warm feelings toward thin people than fat.

Table 8 indicates the specific range of responses.

Table 8.

Range of Feelings Towards Fat People.

	Feel towards fat people?							
Feel towards thin people?	1	2	3	4	5	6	7	Very Cold
Extremely warm (1)	2	0	0	0	0	0	0	1
Very warm (2)	0	2	1	0	1	0	1	0
Moderately warm (3)	0	0	2	0	0	1	1	0
Somewhat warm (4)	0	0	0	1	0	0	1	0
Slightly warm (5)	0	0	0	0	0	1	0	0
Neither warm nor cold (6)	0	0	0	1	0	**22**	5	0
Slightly cold (7)	0	0	0	0	1	0	0	0

As indicated in Table 8, the neutrality to thin people and fat people was consistent across the same individuals.

Table 9 describes personal preferences for fat or thin people.

Table 9.

What Statement Best Describes You?

Response	Frequency	Percent
I moderately prefer fat people to thin people	1	2.3
I slightly prefer fat people to thin people	1	2.3
I like fat people and thin people equally	42	95.5

Table 9 is consistent with the results revealed in Table 7 and Table 8.

Table 10 indicates a belief about how controllable weight is for the individual and how controllable it is believed to be for others.

Table 10.

How Much Control Over Weight?

	Others	Myself
Complete	0	6
A lot of control	28	28
Some control	15	9
A little control	1	1

Table 10 indicates a lack of consistency in the attribution of control over weight for the individual and the control over weight for others.

Table 11 provides a detailed breakdown of those responses.

Table 11.

Degree of Responses for Control Over Weight

| | Myself | | | |
| | Complete | A lot of | Some | A little |
Others	control	control	control	control
A lot of control	6	21	1	0
Some control	0	7	7	1
A little control	0	0	1	0

Like Table 10, Table 11 reinforces that inconsistency.

Table 12 indicates the self-reported feelings about perceived similarities between themselves and those that are thin and fat.

Table 12.

How Much do You Feel Similar to People Who Are Thin and Fat?

	Thin	Fat
Not at all similar	6	15
Somewhat similar	15	13
Moderately similar	19	13
Very similar	3	2
Extremely similar	1	1

Table 12 reveals that more individuals felt similar to those that were thin than fat. These perceptions seem inconsistent with the reported BMI of the participants; the average BMI was 31.0 and categorized as obese (Centers for Disease Control and Prevention, 2017).

Table 13 provides a breakdown of the range of responses from Table 12.

Table 13.

Degrees of Responses about Feelings of Similarity Towards Thin and Fat People

	Fat				
Thin	Not at all	Somewhat	Moderately	Very	Extremely
Not at all similar	2	1	2	1	0
Somewhat similar	7	6	2	0	0
Moderately similar	5	5	9	0	0
Very similar	1	1	0	1	0
Extremely similar	0	0	0	0	1

