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Perceptions of Workplace Discrimination: A Closer Look

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Perceptions of Workplace Discrimination: A Closer Look

by

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DEDICATION

This dissertation is dedicated to my wife, Taylor Doaty, who supported me through the highs and lows of the Ph.D. journey. This dissertation is also dedicated to my parents, Fran Zimmerman and Bernie Slutsky, my sister, Jessica Zimmerman, my grandmother, Dottie Zimmerman, and my in-laws: Thomas, Nile, Terrell, Terhea, TJ, Torey, Xander, and Sebastian. I am incredibly lucky to have such a loving and caring family.

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ABSTRACT

This research operationalized perceptions of workplace discrimination (PWD) as a multidimensional construct and examined relationships between different types of PWD (subtle, interpersonal, and formal discrimination) and potential antecedent variables. Furthermore, this research investigated whether different types of PWD related to job attitude variables differently across different demographic groups (race, sex, and age). Participants of this study consisted of 1,610 employees from multiple southeastern public universities. Results from this study found that psychological diversity climate had the strongest relationship to the different dimensions of PWD, followed by hostile attribution bias and perceived group dissimilarity. Blacks and Black females reported the most frequent occurrences of PWD, and older employees reported significantly stronger negative relationships between types of PWD and organizational commitment than younger employees. There are several contributions to the literature as well as opportunities for future research that are discussed.

CHAPTER ONE:

INTRODUCTION

Interest in workplace discrimination has increased over the years by researchers, organizations, and the general public. Discrimination has traditionally been defined as unjustified negative actions that deny "individuals or groups of people equality of treatment" (Allport, 1954, p. 51). Workplace discrimination can lead to potentially serious outcomes for both the individual and organization. From the individual's perspective, it can lead to negative psychological and physical health outcomes as well as decreases in job satisfaction. From the organization's perspective, it can yield declines in employee's levels of organizational commitment and job performance as well as costly lawsuits that can negatively impact shareholders (for a review, see Goldman et al., 2008). Discrimination has long been studied as a unidimensional construct, however, more recent publications have described and investigated it as a multidimensional construct consisting of dimensions such as subtle discrimination and overt discrimination (for a review, see Hebl et al., 2020). Subtle discrimination is typically defined as "negative or ambivalent demeanor or treatment enacted toward social minorities on the basis of their minority status membership" (Jones et al., 2016: p. 1591), whereas overt discrimination is commonly defined as "clearly exercised form of unfair treatment with visible structural outcomes" (Van Laer & Janssens, 2011: p. 1205) and "takes the form of behaviors that are unconcealed, intentional, and easily recognizable and are directed at a target on the basis of his or her stigmatized characteristics" (Jones et al., 2016: p. 1591).

Over the past ten years, IO psychology researchers have begun to examine how different dimensions of discrimination relate to relevant outcomes differently. For example, in a recent meta-analysis, subtle discrimination had larger effect sizes in absolute magnitude relative to overt discrimination across psychological, physical, and organizational work outcomes (Jones et al., 2016). However, little work has examined how or why different antecedents may relate differently across types of discrimination.

Another important delineation that has emerged in the literature is the difference between objective and perceptive discrimination. Objective workplace discrimination can be described as factual evidence of unequal treatment. This type of discrimination is often seen as established evidence in court cases, such as data showing systematic underpaying or underpromoting of a certain racial group of employees. Perceptions of workplace discrimination (PWD) is different in that it may or may not be based on evidence or may or may not be an accurate representation of actual events. For example, not receiving a promotion could be construed to the target as unfair treatment based upon their age, but to others it may be due to a history of poor job performance. Again, there is a dearth of research investigating why people might differ in their perceptions of different types of workplace discrimination.

With these considerations in mind, this dissertation has the following primary purposes. First, this dissertation investigated the relationships between different potential antecedent variables to three types of PWD (subtle, interpersonal, and formal discrimination). Second, this dissertation investigated whether demographic differences relate to different types of PWD as well as if they have moderating effects on the relationship between PWD and relevant outcome variables. This research project uses the conceptual framework provided by Jones et al. (2017) and relational demography theory as a jumping off point for the development of the hypotheses.

This dissertation goes beyond extant research on workplace discrimination by empirically testing the relationships between different types of PWD and potential antecedent variables that have not been previously examined. Furthermore, this dissertation examines race, sex, and age as a moderator between types of PWD and job attitude outcomes, a possibility that also has not been previously examined.

The results from this dissertation contribute to science and practice in several important ways. To begin, this research project advances our understanding of what contributes to PWD. Previous research that examines antecedents of discrimination typically measures absolute or objective measures of discrimination. By being more proximal in the investigation of discrimination through measuring perceptions, we gain a deeper understanding of why employees might perceive workplace events as discriminatory, especially those that are subtle and open to alternative interpretations.

This research also offers important implications for practice. Discrimination is a workplace event that has evolved over the years and organizations have changed how they recognize and address discrimination. Furthermore, recent divisiveness in society has contributed to a growing backlash to diversity, equity and inclusion initiatives. As a result, a broader range of employees (i.e., non-protected social groups) are reporting increases in PWD. For example, a poll of 3,453 adults by National Public Radio, the Robert Wood Johnson Foundation, and the Harvard T.H. Chan School of Public Health found that 55% of White adults reported feeling that discrimination exists against White people in America (Gonyea, 2017). This dissertation's inclusive approach (including participants from non-protected classes in the sample) aims to inform why organizations are beginning to see a change in employee PWD.

Subtle Discrimination

Following the Civil Rights Act of 1964 that made the differential treatment of employees based on identification with protected groups (race, color, religion, sex, or national origin) illegal, the attention paid to subtle discrimination increased dramatically. The defining feature of subtle discrimination is the lack of clear-cut intent. In Jones et al.'s (2017) framework, subtle discrimination ranges on two continua: level of subtlety (from overt to ambiguous) and formality (from formal to interpersonal). Overt discrimination involves negative treatment directed towards individuals on the basis of their minority status membership that has clear and harmful intent. Interpersonal discrimination manifests itself as disrespectful, general rudeness, and/or hostile behavior. Formal discrimination refers to discrimination that has job-related implications.

Klein and Briggs (2017) discussed how various constructs in the workplace mistreatment literature fall within the subtle discrimination dimension across the subtle and formal continua. For example, selective incivility, defined as rude and discourteous behavior that is highly ambiguous in its intent and is directed towards specific groups of people (Cortina, 2008), is a form of subtle discrimination. It is characterized as subtle in nature and more interpersonal than formal because of its social dynamic focus. Social undermining, described as intentional actions that hinder a target's ability to establish and maintain positive relationships and work-related success (Duffy et al., 2002), also falls within the subtle discrimination dimension when it is directed at specific groups of people. This form of mistreatment, contrary to selective incivility, is characterized as more formal than interpersonal because of its work-related implications. Finally, microaggressions, defined as ‘‘brief and commonplace daily verbal, behavioral, or environmental indignities" (Sue et al., 2007, p. 273), also falls within the subtle discrimination

dimension when it is directed towards specific groups of people, and is characterized as neutral on the formality-interpersonal continuum according to Klein and Briggs (2017).

While I am not investigating microaggressions specifically, elaborating on this type of everyday workplace mistreatment experience helps bring to light what individuals may frequently be perceiving when they report subtle discrimination. Sue et al.'s (2007) model includes different subtypes of microaggressions. Examples include microinvalidations, described as actions that nullify a groups' thoughts, feelings, or experiences, and microinsults, described as insensitive or rude actions that demean one's identity or heritage (Sue et al., 2007). Research over the past 10 years has started to examine themes of microaggressions that are perceived across different groups. For example, females of color often possess perceptions as being exoticized or treated as sexual objects (often perceived through comments and expressed assumptions), Asian males report perceptions of being desexualized, and males of color often possess perceptions of being treated as inferior and criminalized (often perceived through body language and movement; Nadal et al., 2015).

Overt Discrimination

Overt discrimination is a dimension of discrimination that is characterized as easier to detect than subtle discrimination. Many times, overt discrimination can be clear cut and objective, such as being a called a racial slur or being the target of humiliating jokes. This characteristic is distinct from subtle discrimination, such that with subtle discrimination there can be variance amongst people in how they perceive an event (i.e., discriminatory or innocuous). Klein and Briggs (2017) proposed various forms of workplace mistreatment that fall within the overt discrimination dimension. For example, they identified abusive supervision, defined as the engagement in hostile verbal and nonverbal behaviors, excluding physical contact by supervisors

(Tepper, 2000), as a construct that falls within the overt discrimination dimension when recipients perceive that the behavior is directed at them because of their membership in a specific group. It is characterized as more formal than interpersonal because subordinates are economically dependent on supervisors. Bullying is defined as the occurrence when one or more persons "systematically and over time feel that they have been subjected to negative treatment on the part of one or more persons, in a situation in which the person(s) exposed to the treatment have difficulty in defending themselves against it" (Hauge et al., 2007, p. 227). Bullying is a form of overt discrimination when one is subject to a pattern of abusive physical and/or nonphysical acts and the recipient believes that such behavior is directed at them because of their identity to a specific group. Klein and Briggs (2017) proposed that bullying is slightly more formal than interpersonal and not as overt as abusive supervision. This may be because the nature of bullying is subtle enough that it can continue to happen and likely have more work-related than relationship outcomes. Hostile sexism is defined as overtly antagonistic attitudes toward females (Dardenne et al., 2007) and benevolent sexism is defined as protective actions by males under the assumption that females are incompetent and/or weak (Chawla et al., 2019). These behaviors are categorized by Klein and Briggs (2017) to fall within the overt dimension of discrimination and are characterized as more interpersonal than formal because of the social dynamic focus. These types of behaviors are also much more subjective than objective because they more heavily involve interpretation of intention.

Upon reviewing the workplace discrimination literature, there are obvious limitations of how discrimination has been previously considered and measured. For example, the literature largely does not address how majority groups perceive workplace discrimination even though social psychology research has found that these groups often do perceive discrimination

(Sullivan et al., 2011; Young & Sullivan, 2016). Furthermore, PWD measures usually are not examined multidimensionally and researchers tend to ignore the nuances across subtlety and formality.

The current study addressed these limitations by operationalizing PWD as multidimensional as well as investigating perceptions from both majority and minority groups. This study examined whether hostile attribution bias, group dissimilarity, and diversity climate have varied relationships with three types of PWD (subtle, interpersonal, and formal discrimination). These three types were investigated because they overlapped well with the items of a validated measure of PWD. Furthermore, differences in frequencies of PWD across demographic groups as well as whether demographic characteristics moderate the relationships between PWD and job attitude outcomes were investigated. This novel approach for examining factors that contribute to different forms of PWD as well as the relationship with and impact of PWD across demographic groups helps advance our understanding of what drives perceptions as well as outcomes of workplace discrimination.

Hostile Attribution Bias

Hostile attribution bias (HAB) is described as the extent to which people attribute hostile intentions to others (Milich & Dodge, 1984). Individuals who are high in HAB are more likely to view ambiguous intentions of other people as hostile than those who are low in HAB. Previous research found that HAB has a significant correlation with perceptions of interpersonal conflict (r = 0.34 – 0.59; Spector et al., 2022; r = 0.37; Spector & Zhou, 2014;) indicating that those who are higher in HAB are more likely to perceive negative interactions with others at work. While HAB and PWD have not been studied together specifically, HAB has been found to be negatively related to self-esteem (Haertel, 2016), and self-esteem is negatively related to

perceptions of discrimination (Schmitt & Branscombe, 2002). Based on the tendency for those high on HAB to perceive others to have harmful intentions, I would expect them to be more likely to interpret interactions with others as being purposely harmful and likely discriminatory. This leads to:

Hypothesis 1a: There will be a positive relationship between hostile attribution bias and perceptions of workplace discrimination; those high on HAB are more likely to perceive workplace discrimination.

With regards to specific types of discrimination that those who are high in HAB would most likely report, it would be expected that HAB would have a stronger relationship with discrimination that is more subtle in nature given that those who are high in HAB are predisposed to assume that others' intentions are malicious when the situation is ambiguous. When the situation is not ambiguous, it is likely the case that all individuals, regardless of one's levels of HAB, would view the situation as discriminatory. Because those who are high in HAB are more likely to interpret subtle situations as harmful than those who are low in HAB, I predict:

Hypothesis 1b: There will be a stronger relationship between hostile attribution bias and reported occurrences of subtle discrimination than with interpersonal discrimination and formal discrimination.