The information from Table 13 is graphically represented below in Figure 1.
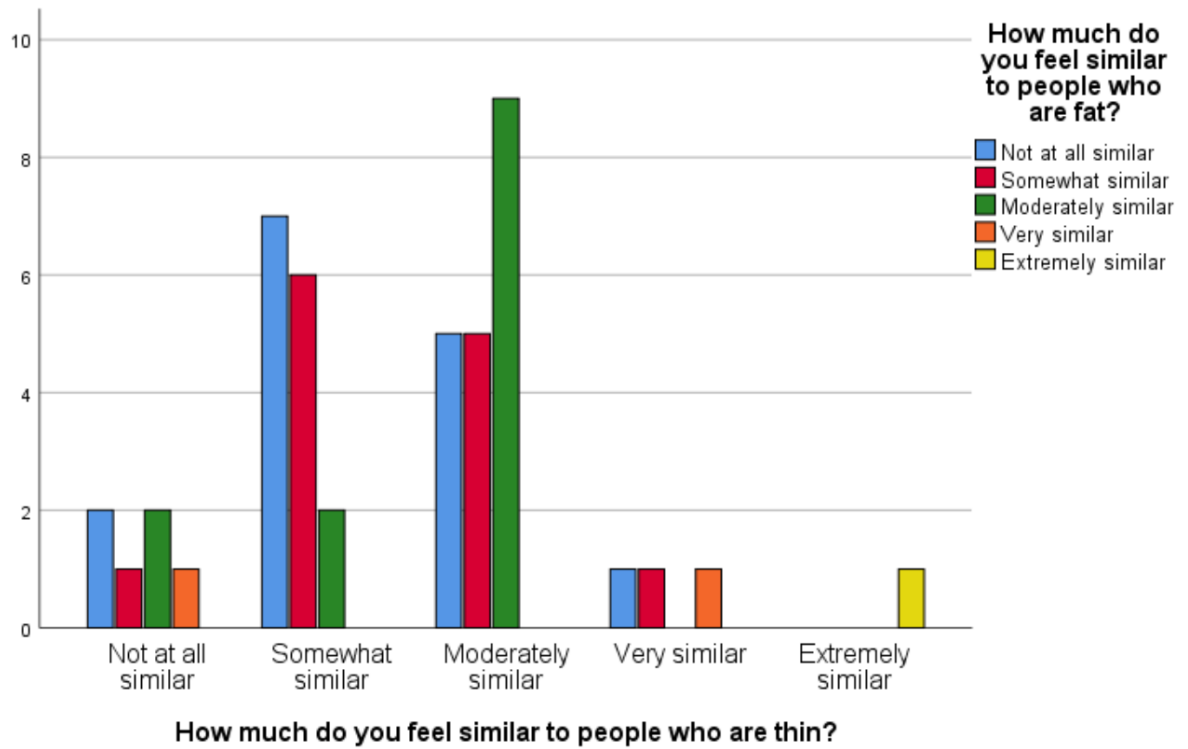
Figure 1. A graphical representation of responses indicating similar feelings toward thin people.

Table 14 indicates the participant's beliefs about others' preferences for fat or thin individuals.

Table 14.

Do Most People Prefer Fat People to Thin People?

	Frequency	Percent
Most people slightly prefer fat people to thin people	2	4.5
Most people like fat people and thin people equally	6	13.6
Most people slightly prefer thin people to fat people	15	34.1
Most people somewhat prefer thin people to fat people	12	27.3
Most people strongly prefer thin people to fat people	8	18.2

Table 14 indicates that 35 (79.6%) participants believe that others prefer thin people to fat people. Fifteen (34.1%) participants think that others have a slight preference for thin people, yet only two (4.5%) participants believe that others have a slight preference for fat people.

Table 15 indicates self-reported beliefs about the importance of weight on the sense of self.

Table 15.

How Important is Your Weight to Your Sense of Who You Are?

Variable	Frequency	Percent
Not at all important	4	9.1
Slightly important	17	38.6
Moderately important	12	27.3
Very important	10	22.7
Extremely important	1	2.3

In Table 15, 22 (50%) of the participants felt that weight was Moderately Important and

Very Important to their sense of self. Only four (9%) participants felt it was Not At All

Important and one (2%) participant felt it was Extremely Important.

Statistical Analyses.

Three research questions were used to guide the investigation.

Research question #1: To what extent do administrators prefer a thin applicant to an

overweight applicant?

Based on the responses of 44 participants, the average score regarding preference

on the IAT was .45 indicating an average preference for thin people. The responses

ranged from -.72 to 1.24.

Research question #2: To what extent does an administrator's preference towards thin or

fat people match their IAT score?

Analysis of Variance (ANOVA) was used to analyze the responses of participants

on two items (How warm do you feel towards thin/fat people?). ANOVA is the most

appropriate analysis since the IAT score is a normally distributed continuous value; responses to the two items are categorical. Levene's Test of Homogeneity of Variance indicates that homogeneity is tenable for both the thin and fat item ($p = .555$ and $p = .317$) respectively.

The results of the ANOVA are presented in Table 16.

Table 16.

Analysis of Variance of Feelings of Warm

Response Item	Sum of Squares	df	Mean Square	F	Sig.
Feel Warm to Thin	1.26	6	0.21	0.82	0.56
	9.42	37	0.26		
	10.7	43			
Feel Warm to Fat	1.72	7	0.25	0.99	0.45
	8.96	36	0.25		
	10.7	43			

As seen above, there are no significant differences found across the response categories on the participants IAT scores.