Group Dissimilarity

Relational demography theory submits that individuals continuously compare their own demographic makeup with that of the social unit's demographic composition to determine similarity (Tsui et al., 1992). This comparison is proposed to influence one's perceptions of workplace discrimination, such that when one perceives themselves as dissimilar to their surrounding work group (i.e., immediate team or broader organization), they are likely to view

their "otherness" as a deficiency and a primary reason for negative treatment (Riordan et al., 2005). Because of the tendency for individuals in dissimilar group settings to view their dissimilarity as a reason for negative treatment, I propose:

Hypothesis 2a: There will be a positive relationship between perceived group dissimilarity and perceptions of workplace discrimination; those who report high perceived group dissimilarity are more likely to perceive workplace discrimination.

While much of the research on relational demography has tested more distal outcomes (e.g., organizational commitment; Tsui et al., 1992), less work has examined more proximal outcomes such as PWD. Previous research did find that sex dissimilarity was related to higher levels of perceived conflict (Pelled, 1996). More recent research found a significant relationship between minority status within one's work environment and perceptions of racial/ethnic harassment and discrimination (r = 0.18; Bergman et al., 2012). Lastly, research found that perceptions of dissimilarity between subordinate and supervisor was related to higher levels of perceived abuse reported by the subordinate (Tepper et al., 2011). Because previous research found a positive relationship between group dissimilarity and perceptions of treatment that is consistent with interpersonal discrimination, it is predicted that perceived group dissimilarity will be more strongly related to the perceptions of interpersonal discrimination. When there are low perceptions of group dissimilarity, there are less feelings of "otherness" and less of a reason to perceive unfair and hostile treatment from others. Therefore:

Hypothesis 2b: There will be a stronger relationship between perceived group dissimilarity and reported occurrences of interpersonal discrimination than with subtle discrimination and formal discrimination.

Psychological Diversity Climate

Psychological diversity climate refers to employees' perceptions that their organization's policies, procedures, and practices are fair and facilitate a multicultural workforce (Mor Barak et al., 1998). Employees who are high in psychological diversity climate report outcomes that are correlates of PWD, such as being treated better at work (high perceptions of interactional justice; Buttner et al., 2010), experiencing less interpersonal conflict (Drach-Zahavy & Trogan, 2013), and reporting higher levels of job attitudes (job satisfaction; Hofhuis et al., 2012); organizational commitment; Buttner et al., 2010; McKay et al., 2007). Based on the overlap between psychological diversity climate and conditions that are less conducive to PWD, I would expect those who report high psychological diversity climate to perceive low workplace discrimination. Therefore:

Hypothesis 3a: There will be a negative relationship between psychological diversity climate and perceptions of workplace discrimination; those that report high levels of psychological diversity climate are less likely to perceive workplace discrimination.

A primary component of psychological diversity climate includes perceptions of fairness around policies and procedures, such as providing equitable access to employment opportunities (i.e., being hired and/or promoted) as well as equal treatment once hired to the job. Therefore, it is highly likely that if employees perceive an organization to have diversity-minded recruitment, selection, and placement procedures, as well as formal diversity policies and inclusivity training, they will be dissuaded from engaging in formal discrimination because that would be counter to such policies and procedures. Because the primary aspect of psychological diversity climate relates to the formal aspects of discrimination, it is expected that there will be a stronger relationship between psychological diversity climate and perceived formal discrimination than

with other forms of discrimination. When there are low levels of psychological diversity climate, it is expected that perceptions of formal discrimination would be particularly high because employees perceive that the organization condones discrimination and that there would be no expected policies or penalties enforced to mitigate discriminatory acts. Therefore:

Hypothesis 3b: There will be a stronger relationship between psychological diversity climate and reported occurrences of formal discrimination than with subtle discrimination and interpersonal discrimination.

Sex and Race

Social psychology research suggests that members of non-protected groups, such as Whites and males, also perceive discrimination through a mechanism called competitive victimhood, defined as the tendency to view one's in-group as having comparatively suffered relative to an out-group (Young & Sullivan, 2016). Workplace discrimination research has yet to report on what types of discriminatory events protected and non-protected groups are most likely to perceive. Furthermore, there is no clear-cut theoretical argument for why I can expect a certain sex or race to perceive one type of discrimination more frequently relative to the comparison group. On the one hand, there is a long history in the United States of females and Blacks experiencing more formal and interpersonal forms of workplace discrimination. Indeed, Gallup and Pew Research Center surveys found that females and Blacks file more discrimination cases than males and Whites (Horowitz et al., 2019; Lloyd, 2021). Furthermore, scholars suggest that stigmatized groups are more likely to attribute ambiguous interactions as discriminatory as a form of coping (as opposed to attributing the interaction as a result of a personal deficiency; Crocker et al., 1991). This line of research indicates that females and Blacks are more likely to also perceive subtle discrimination more frequently relative to males and Whites.

On the other hand, recent research has found that the emergence of pro-diversity messages from organizations can be viewed as threatening to high-status groups (Whites and males). As such, Whites are likely to express concerns about being treated unfairly and about anti-white discrimination when applying for a job at an organization that expresses pro-diversity values (Dover et al., 2016). Furthermore, a comparison of recent data indicates that Whites and males are reporting perceptions of workplace discrimination at similar rates as Blacks and females. For instance, recent research found that 31% of Whites reported being personally discriminated against when applying for jobs, and 32% reported receiving racial slurs or negative words towards them on the job for being White (Gonyea, 2017). These data compare similarly to other survey data that found that 42% of females reported experiencing workplace discrimination (25% report pay inequity, 23% report being treated as if they were incompetent; Parker & Funk, 2017) and 24% of Blacks report being discriminated against just within the past 12 months at their job (Lloyd, 2021). Because there are no clear-cut theoretical arguments proposing how Blacks and Whites or females and males might perceive a specific type of PWD more so than the other group, my investigation into relative frequencies of different types of PWD across demographic groups will remain a research question.

Research Question 1: Are there differences in the relative frequencies of reporting different types of PWD across demographic groups?

Potential Outcome Variables

It is well established that PWD is associated with lower job satisfaction and organizational commitment (Ensher et al., 2001; Sanchez & Brock, 1996). These findings can be explained through affective events theory (AET), which posits that negative affective events can negatively impact employee's attitudes and commitment towards the job (Weiss & Cropanzano,

1996). Less work, however, has examined how demographic differences impact the relationship between PWD and such outcomes.

Experimental studies have found that both subtle and overt forms of interpersonal conflict can elicit strong responses from non-protected classes (Salomon & Jagusztyn, 2008; Word et al., 1974). In one study, a mock interview was conducted and trained interviewers were randomly assigned to either enact subtle discriminatory behaviors (i.e., lack of eye contact, indirect body positioning; these behaviors were found to be more commonly directed towards black interviewees in a previous study within the same paper) or the control condition (normal eye contact and body positioning). Results found that Whites in the subtle discrimination condition were rated as more nervous and performed worse compared to those in the control condition (Word et al., 1974). In another study, participants were brought to the lab and heart rate was measured before and after an experimenter engaged in an interpersonal conflict task (i.e., cold and rude behaviors). Results found that Whites had significant increases in heart rate reactivity whereas Blacks did not, indicating that Whites found the rude treatment to be more stressful than Blacks (Salomon & Jagusztyn, 2008).

Jones and colleagues (2017) propose one explanation for such findings; repeated exposure to discrimination can produce a habituation effect over time. As such, it is expected that Blacks and females will be better able to cope with instances of discrimination than Whites and males. On the other hand, Whites and males may be more reactive to instances of discrimination because they have not developed habituation to such experiences. Based on the previously discussed work, I expect that Blacks and females will have weaker relationships between PWD and job satisfaction and organizational commitment.

Hypothesis 4: Demographics will moderate the relationship between PWD and job satisfaction and organizational commitment such that the negative relationships will be weaker for Blacks and females compared to Whites and males.

Current Study

Because the aim is to investigate whether variables of interest correlate with each other and if groups moderate such relationships, the most appropriate and efficient methodological approach is to conduct a cross-sectional survey. In the current study, a single time point survey was completed by university employees. University employees are an optimal sample for this type of research because they are a sufficiently diverse group (University of South Florida, 2019) and the higher education sector continues to have documented workplace discrimination problems (Museus et al., 2015).

While there is currently no published scale that intentionally operationalizes PWD as a multidimensional construct, the Chronic Work Discrimination and Harassment (CWDH; (D. Williams, 2012) scale was used for the current study because the items appeared to be categorized into three types of PWD. The CWDH scale is largely adapted from the Perceived Racism Scale (PRS; McNeilly et al., 1996) and the PRS does indeed group items into subtle, interpersonal (labeled as Exposure to Racism in Public Settings), and formal (labeled as Exposure to Racism on the Job) discrimination categories. I grouped the items similarly based upon their fit within the different previously discussed types of PWD. For example, the item "how often do you feel that you are ignored or not taken seriously by your boss?" fits within the subtle discrimination dimension because there is lack of clear-cut intention for the negative treatment. The item "how often do your coworkers direct slurs at you?" fits within the interpersonal discrimination dimension because it is a form of hostile behavior. The item "how

often has a coworker with less experience and fewer qualifications gotten promoted before you" fits within the formal discrimination dimension because the mistreatment experience has job-related implications.

CHAPTER TWO:

METHOD

Participants and Procedures

A link to a survey hosted by Qualtrics was sent to all full-time university employees at four universities in the southeastern United States. A recruitment email was sent to 36,058 email addresses obtained via public record requests. While this approach makes it difficult to know how many recruitment e-mails were successfully delivered (e.g., inactive email addresses or automatic spam filtering), Qualtrics reported 3,472 individuals clicked the survey link and 2,419 participants began the survey. The response rate between those who clicked the survey link and began the survey was 69.67% and the response rate between the number of recruitment emails sent out and those who began the survey was 6.71%. Data collection occurred between May 16 and May 31, 2022. From this data set, 671 participants were removed for quitting the survey prior to the final question and 138 participants were removed for failing the attention check (a single item that stated, "please select 'disagree'"). The final data set contained a sample size of 1,610.

Because of concerns around anonymity, I combined data across universities and did not examine between university differences. The mean age of the final sample was 45.12 (SD = 12.87), the majority of participants were female (66.96%), and 76.0% identified as White, 9.9% identified as Black or African American, 4.3% identified as Asian, 4.1% identified as Other, and 5.8% identified as mixed race (see Table 1 for count and percentage of sample for race,

ethnicity). Based upon this sample breakdown, I am able to meaningfully compare Black vs White and male vs female groups for Research Question 1 and Hypothesis 4.

Measures

The full set of items used in the survey is presented in Appendices A-H.

Demographics

Race, sex, age, ethnicity, and tenure were measured with single items that contained, multiple choice responses, open-ended questions, and drop-down menus. Age was measured with the item, "what is your age?" and included a drop-down menu from 18 to 99 years old; race was measured with the item, "what is your race? (Please select all that apply)" and included the following response options "White", "Black or African American", "American Indian or Alaska Native", "Asian", "Native Hawaiian and Pacific Islander"; sex was measured with the item, "what is your sex?" and included response options "Male", "Female", or "Other (Please specify); ethnicity was measured with the item, "are you of Hispanic, Latino, or Spanish origin?" and included yes or no as response options. The questions and response options to the previous items were taken from the US Census survey (US Census Bureau, 2020). In an effort to examine whether I collected data from a broad representation of both newer and long-tenured university employees, I included the item "when did you start working with your current employer?" and included a dropdown menu with years dating back from 2022 to 1950.

Hostile Attribution Bias

Hostile attribution bias was measured by the 7-item Workplace Hostile Attribution Style (WHAS; Bal & O'Brien, 2010). While many other HAB measures are either lengthy, not available for research, or have poorly documented psychometric properties (i.e., Homant & Kennedy, 2003; James et al., 2004), the WHAS is relatively short, accessible, and has

demonstrated acceptable psychometric properties both in the over 1,500 participant validation study (strong demonstration of convergent and discriminant validity; Bal & O'Brien, 2010) and in subsequent research (Coefficient Alpha (α) scores all over .75; Howard, 2021; Pindek et al., 2019; Zhou et al., 2015). A sample item includes, "When coworkers leave me out of social events, it is to hurt my feelings." Participants responded on a 5-point Likert scale from "Strongly agree" to "Strongly disagree" and an overall HAB score was calculated by summing and averaging the items; $\alpha = .81$.

Perceived Group Dissimilarity

Perceived group dissimilarity was measured by a 3-item scale. The items include "To what extent are you similar to the coworkers in your current job based on your: Race", "To what extent are you similar to the coworkers in your current job based on your: Sex", and "To what extent are you similar to the coworkers in your current job based on your: Age." Participants responded on a 5-point Likert scale from "no one is similar to me" to "everyone is similar to me." This type of measure is similar to how other relational demography studies have measured perceived group similarity (Avery et al., 2007, 2008). In these studies, participants classified the sex, race, and age of their coworkers as mostly similar, balanced, or mostly dissimilar.