Table 17 provides the average score by response level to the questions "How warm or cold you feel towards thin people?" and "How warm or cold do you feel towards fat people?".

Table 17.

Average Score by Response Level for "How warm or cold do you feel towards thin/fat people?"

	Thin	Fat
Extremely warm	0.59	0.38
Very warm	0.44	-0.03
Moderately warm	0.61	0.93
Somewhat warm	-0.12	0.12
Slightly warm	0.90	0.31
Neither warm nor cold	0.46	0.46
Slightly cold	-0.05	0.44
Very Cold		1.00

A graphical representation of the results in Table 17 is provided in Figure 2. Since a score of zero indicates no preference, a positive score indicates a preference for thin and a negative score indicates a preference for fat.
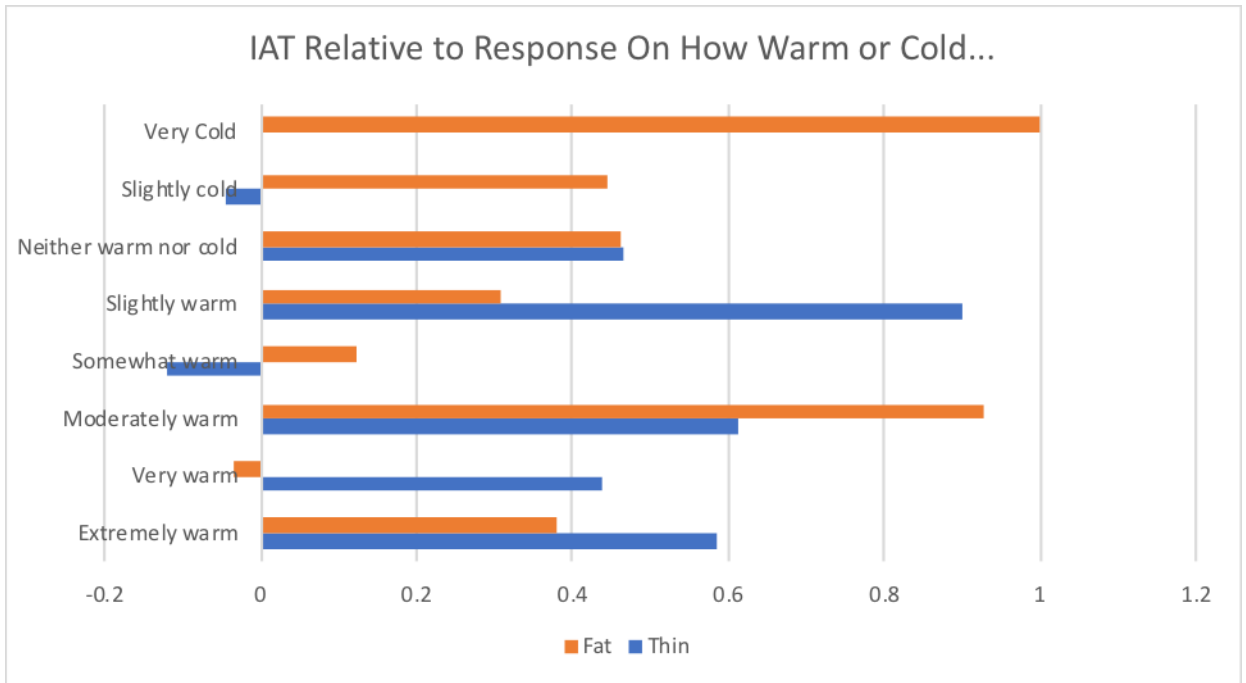
Figure 2. Graphical representation of the average score by response levels indicated in Table 17

Research question #3: To what extent is there an association between the self-reported demographics of an administrator and the results of the IAT?

The research indicates that there is little correlation between demographics and the IAT scores, except in Race. While Race reveals a moderate correlation, the results are not statistically significant. The research revealed a negative correlation between Race and the results of the IAT scores.

Table 18 provides an analysis of those correlations between Gender, Age, Race, Politics, Religion, and IAT Scores.

Table 18.