Psychological Diversity Climate

Psychological diversity climate was measured by 10-items from the Organizational Fairness and Organizational Inclusion factors of the Diversity Climate Perceptions instrument (Mor Barak et al., 1998). Similar to how this instrument has been used to measure psychological diversity climate in past research (Gonzalez & DeNisi, 2009; McKay et al., 2007), the items were summed and averaged, such that higher scores representing more positive perceptions of the organization's diversity climate. A sample item includes, "Managers here have a track record

of hiring and promoting employees objectively regardless of race, sex, religion, or age." Participants responded on a 6-point Likert scale from "Strongly agree" to "Strongly disagree"; α = .88.

Job Satisfaction

Job satisfaction was measured by 3 items from the Michigan Organizational Assessment Questionnaire (Camman et al., 1975). A multistudy paper by Bowling and Zelazny (2022) found evidence to support construct validity (established convergent and discriminant validity) of the MOAQ indicating its acceptability as a global measure of job satisfaction. A sample item includes, "In general, I don't like my job." Participants responded on a 6-point Likert scale from "Agree very much" to "Disagree very much" and an overall job satisfaction score was calculated by summing and averaging the items; α = .91.

Organizational Commitment

Organizational commitment was measured by the 8-item Affective Commitment subscale from the Organizational Commitment Scale (Allen & Meyer, 1990). This scale has been widely used as a summated rating scale measure of affective commitment (validation paper has over 22,400 citations according to Google Scholar) and its psychometric properties suggest that it is a reliable measure (Allen & Meyer, 1990). A sample item includes, "I would be very happy to spend the rest of my career with this organization." Participants responded on a 7-point Likert scale from "Strongly agree" to "Strongly disagree" and an overall organizational commitment score was calculated by summing and averaging the items; α = .88.

Perceived Workplace Discrimination

Perceived workplace discrimination was measured by the 10-item Chronic Work Discrimination and Harassment (CWDH) scale (Williams et al., 2012). The CWDH was

originally adapted from the Perceived Racism Scale (McNeilly et al., 1996) and the Los Angeles Study of Inequality (Bobo and Suh, 2000) and was developed for the YES Health Study. While the original psychometric results are not publicly available, prior research has found acceptable internal consistency reliability for the PRS (coefficient alphas ranging from .87-.96; McNeilly et al., 1996) as well as an adapted version of the CWDH (coefficient alphas ranging from .88-.92; Blackhurst, 2016).

Previous research using the CWDH typically examines the attributions of discrimination, ultimately operationalizing it as a unidimensional construct (e.g., perceptions of sex discrimination and perceptions of age discrimination; Blackhurst, 2016), however, a review of the measure's content suggests that the scale measures multiple facets of PWD (subtle discrimination, interpersonal discrimination, and formal discrimination). To adequately measure the facets of PWD as opposed to discrimination attributions, I adapted the measure by removing attributions from the items (e.g., the terms "racial" and "ethnic"). A sample item includes, "How often are you unfairly given the jobs that no one else wanted to do?". Participants responded on a 5-point Likert scale from "Never" to "Once a week or more." An overall as well as facet level scores of PWD was calculated by summing and averaging the items; $\alpha = .88$.

In the original CWDH measure, the only attributions captured were race or ethnicity. Because individuals can attribute experiences of workplace mistreatment to a variety of different identities, I created a list of follow up items in an effort to more precisely measure perceptions of workplace discrimination. For every item when a participant reported experiencing a frequency greater than never, participants were further asked, "What do you think is the main reason for why…" The response options for the follow up items were chosen from the Everyday Discrimination Scale list (Williams et al., 1997) and included "Your age", "Your race", "Your

ethnicity", "Your sex", "Your religion", "Your national origin", "Your height", "Your weight", "Your sexual orientation", and "Other." Participants could select as many that are applicable for each item.

Attributions of workplace mistreatment were treated in two ways. The reason for doing so is that when participants report multiple attributions to workplace mistreatment, it is difficult to tell how much they weigh a particular attribution to the mistreatment experience, so comparing the results of both a summated rating and a checklist rating is warranted. For the first treatment, the ratings associated with each attribution were summed and averaged. For example, if a participant responded that race was a reason why they experienced 3 of the CWDH items, then the frequency rating was summed and averaged for those 3 items to calculate a race-based PWD score for that participant. Let's say the participant gave a rating of 3, 4 and 5 for the 3 experiences; the race-based rating score for this participant would be a 4. A second approach for treating the attribution data was to sum the number of items for each attribution. For example, if race was attributed to 3 items of workplace mistreatment, then that participant would receive a score of 3 for race-based PWD. These two approaches provide more precision to PWD measurement than what has typically been done in the literature (using demographic information as the default discrimination attribution (i.e., Cortina et al., 2013) or using a one-item attribution for a multi-item discrimination measure (i.e., Williams et al., 1997). These two treatments were used for exploratory purposes whereas the original CWDH measure was used for hypothesis testing.

Table 1

Count and Percentage of Sample for Demographics

Demographics	Count	Percentage of Sample
White	1224	76.02%
Black	159	9.88%
Asian	70	4.35%
American Indian or Alaska Native	5	0.31%
Other Race	66	4.10%
Mixed Race	86	5.34%
Male	515	31.99%
Female	1078	66.96%
Other Sex	17	1.05%
Latino	223	13.85%
Non-Latino	1384	85.96%

CHAPTER THREE:

RESULTS

Preliminary Analyses

Data cleaning, descriptive statistics, assumption checks, and all analyses were conducted using the statistical computing software R (R Core Team, 2019). Means, standard deviations, skewness, and kurtosis, of primary study variables were computed using the 'psych' package (Revelle, 2020) and are presented in Table 2 for the overall sample. Correlations of the study variables are presented in Table 3. The values for skewness and kurtosis revealed that there were non-normal distributions for only job satisfaction (skewness value of -1.14). Given that the nature of this variables typically yields skewed distributions (MOAQ means between 4.98 and 5.24 found in Bowling & Zelazny, 2022), I proceeded to continue with the planned analyses.

To be sure that the PWD measure would be useable for testing the hypotheses (a 3-factor structure for the subtle discrimination, interpersonal discrimination, and formal discrimination factor was expected), a 3-factor CFA was conducted. The items, "At work, when different opinions would be helpful, how often is your opinion not asked for?", "How often do you feel that you are ignored or not taken seriously by your boss?", and "How often do others assume that you work in a lower status job than you do and treat you as such?" were included in the subtle discrimination factor. The items, "How often does your supervisor or boss direct racial or ethnic slurs or jokes at you?", "How often do your coworkers direct racial or ethnic slurs or jokes at you?", and "How often have you been unfairly humiliated in front of others at work?" were

included in the interpersonal discrimination factor. The items, “How often are you UNFAIRLY given the jobs that no one else wants to do?”, “How often are you watched more closely than others?”, “How often do you feel that you have to work twice as hard as others at work?”, and “How often has a coworker with less experience and fewer qualifications gotten promoted before you?” were included in the formal discrimination factor.

A 3-factor CFA using maximum-likelihood estimation with factor intercorrelations estimated was conducted via the ‘lavaan’ R package (Rosseel, 2012). The results of the CFA showed that the 3-factor structure provided satisfactory fit, χ^2 (32, N = 1610) = 68.52 (Comparative Fit Index [CFI] = .97, Tucker-Lewis Index [TLI] = .96, root-mean-square error of approximation [RMSEA] = .06, standardized root mean square residual [SRMR] = .04). See Table 4 for the full results of the CFA, Table 5 for the estimated inter-factor correlations, and Table 6 for the comparison chi-square results to a 1-factor model. In summary, all 10 items of the scale were significantly related to their latent subfactors (all *p*s < .001), the correlations between factors ranged from .26 (between subtle and interpersonal discrimination) and .58 (between subtle and formal discrimination), and the 3-factor model showed significant model fit improvement (χ^2 (2, N = 1610) 319.00, $p < .001$) over the 1-factor comparison model (RMSEA value improved by .03, CFI value improved by .04, TLI value improved by .06, SRMR value improved by .02).

Hypothesis Testing

Hypothesis 1a stated that there would be a positive relationship between HAB and overall PWD (i.e., the average score of all 10 PWD items). Results from the correlation test indicated that there was a significant positive relationship between HAB and PWD ($r = .53$[1], $p < .001$

[1] All correlations are Pearson product-moment correlations.

[LLCI = .49, ULCI = .56]), therefore, Hypothesis 1a is supported. Hypothesis 1b stated that there would be a significantly stronger relationship between HAB and reported occurrences of subtle discrimination than with interpersonal discrimination or formal discrimination. Results from the correlation test indicated that there was a significant positive relationship between HAB and subtle discrimination (r = .47, p < .001 [LLCI = .43, ULCI = .51]), a significant positive relationship between HAB and interpersonal discrimination (r = .41, p < .001 [LLCI = .37, ULCI = .49]), and a significant positive relationship between HAB and formal discrimination (r = .48, p < .001 [LLCI = .44, ULCI = .52]). A t-test for dependent correlations found that the correlation between HAB and subtle discrimination was significantly stronger than the correlation between HAB and interpersonal discrimination (t (1607) = 2.85[2], p<.05), but not the correlation between HAB and formal discrimination (t (1607) = -.52, p = .60). Thus, Hypothesis 1b is partially supported.

Hypothesis 2a stated that there would be a positive relationship between perceived group dissimilarity and PWD. Results from the correlation test indicated that there was a significant positive relationship between perceived group dissimilarity and PWD (r = .19, p < .001 [LLCI = .14, ULCI = .23]), therefore, Hypothesis 2a is supported. Hypothesis 2b stated that there would be a significantly stronger relationship between perceived group dissimilarity and reported occurrences of interpersonal discrimination than with subtle discrimination or formal discrimination. Results from the correlation test indicated that there was a significant positive relationship between perceived group dissimilarity and subtle discrimination (r = .14, p < .001 [LLCI = .09, ULCI = .18]), a significant positive relationship between perceived group dissimilarity and interpersonal discrimination (r = .15, p < .001 [LLCI = .10, ULCI = .19]), and a

[2] All t tests are Hotelling's t test.

significant positive relationship between perceived group dissimilarity and formal discrimination (r = .20, p < .001 [LLCI = .15, ULCI = .24]). A t-test for dependent correlations indicated that the correlation between perceived group dissimilarity and interpersonal discrimination was not significantly stronger than the correlation between perceived group dissimilarity and subtle discrimination (t(1607) = .42 p=.68). Interestingly, the correlation between perceived group dissimilarity and formal discrimination was stronger than the correlation between perceived group dissimilarity and interpersonal discrimination (t(1607) = -2.89 p<.05). Thus, hypothesis 2b is not supported.

Hypothesis 3a stated that there would be a negative relationship between psychological diversity climate and PWD. Results from the correlation test indicated that there was a significant negative relationship between psychological diversity climate and PWD (r = -.69, p < .001 [LLCI = -.71, ULCI = -.66]), therefore, Hypothesis 3a is supported. Hypothesis 3b stated that there would be a significantly stronger relationship between psychological diversity climate and reported occurrences of formal discrimination than with subtle discrimination or interpersonal discrimination. Results from the correlation test indicated that there was a significant negative relationship between psychological diversity climate and subtle discrimination (r = -.64, p < .001 [LLCI = -.67, ULCI = -.61]), a significant negative relationship between psychological diversity climate and interpersonal discrimination (r = -.46, p < .001 [LLCI = -.50, ULCI = -.42]), and a significant negative relationship between psychological diversity climate and formal discrimination (r = -.64, p < .001 [LLCI = -.67, ULCI = -.61]). A t-test for dependent correlations indicated that the correlation between psychological diversity climate and formal discrimination was significantly stronger than the correlation between psychological diversity climate and interpersonal discrimination (t(1607) = -13.29, p<.05), but

not between psychological diversity climate and subtle discrimination ($t(1607) = 0.00$, $p = 1.00$). Therefore, Hypothesis 3b is partially supported.

Research Question

Research Question 1 asked if there are differences in reporting different types of PWD between protected/non-protected demographic groups. The following analyses were conducted using the 'lme4' package in R (Bates et al., 2015). First, a 2x2 multivariate analysis of variance (MANOVA) was conducted to examine the interaction and main effects of race and sex on subtle, interpersonal, and formal discrimination. The main effects of race ($F(1,1379) = 3.58$, $p < .05$, $\eta^2 = .01$) and sex ($F(1,1589) = 16.83$, $p < .001$, $\eta^2 = .04$) were significant but not the interaction between race and sex ($F(1,1367) = 0.36$, $p = .78$, $\eta^2 = .00$).