Analysis of Associations Between Gender, Age, Race, Politics, Religion, and IAT Scores

	IAT	Gender	Age	Race	Politics	Religion
IAT Score	-	0.08	0.11	-0.27	0.07	-0.1
Gender		-	0.26	-0.17	0.23	-0.1
Age			-	0.01	0.16	0.08
Race				-	-0.00	0.03
Politics					-	-0.00
Religion						-

The association between the demographics and IAT scores are not statistically significant. While there is a moderate negative relationship between IAT and Race, this is not a statistically significant relationship.

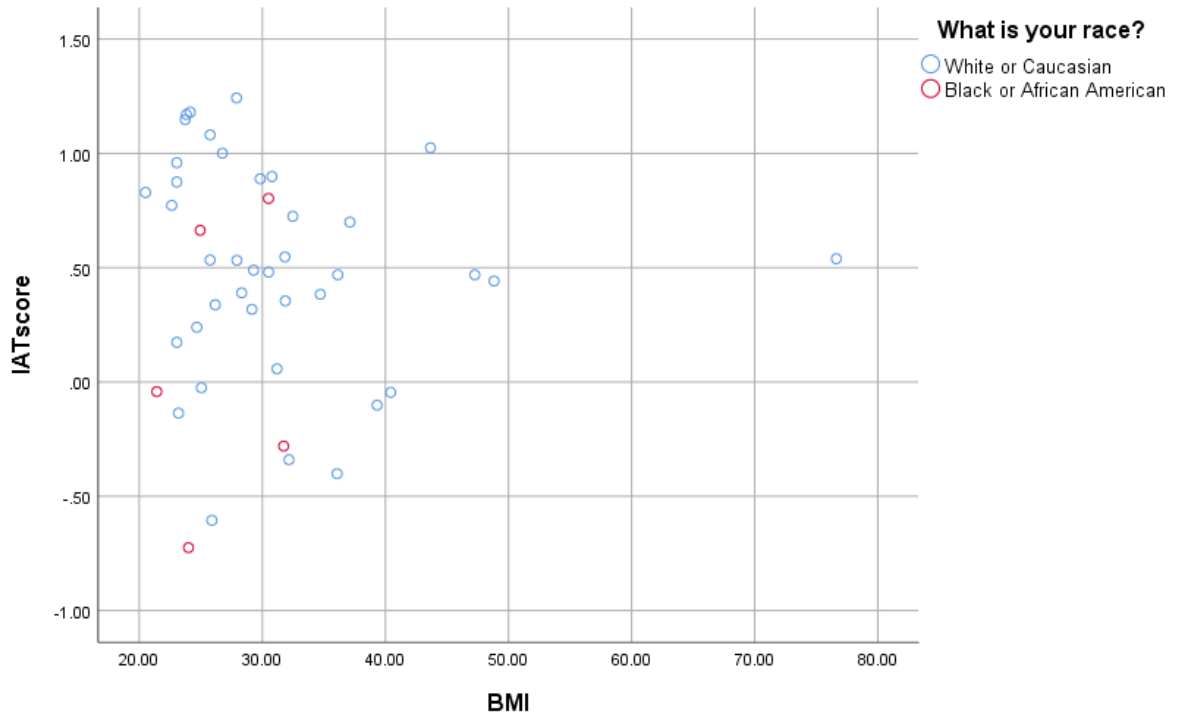A graphical representation of Table 18 can be found in Figure 3.

Figure 3. A correlation between IAT score, BMI, and Race.

As indicated above, the five Black participants had both positive and negative IAT scores. There is one outlier; however, this outlier is based on the individual's BMI, and not their IAT score.

Summary

This mixed-method study was distributed to a sample of 118 practicing administrators but only returned 44 full participants. The purpose of this investigation was to collect and compare the administrator's self-reported responses to the SurveyMonkey questionnaire to the score on the Implicit Association Test (IAT). Although there were several inconsistencies between the self-reported demographics, the survey responses, and the IAT scores, the results of the investigation were statistically nonsignificant. The limited number of participants impacted the power of the study, as

did the unanswered or neutral responses. These limitations and the potential factors

behind them will be addressed in Chapter 5.

Chapter 5

Discussion

This mixed-methods research study investigated the perceptions and beliefs about thin and fat people. The study targeted practicing school administrators who, in some capacity, interview and hire teachers. Data were collected two ways. First, a questionnaire was created using SurveyMonkey and distributed by email. The questionnaire asked a variety of questions about demographics, as well as questions about perceptions and ranges of feelings about the administrators and others. Located at the end of the questionnaire, a link directed participants to the second step of the study: Harvard's Implicit Association Test (IAT) for weight. The IAT uses pictures and word association to measure the accuracy and timing of a participant's responses; from there, a score is produced that indicates the strength of a preference for either of the two variables. This IAT measured an administrator's preference for fat or thin individuals. The investigation was guided by the following research questions:

1. To what extent do administrators prefer a thin applicant to an overweight applicant?

2. To what extent does an administrator's preference towards thin or fat people match their IAT score?

3. To what extent is there an association between the self-reported demographics of an administrator and the results of the IAT?

Summary of Findings

Although the results of the study were statistically nonsignificant, they were still revealing. The sample size included 118 individuals but with only 44 fully participating.

Of those, 25 (57%) self-reported as male, while 19 (43%) self-reported as female. Of the 26 male respondents, 4 self-reported as Black, while, of the 19 females, 1 self-reported as Black. The average age of the participants was 46 years old and the average BMI was 31. According to the Centers for Disease Control and Prevention (2017), a 31 BMI is categorized as obese.

On the IAT, a positive score indicates the strength of the preference for thin people, whereas a negative score indicates preference for fat people. A score of 0 indicates no preference. The average score on the IAT test was .45. This revealed an average preference for thin people. There was a wide range of responses with 1.24 being the most extreme preference for thin people, and -.72 being the most extreme preference for fat people.

When responding to feelings of similarity to those who are fat and thin, there was an inconsistency between the self-reported responses and the average BMIs of participants. More participants felt similar to those who were thin than fat, despite the average BMI of the participants categorized as obese. Sixty-four percent of administrators reported feeling Not Similar or only Somewhat Similar to fat people. Furthermore, only 7% reported feeling Very Similar or Extremely Similar to fat people. When asked about feelings of similarity to those who are thin, 77% felt Somewhat Similar and Moderately Similar to thin people. Additionally, only 9% felt Very Similar and Extremely Similar to thin people.

When administrators were asked about the importance of their weight on their sense of self, 50% reported that weight was Moderately Important and Very Important to

sense of self. On the extremes, 9% felt it was Not At All Important and 2% felt it was Extremely Important.

Overall, there was no significant association found between the demographics of Gender, Age, Political Identity, Religious Identity, and IAT score; however, there was a moderate correlation found between Race and IAT score. Although the results were not statistically significant, they did reveal a negative correlation. This negative correlation could imply that the average of their IAT score falls closer to No Preference than White administrators.

When asked about the range of preference that they believe other people have for thin people, 80% responded within the range of slight preference for thin people to strong preference for thin people. An interesting finding was that when asking about their own preference for thin people, 96% of participants self-reported a neutral stance; they "like fat people and thin people equally."

Another inconsistency is the attribution of control over weight. Administrators responded that they believed they had more control over their own weight than they perceive others do. Seventy-seven percent reported either A Lot of Control or Complete Control in regard to their own weight; as for perceptions of weight control for others, only 64% reported those same responses.

Interpretation of Findings

The recruitment of participants was more challenging than anticipated. Although the sample size was much larger, there was only a small number who fully participated. This limited the power of the analyses as well as the generalizability of the results. However, despite the nonsignificant results and the lack of correlation between variables,

the research provided insight into the perceptions of practicing administrators and supports a need for continued research.

There was a clear disconnect between the self-reported responses and the IAT scores. Although the average IAT score was .45, which revealed an average preference for thin people, an overwhelming majority of participants responded neutrally to the self-report question, indicating No Preference for thin or fat people. It is likely that the results on the IAT are more accurate representations of implicit bias than the self-reported responses. For one, self-reported measures can be easily impacted by response bias and misreporting. Subsequently, according to Greenwald et al. (2009), the IAT scores are "more resistant to faking" (p. 18). In a study conducted by Banse, Seise, and Zerbes (2001), when participants were instructed to fake their beliefs when responding to an IAT, they were successful in doing so on the self-report questionnaire but failed to fake those feelings on the attitude IAT (as cited in Greenwald et al., 2009).