Follow up 2x2 univariate analyses were conducted using demographics groups as the independent variable (race and sex because of the significant main effects in the MANOVA results) and the perceived workplace discrimination sub-dimension composite variables as the dependent variable. Results from the ANOVA with subtle discrimination as the dependent variable found that occurrences of subtle discrimination did significantly differ between males and females (F (1,1591) = 53.17, $p < .001$, $\eta^2 = .03$) and between Whites and Blacks (F (1,1381) = 7.20, $p < .01$, $\eta^2 = .01$). Results from the ANOVA for interpersonal discrimination found that occurrences of interpersonal discrimination did significantly differ between males and females (F (1,1591) = 7.36, $p <. 01$, $\eta^2 = .01$) and between Whites and Blacks (F (1,1381) = 8.97, $p < .01$, $\eta^2 = .01$). Results from the ANOVA for formal discrimination found that occurrences of formal discrimination did significantly differ between males and females (F (1,1591) = 46.94, $p = < .001$, $\eta^2 = .03$) and between Whites and Blacks (F (1,1381) = 28.08, $p = < .001$, $\eta^2 = .02$). An examination of the PWD dimension means across demographic groups indicates that Blacks

significantly perceived more frequent rates of subtle, interpersonal, and formal discrimination than Whites and females significantly perceived more frequent rates of subtle, interpersonal, and formal discrimination than males (see Table 8 for a breakdown of means, SDs, and difference tests across demographic groups).

While the interaction effect on the MANOVA was nonsignificant, follow up 2x2 univariate analyses were still conducted using intersectional demographic groups as the independent variable (race by sex) and the PWD sub-dimension composite variables as the dependent variable. Results from the ANOVA with subtle discrimination as the dependent variable found that occurrences of subtle discrimination did significantly differ across race by sex groups (F (1,1369) = 47.29, $p < .001$, $\eta^2 = .03$). Results from the ANOVA with interpersonal discrimination as the dependent variable found that occurrences of interpersonal discrimination did significantly differ across race by sex groups (F (1,1369) = 15.98, $p < .001$, $\eta^2 = .03$). Finally, results from the ANOVA with formal discrimination as the dependent variable found that occurrences of formal discrimination did significantly differ across race by sex groups (F (1,1369) = 68.26, $p < .001$, $\eta^2 = .05$). An examination of the PWD dimension means across race by sex groups indicates that Black females perceive the most frequent rates of subtle, interpersonal, and formal discrimination followed by White females (except for interpersonal discrimination), Black males, and White males (see Table 9 for a breakdown of means, SDs, and difference tests across race by sex groups).

Hypothesis 4 stated that demographics will moderate the relationship between PWD and job satisfaction and organizational commitment, such that the relationships will be weaker for Blacks and females compared to Whites and males. Moderated multiple regression analyses were conducted using the 'lme4' package in R. Results from the overall moderated multiple regression

test of job satisfaction on the interaction between sex and PWD was significant (F (3,1589) = 237.50, p = <.001, R^2 = .31). The main effects of PWD (β = -.73, t(3, 1589) = -12.02, p<.001) and sex (β = .45, t(3, 1589) = 3.02, p<.01) were significant. Furthermore, the interaction effect of PWD*sex was also significant (β = -.19, t(3,1589) = -2.69, p<.01). The overall model with organizational commitment as the dependent variable and sex as the moderator variable was significant (F(3,1589) = 159.90, p <.001, R^2 = .23) along with the main effect of PWD (β = -.75, t(3, 1589 =-11.13, p<.001), but the main effect of sex (β = .13, t(3, 1589) = .83, p = .49) and the interaction effect (β = -.06, t(3, 1589 =-.70, p = .49) was not significant. An examination of Figure 1 indicates that females had lower levels of job satisfaction than males when PWD was high (+1SD from mean) but higher levels of job satisfaction than males when PWD was low (-1SD from mean).

The multiple moderated regression test of the race*PWD interaction on job satisfaction was significant overall (F (3,1379) = 208.50, p <.001, R^2 = .31) and the main effect of PWD on job satisfaction was significant (β = -.78, t(3, 1379) = 28.57, p < .001), but the main effect of race (β = .17, t(3, 1379) = .73, p = .47) and the interaction effect (β = -.12, t(3, 1379) = -1.15, p = .25) was not significant. The multiple moderated regression test of the race*PWD interaction on organizational commitment was significant overall (F (3,1379) = 150.80, p <.001, R^2 = .25) and the main effect of PWD on organizational commitment was significant (β = -.74, t(3, 1379) = -7.20, p < .001), but the main effect of race (β = .32, t(3, 1379) = 1.25, p = .21) and the interaction effect (β = -.09, t(3, 1379) = -0.83, p = .41) was not significant. Thus, Hypothesis 4 was partially supported.

Exploratory Analyses

As mentioned in the methods section, data were collected that measured attributions of reported PWD to as many demographic identities that applied. One treatment of this data involved averaging ratings for mistreatment experiences across attribution categories. Table 9 reports means and standard deviations for all PWD items for this approach. The most commonly reported items included working twice as hard (m = 2.75), unasked opinions (m = 2.53), being ignored (m = 2.49), and assumed lower status (m = 2.30), whereas the least frequently reported items were the three interpersonal discrimination items: supervisor slurs (m = 1.25), coworker slurs (m = 1.39), and being humiliated (m = 1.48). The second approach for treating the attribution data was to sum the items for each attribution. Table 10 reports counts of all attribution categories for each mistreatment item. Similar to Table 9, Table 10 shows that the mistreatment items with the most attributions of discrimination include: working twice as hard (n = 1082), being ignored (n = 977), being assigned unfair jobs (n = 917) and being assumed lower status (n = 904). Supervisor slurs (n = 226), coworker slurs (n = 387), and being humiliated (n = 465) were also the mistreatment items with the least attributions of discrimination. Sex (n = 2058), age (n = 2010, and race (n = 900) were the most common attributions and religion (n = 124), height (n = 199), and sexual orientation (n = 238) were the least common attributions. Other was also a frequently chosen attribution to the mistreatment items (n = 3837). Table 11 shows sample ‘other’ responses for each mistreatment item. As an aside, 15.34% of males, 9.18% of females, 7.55% of Blacks, and 11.52% of Whites responded with “never” to all of the workplace mistreatment items. Of those who did report experiencing a workplace mistreatment experience, 63.76% of males, 80.18% of females, 87.76% of Blacks, and 72.39% of Whites

marked at least one of the attribution categories as a reason for their workplace mistreatment experiences (excluding the response option, 'other').

Means, SDs, and F-value difference scores from one-way analysis of variance (ANOVA) tests of each attribution ratings were calculated and compared across demographic groups (race and sex and race by sex; see tables 13 and 14). Table 12 shows that across every attribution Blacks had higher ratings than Whites and Females had higher ratings than Males. Table 13 shows that Blacks had significantly higher mean ratings of ethnicity, sex, and national origin attributions than Whites, and Black females had significantly higher mean ratings of ethnicity, sex, national origin, and race attributions than the other intersectional groups.

To answer the call for more intersectional research on discrimination (Hebl et al., 2020), I examined the effects of intersectionality on PWD. First, I conducted multiple moderated regression tests to examine the effects of sex (male vs female) on the relationship between perceptions of race-based discrimination (sum of all 10 items, as well as specifically for subtle, overt, and formal discrimination) and job satisfaction and organizational commitment. I also conducted multiple moderated regression tests to examine the effects of race (black vs white) on the relationship between perceptions of sex-based discrimination (sum of all 10 items, as well as specifically for subtle, overt, and formal discrimination) and job satisfaction and organizational commitment. The independent variable used for these tests were the counts of x-based discrimination (amount of PWD items that were attributed to race or sex). These tests produced non-significant interaction effects.

I followed up the previous multiple moderated regression analyses with another set of multiple moderated regression analyses to test the effects of race and sex on the relationship between perceptions of race and sex-based discrimination and job satisfaction and organizational

commitment using the ratings for the discrimination attributions. Results from these did not find a significant race*sex-based PWD interaction on job satisfaction and organizational commitment nor a sex*race-based PWD interaction on job satisfaction and organizational commitment.

Because age-based discrimination emerged as the second most frequently reported attribution of discrimination, I examined it further both with how it relates to different types of discrimination and as a moderator on the relationship between PWD and job satisfaction and organizational commitment. An examination of Table 3 shows that age more strongly correlates with formal discrimination than subtle and interpersonal discrimination. A t-test for dependent correlations found that the correlation between age and formal discrimination was significantly stronger than the correlation between age and interpersonal discrimination (t = -2.28, p<.05) but not significantly stronger than the correlation between age and subtle discrimination (t = -0.44, p<.66).

I also tested age as a moderator on the relationship between PWD and the two dependent variables. Results from the overall model of age moderating the relationship between PWD and organizational commitment was significant (F (3, 1606) = 185.8, p <.01; t = 16.15, p <.05, R^2 = .26). The main effects of PWD (β = -.44, t(3, 1606) = -3.37, p < .001) and age (β = .03, t(3, 1606) = 3.18, p < .001) were significant as well as the interaction effect (β = -.01, t(3, 1606) = -2.56, p < .05). Results from the overall model of age moderating the relationship between subtle discrimination and organizational commitment was also significant (F (3, 1606) = 191.2, p <.01; t = 17.64, p < .01, R^2 = .26). The main effect of subtle discrimination (β = -.28, t(3, 1606) = -3.09, p < .01) and age (β = .03, t(3, 1606) = 6.01, p < .001) was significant as well as the interaction effect (β = -.01, t(3, 1606) = -3.00, p < .01). Results from the overall model of age moderating the relationship between interpersonal discrimination and organizational

commitment was significant (F (3, 1606) = 79.64, p <.01, t = 13.72, p < .01, R^2 = .13). The main effect of interpersonal discrimination was not significant (β = -.10, t(3, 1606) = -0.56, p = .58), but the main effect of age (β = .04, t(3, 1606) = 6.11, p < .001) and the interaction effect (β = -.01, t(3, 1606) = -2.97, p < .01) were significant. The overall model of the relationship between formal discrimination and organizational commitment was significant (F (3, 1606) = 145.10, p <.01; t = 16.45, p = .001). The main effect of formal discrimination (β = -.35, t(3, 1606) = -3.08, p = .01), and age (β = .03, t(3, 1606) = 4.88, p < .001) were significant, but not the interaction effect (β = -.00, t(3, 1606) = -1.95, p = .05). An examination of Figures 2-4 indicates that older employees had lower levels of organizational commitment when there were higher levels of PWD, subtle, and interpersonal discrimination and higher levels of organizational commitment when there were lower levels of PWD, subtle, and interpersonal discrimination compared to younger employees.

Next, I inputted the rating of age-based discrimination (both for overall PWD and for subtle, interpersonal, and formal discrimination) as the independent variable in the model with age as the moderator and job satisfaction and organizational commitment as the dependent variables. The overall model of age moderating the relationship between interpersonal age-based discrimination organizational commitment was significant (F (3, 220) = 8.05, p <.05; t = -2.45, p < .05). The main effect of interpersonal age-based discrimination was not significant (β = .35, t(3, 1606) = 1.12, p = .26), but the main effect of age (β = .06, t(3, 1606) = 2.92, p < .01) and the interaction effect (β = -.02, t(3, 1606) = -2.45, p < .05) were significant. When count-based PWDs were inputted in the model, the overall model of age moderating the relationship between age-based PWD and organizational commitment was significant (F (3, 1606) = 50.75, p <.05; t = 22.79, p <.01, R^2 = .09). The main effect of age-based PWD was not significant (β = .00, t(3,

1606) = 0.10, p = .92), but the main effect of age (β = .02, t(3, 1606) = 6.86, p < .001) and the interaction effect (β = -.00, t(3, 1606) = -2.80, p < .01) were significant. The overall model of age moderating the relationship between age-based formal discrimination and organizational commitment was significant (F (3, 1604) = 16.83, p <.05; t = 16.90; p <.001, R^2 = .04) age-based PWD and organizational commitment. The main effect of age-based formal discrimination was not significant (β = .38, t(3, 1606) = 1.28, p = .20), but the main effect of age (β = .02, t(3, 1606) = 5.23, p < .001) and the interaction effect (β = -.01, t(3, 1606) = -2.25, p < .05) were significant. There was not a significant moderating effect of age on the relationship between subtle and interpersonal age-based PWD and organizational commitment. Similar to Figures 2-4, an examination of Figures 5-7 indicates that older employees had lower levels of organizational commitment when there were higher levels of age-based PWD, interpersonal, and formal discrimination and higher levels of organizational commitment when there were lower levels of age-based PWD, interpersonal, and formal discrimination compared to younger employees.

Because there are age and tenure differences when comparing whites (mean age = 46.00; mean tenure = 2.41) to blacks (mean age = 42.40; mean tenure = 2.67) and males (mean age = 47.40; mean tenure = 2.15) to females (mean age = 44.10; mean tenure = 2.58), I included age and tenure as control variables for the models used in Research Question 1 by adding age by race and age by sex product terms to the analysis. The results from the first MANCOVA showed that the effect of race on subtle, interpersonal, and formal discrimination remained significant when controlling for age (F(1,1379) = 10.599, p < .001) and tenure (F(1,1379) = 10.755, p < .001). The results from the second MANCOVA showed that the effect of sex on subtle, interpersonal, and formal discrimination remained significant when controlling for age (F(1,1589) = 20.849, p < .001) and tenure (F(1,1579) = 20.749, p < .001). Follow-up ANCOVAs controlling for age

and tenure did not result in changes to significance. In addition to age and tenure, there were group differences across sex and race in the predictor and dependent variables. Similarly, controlling for these variables did not result in changes to significance.

Table 2

Descriptive Statistics of Study Variables for Full Study Sample

Variable	*M*	*SD*	Median	Min	Max	Skew	Kurtosis
Subtle Discrimination	2.44	1.13	2.33	1.00	5.00	0.49	-0.71
Interpersonal Discrimination	1.38	0.63	1.00	1.00	5.00	2.44	7.18
Formal Discrimination	2.15	0.95	2.00	1.00	5.00	0.61	-0.42
Perceived Workplace Discrimination	2.00	0.80	1.80	1.00	5.00	0.82	0.21
Perceived Group Difference	3.10	0.68	3.00	1.00	5.00	0.09	0.02
Diversity Climate	3.92	1.08	4.00	0.00	6.00	-0.31	-0.55
Hostile Attribution Bias	1.92	0.69	1.86	1.00	4.29	0.46	-0.44
Job Satisfaction	4.84	1.25	5.00	1.00	6.00	-1.14	0.60
Organizational Commitment	4.37	1.32	4.50	1.00	7.00	-0.32	-0.68

Table 3

Correlations of Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Subtle Discrimination												
2. Interpersonal Discrimination	.52**											
3. Formal Discrimination	.75**	.58**										
4. Perceived Workplace Discrimination	.90**	.73**	.93**									
5. Hostile Attribution Bias	.47**	.41**	.48**	.52**								
6. Perceived Group Difference	.13**	.14**	.20**	.18**	.13**							
7. Diversity Climate	-.64**	-.46**	-.64**	-.69**	-.45**	-.21**						
8. Organizational Commitment	-.48**	-.30**	-.43**	-.48**	-.35**	-.15**	.59**					
9. Job Satisfaction	-.50**	-.41**	-.51**	-.55**	-.38**	-.11**	.57**	.72**				
10. Age	-.10**	-.07**	-.11**	-.11**	-.07**	-.07**	.10**	.21**	.15**			
11. Race	-.07**	-.08**	-.14**	-.12**	-.08**	-.32**	.14**	.09**	.04	.09**		
12. Sex	.18**	.07**	.17**	.17**	.07**	-.09**	-.19**	-.07**	-.06*	-.12**	-.03	
13. Ethnicity	.00	.02	.04	.02	.04	.14**	-.04	-.00	-.01	-.10**	.00	.01

Note. Confidence intervals are within +-.05 from the point. * indicates $p < .05$. ** indicates $p < .01$. For race, White was coded as 1 and Black was coded as 0. For sex, female was coded as 1 and male was coded as 0.

Table 4

Confirmatory Factor Analysis Results of Perceived Workplace Discrimination Measure

	Unstandardized Loading	Standardized Loading	S.E.	P-Value
Subtle Discrimination				
Item 2	1.00	.63		
Item 7	1.54	.89	.06	.00
Item 8	1.33	.77	.05	.00
Interpersonal Discrimination				
Item 4	1.00	.63		
Item 5	1.02	.56	.06	.00
Item 10	1.47	.79	.07	.00
Formal Discrimination				
Item 1	1.00	.66		
Item 3	1.11	.71	.05	.00
Item 6	1.42	.73	.06	.00
Item 9	.76	.61	.04	.00

Table 5

Estimated Inter-Factor Correlations

	Subtle Discrimination	Interpersonal Discrimination
Subtle Discrimination	-	
Interpersonal Discrimination	.26	
Formal Discrimination	.58	.28

Table 6

Comparison of CFA Model Fit

	Chi(df)	*RMSEA*	*CFI*	*TLI*	*SRMR*	P-value (Chi-Sq)
Single Factor Model	581.92(35)	.10	.92	.89	.05	
Three Factor Model	262.92(32)	.07	.96	.95	.03	
Model Differences	319.00(3)	.03	.04	.06	.02	<.001

Table 7

Descriptive Statistics and Mean Difference Tests Results of Demographics and Main Study Variables

	White		Black			Male		Female		
	M	*SD*	*M*	*SD*		*M*	*SD*	*M*	*SD*	
Demographics					χ^2					χ^2
Age	46.00	13.00	42.40	12.20	10.53**	47.40	13.30	44.10	12.50	23.36**
Job Tenure	2.41	1.13	2.67	1.18	16.33**	2.15	1.07	2.58	1.13	10.76**
Main Study Variables					*F*					*F*
Perceived Workplace Discrimination	1.96	0.78	2.25	0.89	19.07**	1.81	0.75	2.10	0.81	48.94**
Subtle Discrimination	2.41	1.13	2.67	1.18	7.03**	2.14	1.07	2.58	1.13	53.17**
Interpersonal Discrimination	1.34	0.59	1.50	0.76	8.97**	1.31	0.58	1.41	0.65	7.36**
Formal Discrimination	2.09	0.92	2.51	1.08	28.08**	1.92	0.90	2.27	0.96	46.94**
Hostile Attribution Bias	1.89	0.67	2.07	0.73	9.37**	1.85	0.70	1.96	0.67	8.12**
Perceived Group Difference	2.96	0.62	3.62	0.63	160.56**	3.18	0.71	3.05	0.67	12.74**
Diversity Climate	3.99	1.06	3.53	1.04	26.96**	4.22	1.03	3.78	1.07	59.94**
Job Satisfaction	4.86	1.25	4.68	1.32	2.68	4.96	1.15	4.78	1.29	10.35*
Organizational Commitment	4.43	1.31	4.07	1.36	10.71**	4.52	1.32	4.31	1.31	13.89**

Note. * indicates $p < .05$. ** indicates $p < .01$.

Table 8

Descriptive Statistics and Mean Difference Tests Results of Intersectional Demographics and Primary Study Variables

	White Male		Black Male		White Female		Black Female		
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*F*
Hostile Attribution Bias	1.81	.68	2.01	.78	1.93	.66	2.09	.72	18.37*
Perceived Group Dissimilarity	3.05	.63	3.78	.67	2.91	.61	3.58	.61	60.09*
Diversity Climate	4.30	1.01	3.69	1.01	3.85	1.05	3.45	1.04	73.64*
Perceived Workplace Discrimination	1.77	.72	1.97	.92	2.06	.79	2.37	.86	56.13*
Subtle Discrimination	2.11	1.07	2.39	1.24	2.55	.66	2.79	1.15	37.40*
Overt Discrimination	1.29	.55	1.38	.59	1.37	.61	1.55	.82	15.98*
Formal Discrimination	1.87	.84	2.10	1.15	2.20	.94	2.68	1.01	68.25*
Job Satisfaction	4.95	1.32	4.97	1.10	4.82	1.28	4.55	1.38	7.62*
Organizational Commitment	4.56	1.30	4.33	1.42	4.38	1.30	3.94	1.32	19.60*
Sample Size	389		43		825		114		

Table 9

Means and Standard Deviations of Each Chronic Workplace Discrimination and Harassment Measure Items.

Item	*M*	*SD*
Unfair jobs	2.25	1.18
Unasked opinions	2.53	1.26
Watched more closely	1.86	1.23
Supervisor slurs	1.25	0.72
Coworker slurs	1.39	0.83
Work twice as hard	2.75	1.52
Ignored	2.49	1.38
Assumed lower status	2.30	1.37
Passed over for promotion	1.74	0.98
Humiliated	1.48	0.85

Table 10

Attribution Counts for Each Chronic Workplace Discrimination and Harassment Measure Items

	Frequency									
Item	Age	Ethnicity	Sex	Height	National origin	Race	Religion	Sexual orientation	Weight	Other
Unfair jobs	291	81	285	33	35	94	16	29	53	553
Unasked opinions	297	81	278	13	41	96	17	21	32	637
Watched more closely	148	68	138	12	28	83	13	15	20	333
Supervisor slurs	52	37	52	9	12	30	5	11	18	108
Coworker slurs	73	59	92	15	24	54	13	29	28	151
Work twice as hard	301	132	326	23	46	156	16	36	46	490
Ignored	307	94	293	30	49	109	15	26	54	526
Assumed lower status	263	105	278	30	37	115	7	21	48	427
Passed over for promotion	163	90	187	14	34	107	8	23	37	345
Humiliated	115	51	129	20	22	56	14	27	31	267
Total N	2010	798	2058	199	328	900	124	238	367	3837

Table 11

Sample Other responses for each mistreatment item

Item	Sample Response
Unfair jobs	• My personality • I'm nice and others are perceived as unable to do it
Unasked opinions	• While my opinion wasn't asked for, I don't believe my opinion was unwelcome. At times, I'm not familiar enough with the topic to voice my opinioin. • Often over confident people don't ask for anybody's opinion. Plus I am sort of shy. I don't insert myself into others' deliberations.
Watched more closely	• due to the importance of my work • I'm the boss - people like to second guess the boss
Supervisor slurs	• regional identity and weirdly, veteran status (I am a veteran) • Supervisor is insecure
Coworker slurs	• Mental Health Diagnosis • being a mother, being married
Work twice as hard	• My educational background • I think this is my own self-perception because I consider myself neurodivergent. This is something that is not apparent/visible to others, but I feel as though it presents challenges for me that others do not face.
Ignored	• my knowledge base and years on the job are not as long as others. • Social anxiety
Assumed lower status	• Education Level • Our society doesn't respect teachers/instructors/teaching-faculty.

Table 11 (continued)

Passed over for promotion	• I have no "network" or "mentorship" - skills don't matter! • Favoritism
Humiliated	• Jealous regarding education, competence, and efficiency • people think they are being funny

Note: These quotes are not corrected for typographical errors.