Although a small sample, the Black respondents had a nonsignificant, yet negative correlation with IAT scores. Although the average IAT score for Black participants was negative, since it fell closer to zero, it indicated less preference for thin people than the White participants.

The calculated BMI of participants was a 31, categorized as obese, yet more administrators indicated feeling similar to thin people than fat people. Furthermore, there is a disconnect between the overall perception of an individual's weight compared to their perception of others' weights. On average, the administrators perceived their own weight to be slightly more controllable than others, yet were less likely to associate with obese people, even though it was indicated as such by BMI.

Context of Findings

        The lack of participation and inconsistencies may have to do with several contextual factors.

Noncooperation and Nonresponse

        Of the sample size of 118 administrators, only 44 fully participated in the study. Without an appropriate sample size, the results become less generalizable. Since it was a challenge to get administrators to participate or share the study with others, of the three educational service centers contacted, only one was willing to distribute the survey through the educational service center's Listserv of administrative contacts. Since the entire process took less than 10 minutes, it is less likely that the time commitment was the primary constraint. Instead, it is likely that the nature of the research, as well as participant characteristics, discouraged those in the sample from fully participating in the study.

Neutral Responses and Ambivalence

        The tendency for participants to select a neutral response may also have to do with the design of the research instrument. There are several types of misreporting that occur when responding to a survey question. Individuals who lack motivation, time, or ability may be more encouraged to respond "neutral/no preference" to satisfy the question (Krosnick & Presser, 2009, p. 14). Furthermore, according to Bishop (1987), people also have a tendency to select neutral responses because of ambivalence. He found that, when "asked to make a decision under uncertainty," that "merely mentioning a middle alternative in the preface to a question will lead respondents to select it significantly more often than if it is not mentioned" (Bishop, 1987, p. 229).

Bias and Self-Perception Theory

Greenwald and Krieger (2006) noted that most individuals are unaware of their biases, so it is surprising that the majority of participants reported their feelings differently than the score on the IAT suggested. Response bias occurs on a scale of judgement with a wide range of severity; whether bias is or is not negative in nature, it may reveal a consistent sensitivity within individuals created by past experiences and interactions (Greenwald & Krieger, 2006; Rhodes, 2009).

Attribution Theory

Ross (1977) described attribution theory as "the study of people as 'intuitive psychologists'" because personality traits are one of several cognitive tools that allow individuals to form an impression of another (as cited in Funder, 1980). It is a natural tendency to form perceptions based on interaction in order to compare and better understand each other. Rating scales, like those used in the survey, provided an opportunity for participants to share some of those traits or feelings. According to Funder (1980), this bias addresses the situational nature of revealing traits; they may vary depending on whether they are used to describe themselves, someone with which they know personally, or a complete stranger.

Social Desirability Response Bias

Social desirability can distort the responses of participants. This is because participants would prefer to be viewed in a positive manner and might be uncomfortable giving responses that portray them negatively, even if they are the most honest answers. This is reflective of how individuals may make on-the-spot adjustments to their working identities in order to conform and appear a certain kind of way, often without even

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realizing it (Carbado & Gulati, 2000). According to Paulhus (2017), when using an instrument with a self-report measure, there are several tendencies of a responder that may impact the validity of the survey. One such tendency is socially desirable responding (SDR), described as a "tendency to present oneself in a positive light" by giving answers that they believe "appear positive" on a personality assessment (Paulhus, 2017, p. 2). Paulhus (1984) considered self-deception, "an unconscious self-favorability," and "impression management," the intentional distortion of self-descriptions, to be factors as well (p. 2). Paulhus (2017) suggested that self-reported measurements be considered information and not necessarily a hindrance to sound research or contamination (p. 4).

Implications of Findings

In order to further diversify teaching staffs, as well as administrative staffs, interviewing and hiring practices should be evaluated. Those underrepresented populations should be encouraged to pursue these fields and should have an equitable, fair opportunity to get the job.