Table 12

Descriptive Statistics and Mean Difference Tests Results of Discrimination Attribution Ratings Across Demographic Groups

	White			Black				Male			Female			
Discrimination attribution	*M*	*SD*	n	*M*	*SD*	n	*F*	*M*	*SD*	n	*M*	*SD*	N	*F*
Age	3.08	0.76	562	3.18	.80	78	1.28	3.01	0.79	193	3.12	0.75	550	3.04
Ethnicity	3.27	0.90	87	3.56	0.81	61	4.11*	3.18	0.94	74	3.42	0.84	161	3.87’
Sex	3.04	0.72	526	3.51	0.87	72	25.10**	2.99	0.84	100	3.15	0.75	592	3.60’
Height	3.19	1.01	66	3.47	1.20	7	0.48	3.12	1.08	21	3.29	0.98	63	0.43
National origin	3.10	0.87	54	3.78	0.63	10	4.39*	3.00	0.87	45	3.34	0.92	65	3.87’
Race	3.19	0.91	95	3.39	0.73	119	3.21	3.13	0.83	101	3.33	0.81	186	3.83’
Religion	3.11	1.00	42	3.42	1.15	6	0.49	3.08	0.93	25	3.38	1.03	34	1.32
Sexual orientation	3.17	0.83	73	3.47	1.36	3	0.35	3.21	0.88	45	3.25	0.91	40	0.05
Weight	3.19	0.98	110	3.36	0.74	9	0.25	3.30	0.97	30	3.25	0.99	103	0.06

Note. * indicates $p < .05$. ** indicates $p < .01$. ‘ indicates $p=.05$

Table 13

Descriptive Statistics and Mean Difference Tests Results of Discrimination Attribution Ratings Across Intersectional Demographic Groups

	White male			Black male			White female			Black female			
Discrimination attribution	M	SD	n	M	SD	n	M	SD	n	M	SD	n	*F*
Age	3.03	.78	144	2.73	.73	15	3.09	.75	414	3.29	.78	63	3.22
Ethnicity	3.29	.95	35	3.33	1.02	12	3.26	.87	52	3.64	.75	48	4.66*
Sex	2.95	.84	77	3.40	1.09	5	3.05	.70	443	3.52	.87	66	13.85**
Height	3.11	1.08	18	2.00	NA	1	3.23	1.00	47	3.72	1.10	6	1.01
National origin	3.12	.93	25	2.50	.71	2	3.09	.85	28	4.09	1.20	8	4.32*
Race	3.13	.90	44	3.91	.80	29	3.24	.93	51	3.42	.71	89	4.23*
Religion	2.96	.91	20	NA	NA	0	3.25	1.07	22	3.42	1.15	6	1.16
Sexual orientation	3.13	.78	39	4.00	1.41	2	3.25	.92	31	2.40	NA	1	.34
Weight	3.20	.96	25	NA	NA	0	3.18	1.00	84	3.36	.74	9	.14

Figure 1

Plotting the Moderation Effect of Sex on the Relationship Between PWD and Job Satisfaction

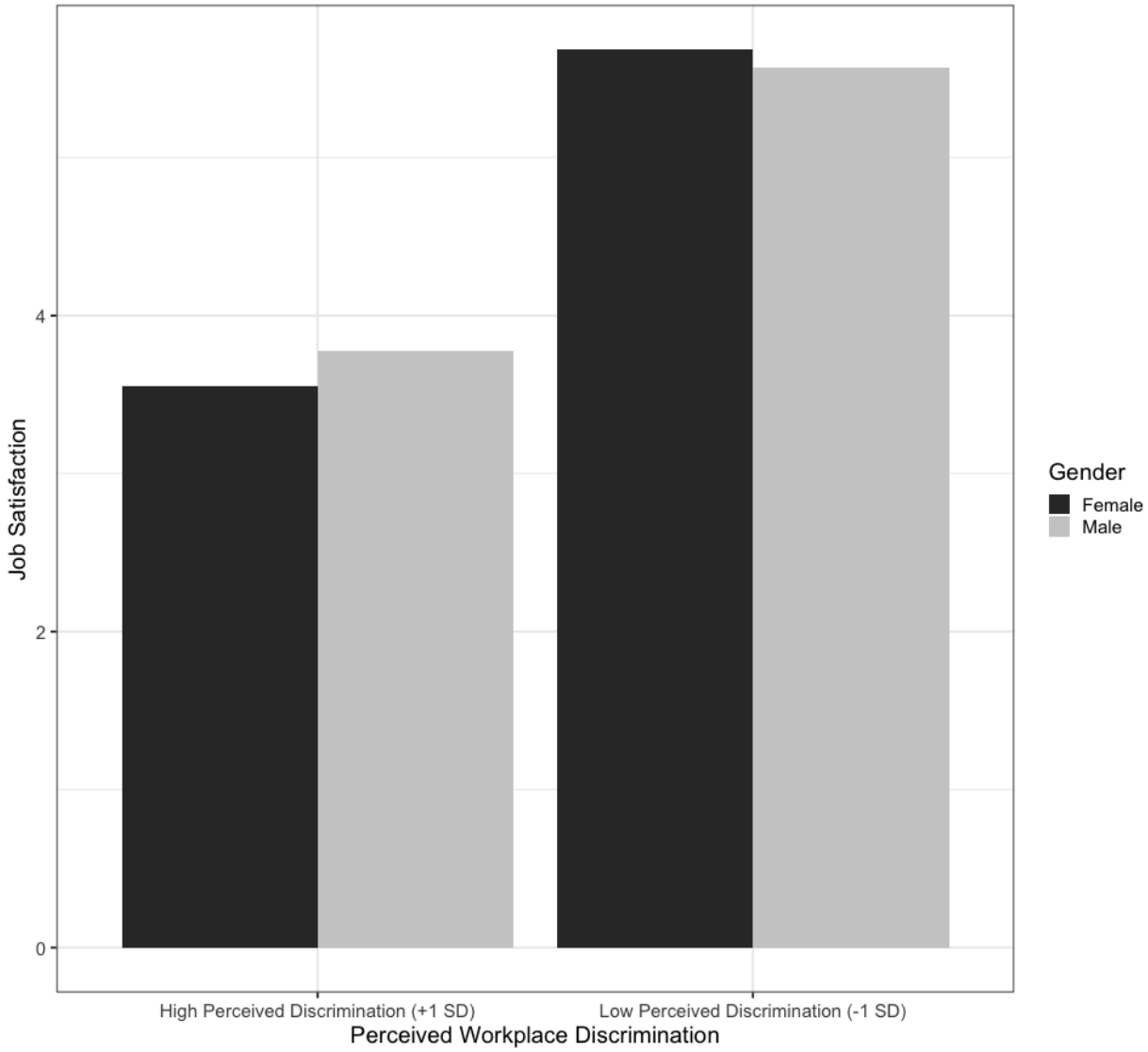

Figure 2

Plotting the Moderation Effect of Age on the Relationship Between PWD and Organizational Commitment

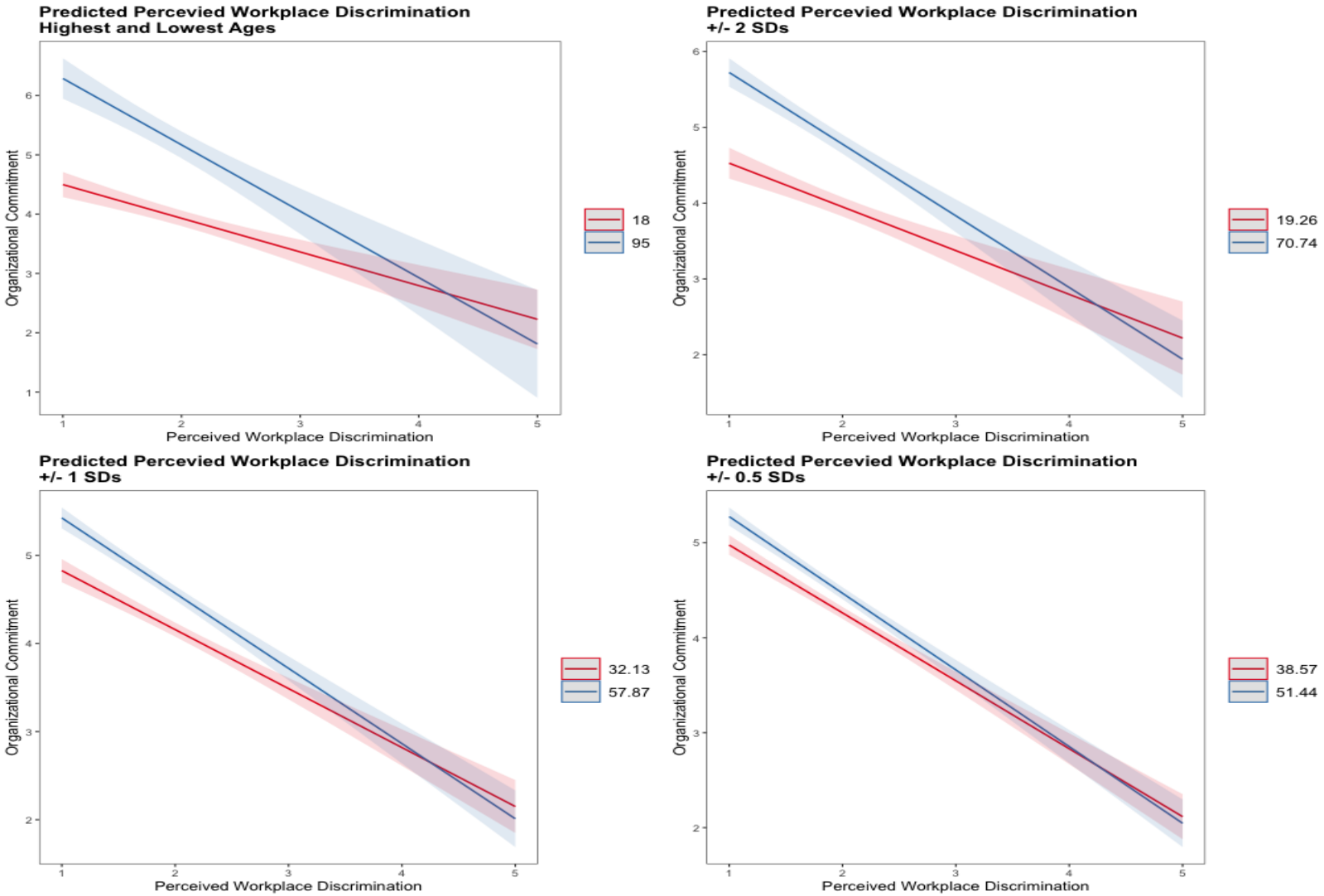

Figure 3

Plotting the Moderation Effect of Age on the Relationship Between Subtle Discrimination and Organizational Commitment

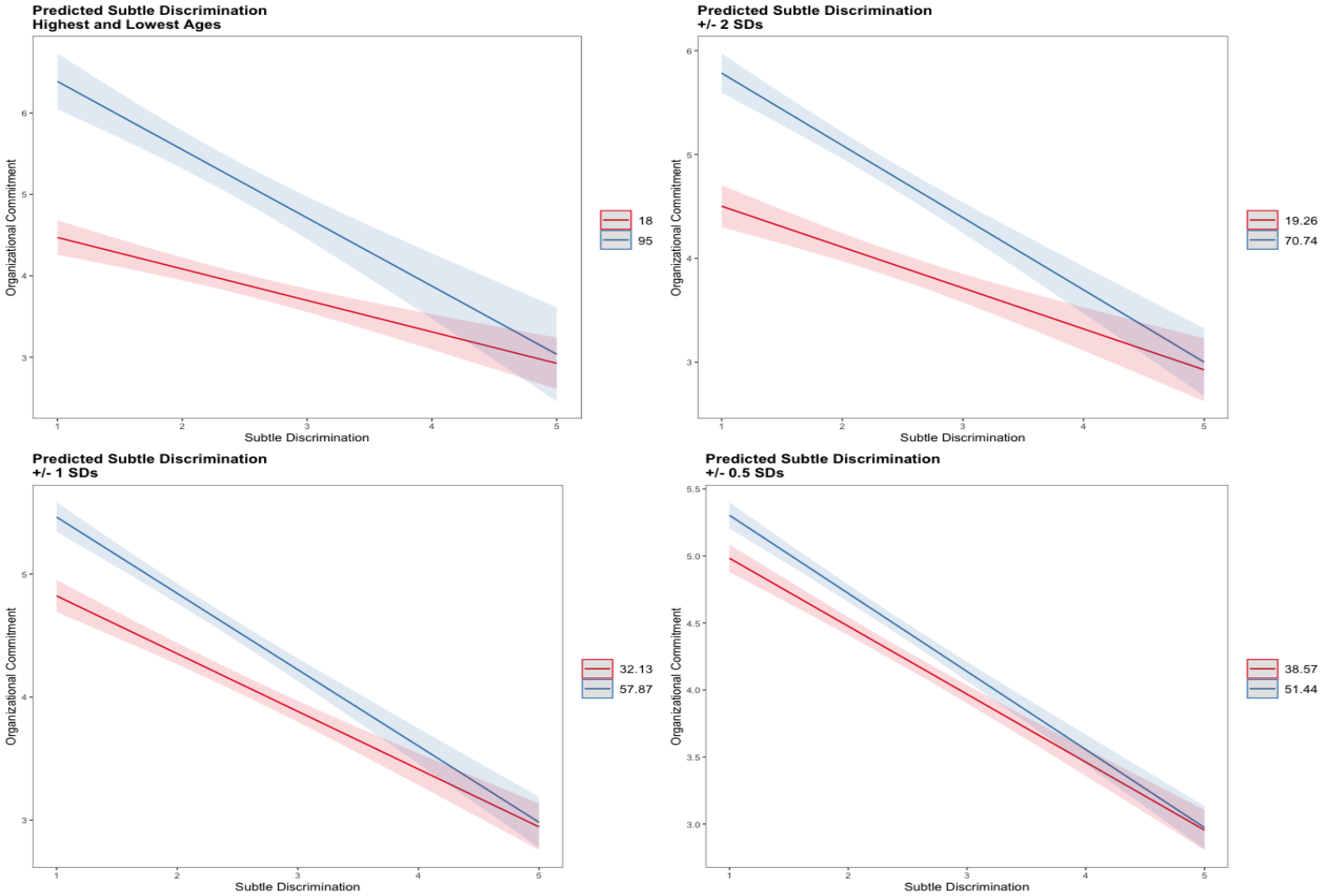

Figure 4

Plotting the Moderation Effect of Age on the Relationship Between Interpersonal Discrimination and Organizational Commitment

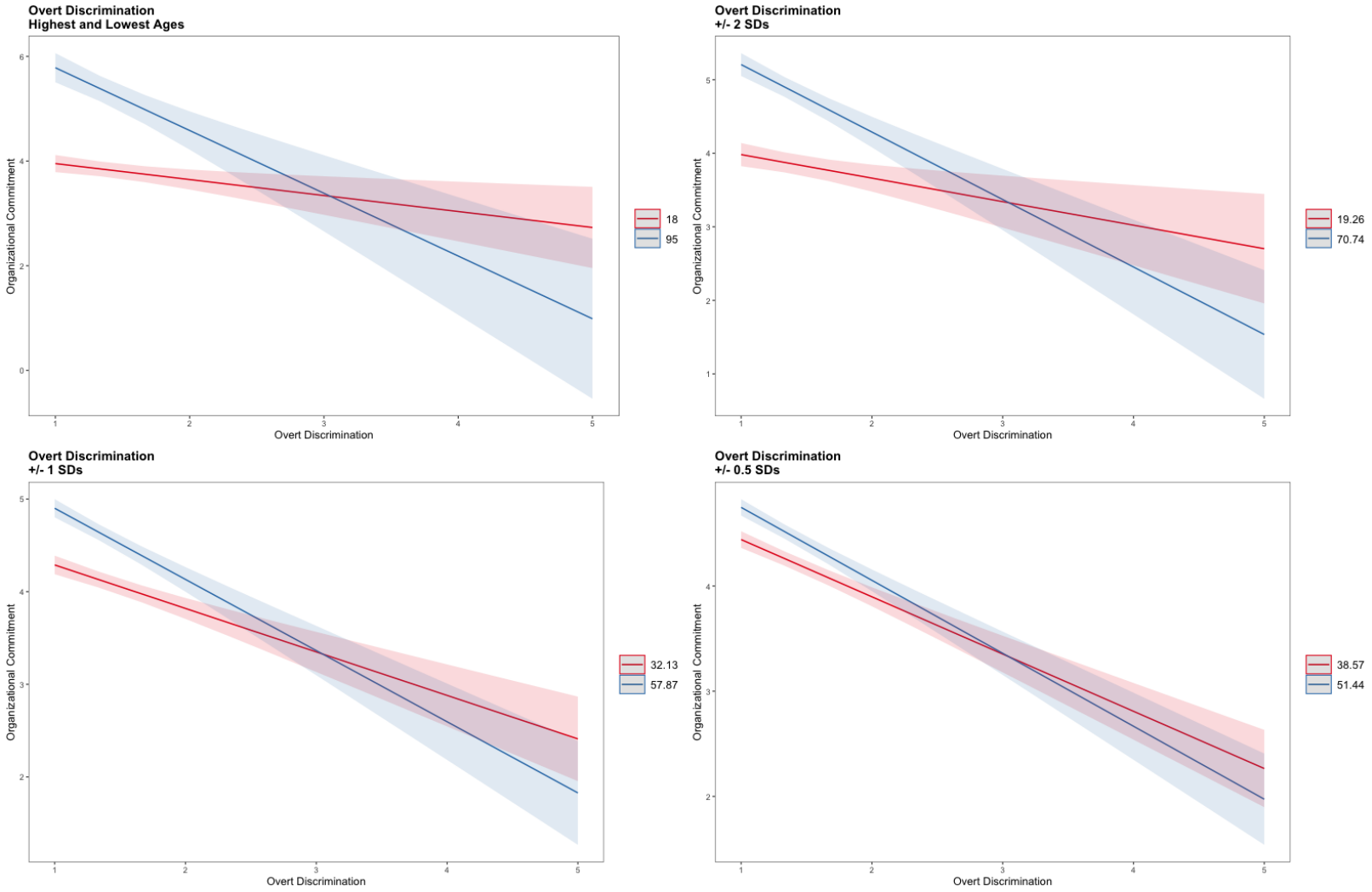

Figure 5

Plotting the Moderation Effect of Age on the Relationship Between Age-Based Interpersonal Discrimination Ratings and Organizational Commitment

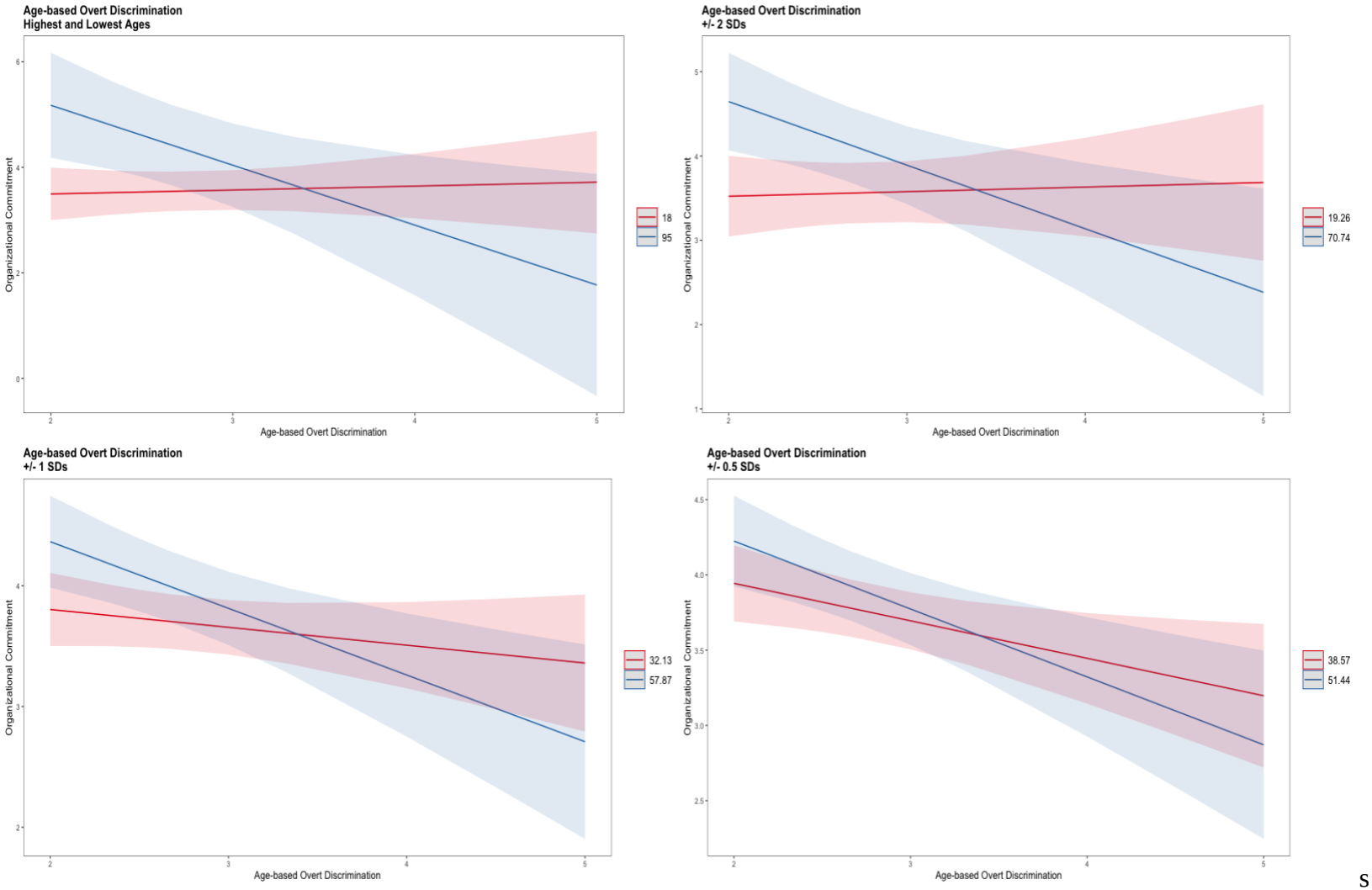

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Figure 6

Plotting the Moderation Effect of Age on the Relationship Between Age-Based PWD Count and Organizational Commitment

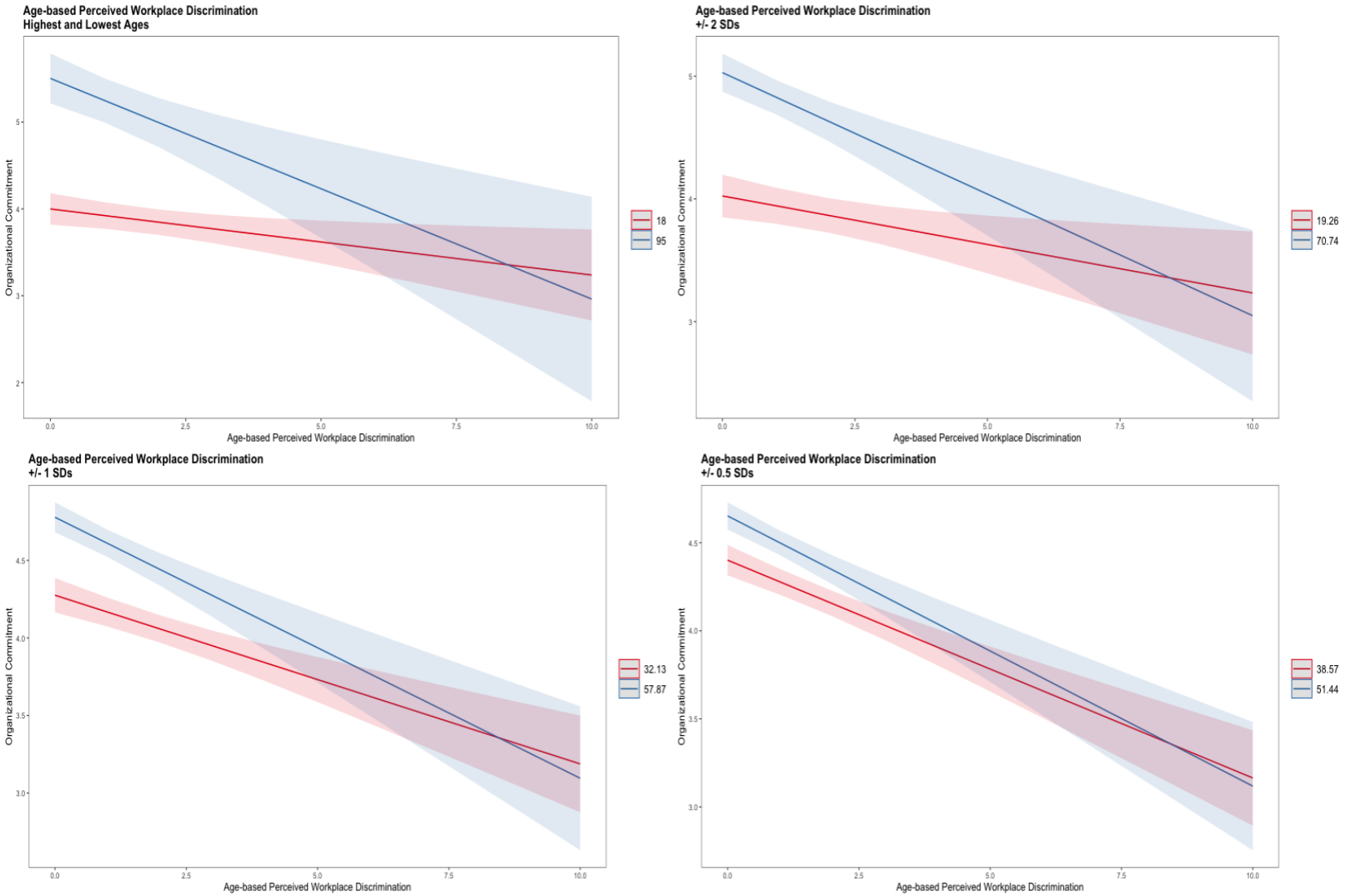
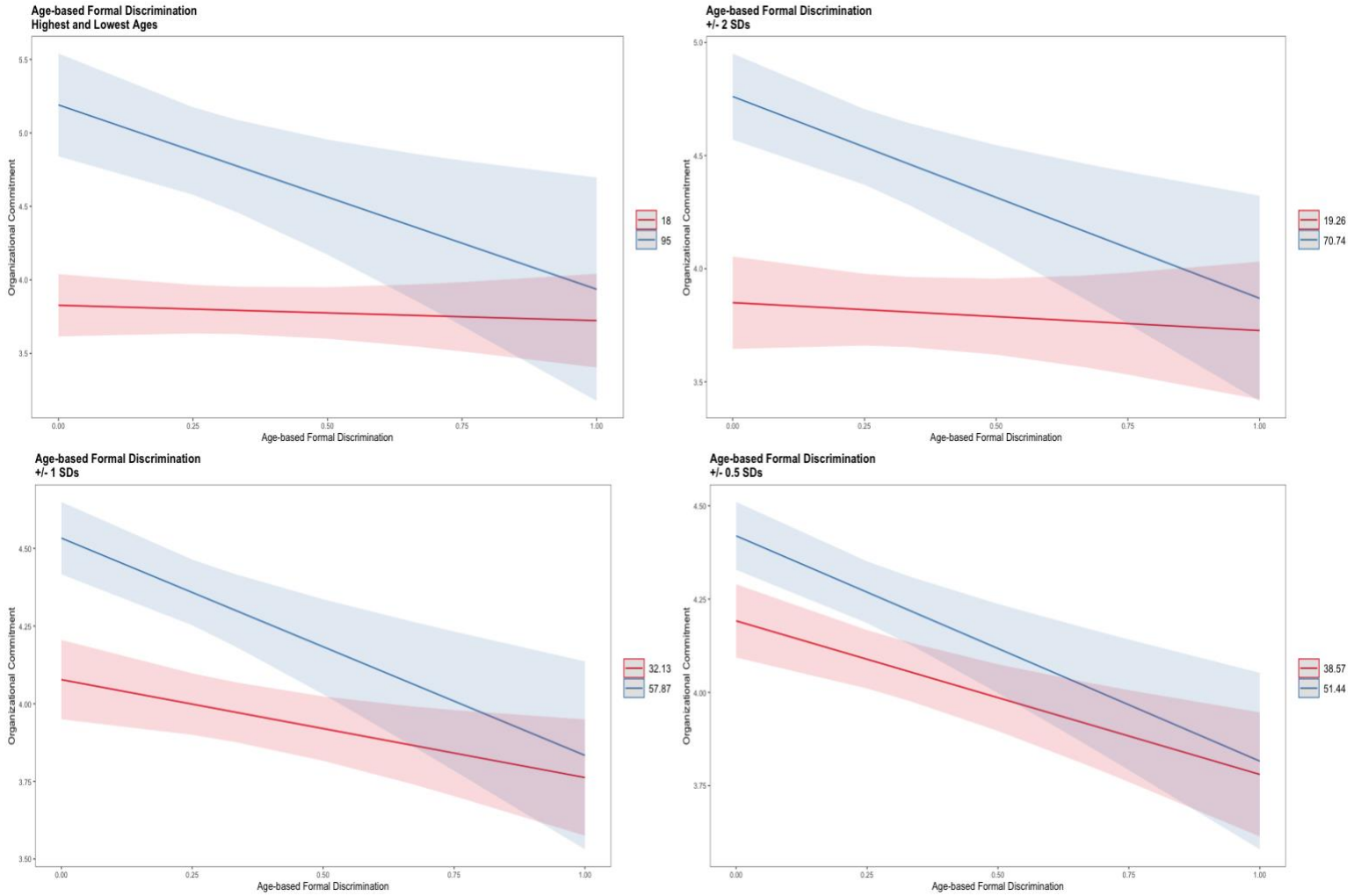