With regard to intersectionality, weight bias can be just one of several obstacles for an applicant. Although not a focus of the research, the percentage of Black participants represents the nationwide statistics and is indicative of the need for increased diversity amongst educators. This race gap not only still exists, but continues to grow, especially for Black women who are discriminated against more frequently than their White counterparts (Reid & Padavic, 2005; Whitesel, 2017).

In future research, it would be interesting to further examine how intersectionality impacts a participant's score on an IAT. The average score of the Black participants revealed less preference for thin individuals than their White counterparts. Since Black

respondents have likely experienced more discrimination than their White counterparts, they may consistently report differently than those who have had fewer characteristics or identities subjected to forms of discrimination. In the nature of intersectionality, this discrimination would be compounding; a Black female, for example, might face discrimination based on gender and race, whereas a Black male might be subjected to discrimination solely on race. Future research may benefit from adding layers to the questionnaire to be able to desegregate some of those compounding factors in relation to IAT scores.

It would also be valuable to distribute an IAT that can measure multiple factors, not one, or request that administrators take multiple IATs and then investigate the correlations between them. Since society "fears and devalues an individual when black [*sic*] and fat intersect," the bias could potentially compound and reveal significantly higher scores on the IAT, thus indicating an increase in bias as more identities are added (Whitesel, 2017, p. 431).

Discussion on Limitations

According to de Leeuw and de Heer (2002), survey response rates have been on the decline over the last few decades. A primary limitation is the nonresponse or noncompletion of participants. The number of full participants who provided usable data was less than half of the goal set out before the study was conducted. There were also gaps in the data left behind by skipped questions. With a larger number of respondents, there is more potential for a diversified sample. With such a limited number of participants, the research becomes less generalizable. In order to encourage more

participation in future studies and make it seem like a valuable use of time, a small incentive might be offered to participants (Archibald & Munce, 2015, p. 36).

Another obstacle was securing the participation and assistance of the educational service centers. Since it was a challenge to get administrators to participate or share the study with others, of the three educational service centers contacted, only one was willing to distribute the survey through the educational service center's Listserv of administrative contacts. Since the entire process took less than 10 minutes, it is less likely that the time commitment was the primary constraint. Instead, it is likely that the nature of the research, as well as participant characteristics, discouraged those in the sample from fully participating in the study.

Archibald and Munce (2015) described "institution and community gatekeeping" as a limitation to effective research (p. 35). Although they primarily focused on how it can encourage liaisons to only distribute the study to those who are likely to respond or are already experts in the field, it may also negatively impact the ability to disseminate information to those who value from it (Archibald & Munce, 2015, p. 35). To strengthen this type of distribution for future IATs, it would be beneficial to meet with these liaisons in advance to "negotiate access" (Archibald & Munce, 2015, p. 35).

In future design, it would be beneficial to embed the research questions directly into the start of the IAT. Many participants completed the questionnaire in SurveyMonkey but dropped out shortly after accessing and opening the IAT. If that second step was removed, it is possible that more participants would have pushed forward.

Discussion on Need for Future Research

Greenwald et al. (2009) recognized the urgency for evaluating the usefulness of IATs as predictors of behavior so that they can be used by other institutions (pp. 18-19). They found that, especially for sensitive or controversial areas of research, the "predictive validity of self-report measures as remarkably low and the incremental validity of IAT measures was relatively high," which supports their recommendation that both measures be used since they "provide a gain in predictive validity relative to using the other alone" (Greenwald et al., p. 32). Since the extent of which a bias revealed by the IAT would translate to discriminatory practices in hiring is unclear, additional research would be beneficial. If research could target school district demographics, compare the diversity of applicants, and investigate the employment of bias-reducing strategies, there would be more insight into the applicability of self-reported and IAT results.

Mason (2012) claimed that there is no consistent measure for discrimination because rarely does it present itself and appear the same way (p. 418). That does not, however, mean it should not be investigated. Even though race and gender have long since been the primary focus of discriminatory research and legislation, with little attention to weight discrimination, its presence is on the rise as the fourth most frequently reported form of discrimination (Nutter at al., 2016; Puhl & Heuer, 2009).

There is a need for additional research in the field of education. Although research exists on appearance bias in the private and public sectors, there is less available on how it impacts the hiring decisions in education. There are those who view the overweight or obese as economic burdens because they account for 9% of medical expenditures in the United States (Wang, 2008, p. 1904). Since an overweight or obese applicant may cost an

employer higher insurance premium, have higher absenteeism rates, or require special accommodations, employers might consider their discrimination justified based on the potential financial hardship on the company.

Weight discrimination can have a social, emotional, and economic impact on those who do not fit within the societal standards and it is the responsibility of future research to examine its role and influence on individuals before it can be addressed from a legal standpoint. Educators have a moral and ethical responsibility to reflect and evaluate their own biases, as well as consider how those biases might influence interactions and decision-making. They should also be willing to employ practices to better ensure equitable hiring and promote workplace safety (Rhodes, 2009).

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APPENDIX A

BMI and feelings of similarity towards thin and fat people self-reported by 44

participants.

BMI	How much do you feel similar to people who are thin?	How much do you feel similar to people who are fat?	Other people would say that I am:
76.62	Not at all similar	Moderately similar	Slightly overweight
48.82	Moderately similar	Moderately similar	Very overweight
47.26	Very similar	Very similar	Moderately overweight
43.66	Moderately similar	Not at all similar	Slightly overweight
40.43	Somewhat similar	Somewhat similar	Slightly overweight
39.32	Not at all similar	Moderately similar	Very overweight
37.11	Moderately similar	Moderately similar	Moderately overweight
36.13	Moderately similar	Somewhat similar	Slightly overweight
36.07	Moderately similar	Somewhat similar	Moderately overweight
34.71	Somewhat similar	Moderately similar	Very overweight
32.47	Moderately similar	Moderately similar	Moderately overweight
32.16	Moderately similar	Not at all similar	Neither underweight nor overweight

			Neither underweight
31.86	Somewhat similar	Somewhat similar	nor overweight
31.83	Moderately similar	Somewhat similar	Neither underweight nor overweight
31.73	Moderately similar	Not at all similar	Neither underweight nor overweight
31.19	Moderately similar	Moderately similar	Moderately overweight
30.78	Moderately similar	Somewhat similar	Neither underweight nor overweight
30.51	Moderately similar	Moderately similar	Slightly overweight
30.5	Not at all similar	Not at all similar	Slightly overweight
29.83	Very similar	Somewhat similar	Neither underweight nor overweight
29.29	Moderately similar	Moderately similar	Neither underweight nor overweight
29.15	Somewhat similar	Moderately similar	Slightly overweight
28.32	Somewhat similar	Somewhat similar	Neither underweight nor overweight
27.93	Not at all similar	Somewhat similar	Slightly overweight
27.9	Moderately similar	Moderately similar	Slightly overweight
26.76	Moderately similar	Not at all similar	Moderately underweight

26.17	Somewhat similar	Somewhat similar	Neither underweight nor overweight
25.9	Extremely similar	Extremely similar	Moderately underweight
25.76	Somewhat similar	Not at all similar	Neither underweight nor overweight
25.76	Moderately similar	Moderately similar	Neither underweight nor overweight
25.05	Moderately similar	Somewhat similar	Slightly underweight
24.95	Somewhat similar	Not at all similar	Neither underweight nor overweight
24.68	Moderately similar	Not at all similar	Neither underweight nor overweight
24.14	Moderately similar	Moderately similar	Moderately overweight
24	Somewhat similar	Somewhat similar	Neither underweight nor overweight
23.83	Not at all similar	Not at all similar	Neither underweight nor overweight
23.73	Somewhat similar	Not at all similar	Neither underweight nor overweight
23.19	Somewhat similar	Not at all similar	Neither underweight nor overweight

23.05	Somewhat similar	Somewhat similar	Slightly underweight
23.05	Somewhat similar	Not at all similar	Neither underweight nor overweight
23.05	Not at all similar	Very similar	Neither underweight nor overweight
22.64	Somewhat similar	Not at all similar	Slightly underweight
21.42	Very similar	Not at all similar	Slightly underweight
20.51	Somewhat similar	Not at all similar	Moderately underweight