Figure 7

Plotting the Moderation Effect of Age on the Relationship Between Age-Based Formal Discrimination Count and Organizational Commitment



CHAPTER FOUR:

DISCUSSION

This dissertation had three primary purposes. First, this study examined how three different types of PWD related to three different potential antecedent variables. Second, this study investigated whether demographic groups (race and sex) related differently to different types of discrimination. Third, this study examined the moderating effects of demographic differences on the relationship between PWD and job attitudes (job satisfaction and organizational commitment). This study is the most comprehensive and precise research investigation to date in terms of empirically examining types of PWD (subtle vs interpersonal vs formal), how individual differences and contextual variables relate to different types of PWD, and how demographic differences (both across race and sex as well as race by sex) relate to and influence the effects of each type.

The main takeaways from this study begin with the relationships between potential antecedent variables and different types of PWD. Specifically, psychological diversity climate had the strongest relationship to PWD (r = -.69), followed by hostile attribution bias (r = .52), and perceived group dissimilarity (r = .18). Psychological diversity climate also related most strongly to the three types of PWD, followed again by hostile attribution bias and then perceived group dissimilarity. On average, the three potential antecedent variables related most strongly to formal discrimination and subtle discrimination and less strongly to interpersonal discrimination. These patterns of results suggest that employees' perceptions of the organizations' treatment and

integration of all employees is highly related to whether they perceive that they have been personally discriminated against at work, both overall and specifically during ambiguous situations and situations that have job-related impacts. To a slightly lesser extent, the individual difference of hostile attribution bias is also relevant, and to a much lesser extent, one's perceptions of demographic differences amongst their working group.

Contrary to predictions, there was a stronger relationship between hostile attribution bias and formal discrimination than with subtle discrimination, a stronger relationship between perceived group dissimilarity and formal discrimination than with interpersonal discrimination, and an equally strong relationship between psychological diversity climate and formal discrimination and subtle discrimination. One possible explanation for the similarity in strength of relationship between hostile attribution bias with formal and subtle discrimination is that the formal discrimination items may be particularly ambiguous in nature, therefore there may not have been as differentiated of a relationship between the variables as if the formal discrimination items were more overt (high correlation between formal and subtle discrimination; $r = .75$). A potential explanation for the stronger relationship between perceived group dissimilarity and formal discrimination than interpersonal discrimination surrounds the idea of hypervisibility; when one feels that they are overexposed because they appear different to the rest of the work group, often times they will change their behavior to try and prove themselves (i.e., working harder than others; Settles et al., 2019). This change in behavior may simultaneously increase the potential for formal discrimination and decrease the potential for interpersonal discrimination (i.e., it may be less socially acceptable to act in a hostile manner towards a coworker who is working hard but it may be more socially acceptable to give them extra work or scrutinize their performance). Finally, the similar relationships between psychological diversity climate and

subtle and formal discrimination may again be because of the similarity between the two constructs.

Another main takeaway from this study pertains to demographic differences and PWD and how protected groups indeed report the most frequent occurrences of PWD. Blacks significantly reported more frequent occurrences of PWD than Whites, and females reported significantly more frequent occurrences of PWD than males. Subtle discrimination was the most frequently reported across all demographic groups, followed by formal discrimination and to a lesser extent interpersonal discrimination. Interestingly, the biggest between-group differences were that Blacks reported higher rates of formal discrimination than Whites (f=28.08) and females reported higher rates of subtle discrimination than males (f=53.17). When examining sex by race differences, Black females reported the most frequent occurrences of all types of PWD, followed by White females (except interpersonal discrimination, which Black males reported slightly higher occurrences), Black males, and White males. An interesting discovery that may be driving these results is that Blacks reported significantly higher ratings across multiple attributions (ethnicity, sex, and national origin) than Whites and females reported non-significantly higher ratings across all discrimination attributions than males.

These patterns of results are consistent with emerging research in the literature. A recent meta-analysis found that females and Blacks perceive workplace mistreatment more frequently than males and Whites (McCord et al., 2018). Furthermore, recent research found that throughout a series of pilot and experimental studies, women were more likely to perceive ambiguous emails and voicemails as uncivil than males (Howard, 2021). The results from this study suggests that this trend in more frequent perceptions of mistreatment for Blacks and females may hold for different types of PWD as well. While data from recent polls finds that

non-protected groups do report being discriminated against (i.e., Gonyea, 2017), it appears that protected groups still perceive broad forms of discrimination on a more frequent basis.

Related to the demographic differences and PWD relationships, results did not show support for the hypothesized moderation effect of race on the relationship between PWD and job satisfaction and organizational commitment, as well as the hypothesized moderation effect of sex on the relationship between PWD and organizational commitment. Interestingly, the results did show that females were more likely to have negative reactions to PWD (lower levels of job satisfaction) than males. These findings are consistent with AET, which posits that frequently occurring affective events are likely to negatively impact one's outlook on their job (Weiss & Cropanzano, 1996). One possible explanation for the null moderation results on organizational commitment is that organizational commitment is more distal from PWD than job satisfaction, such that one might first view their job negatively following experiences of PWD before they negatively view their relationship to their organization.

A final takeaway from the study's results is that age was a highly reported attribution of PWD and was influential on the relationship between PWD and job attitudes. The results found that older employees had a stronger relationship than younger employees between PWD, subtle, and interpersonal discrimination and organizational commitment. Furthermore, older employees had a stronger relationship than younger employees between age-based PWD, interpersonal, and formal discrimination and organizational commitment. While it is widely known that age is a common attribution of discrimination (Wood et al., 2008), an interesting finding from this study is that the pattern of results show that age appears to moderate the relationship between PWD and organizational commitment more consistently than race or sex.

Theoretical and Practical Applications

The results from the current study offer significant contributions to the workplace discrimination literature as well as relevant information for practitioners. First, this study contributes to the workplace discrimination literature through the identification of potential PWD antecedent variables, both individual difference variables as well as contextual variables. The workplace discrimination literature has reported overwhelming evidence documenting the negative psychological and organizational effects of workplace discrimination, however, relatively scant research investigates the potential antecedent variables that drive such perceptions and outcomes. There is an opportunity for further longitudinal research to investigate potential mechanisms explaining the hostile attribution, perceived group dissimilarity, and psychological diversity climate relationships with PWD. Furthermore, while this study identified 3 variables that highly related to the different types of PWD, future research could build off these findings by investigating other potential antecedent variables.

Second, this research study advances the workplace discrimination literature by documenting the different strengths of relationships between the potential antecedent variables and the different types of PWD. To my knowledge, no other workplace discrimination research study published in the literature has used PWD measures in a multidimensional format. Furthermore, no other published workplace discrimination research study to my knowledge has examined how different proposed antecedent variables compare in their relationships across different types of PWD. This study adds to the literature by showing that variables differ in how they relate to different types of PWD, which strengthens the argument for continuing to measure PWD in a multidimensional format.

Third, this research study contributes to the literature by using a novel approach to capturing PWD. A common approach to measuring PWD is to combine a workplace mistreatment measure with self-reported demographic information. The current study demonstrated a more precise approach to measuring PWD by following up each reporting of a workplace mistreatment experience with an item asking the respondent to attribute such mistreatment to a particular identity. Through this approach, researchers can have more confidence that the reporting of PWDs is actually driven by perceptions of discrimination and not a perception of mistreatment that could have been attributed to some other reason (i.e., actual poor performance, favoritism, etc.). When conducting exploratory analyses, I found that participants attributed workplace mistreatment experiences to an 'other' reason over 30% of the time. Furthermore, my data found that many people frequently attributed workplace mistreatment experiences to more than one characteristic. These findings imply that researchers need to be careful about how they capture discrimination data; popular measures such as the Everyday Discrimination Scale (Williams et al., 1997) are not designed to capture such granularity.

A final note on the novel approach of my PWD measure is that the results from my exploratory analyses suggest that there are nuances to PWD and its effects on what and for whom. For example, sex moderated the effects of PWD on job satisfaction but not organizational commitment, and age moderated the effects of PWD (across different types of PWD depending upon how the measure was treated) on organizational commitment but not job satisfaction. While these findings are nascent and exploratory, they do suggest that further exploration and theory building is needed to explain such variances in the relationships.

From a practical perspective, this study found potential variables that could explain what is driving employee PWD. By examining PWD in a more precise and nuanced fashion, the results from this study can be particularly helpful to organizations that are crafting interventions aimed at curtailing PWD within their workplace. While these results are preliminary, they do suggest that efforts to improve perceptions of diversity climate may be more effective at mitigating perceptions of subtle discrimination than improving the perceptions of group dissimilarity.

Limitations and Future Directions

This study contained several limitations. One limitation from this study is that causal inferences cannot be made from the results because the data were collected from a single time point. While potential antecedent variables correlated with the different types of PWD, we cannot be sure that they are causing high/low values of PWD. By examining these relationships through an intervention design, researchers could gain insights into whether there is indeed potential for making causal attributions among these variables. For example, baseline and follow up levels of PWD could be measured before and after an intervention. The intervention could focus on changing the diversity climate through the promotion and enforcement of diversity-related policy, practices, and procedures. Through this type of design, we could make causal attributions that reported changes in the PWD variables are affected by reducing actual discrimination (through an improved diversity climate).

Another limitation from this study is that there were likely floor effects with reporting of perceptions of interpersonal discrimination. The infrequent reporting of interpersonal discrimination may explain why there were smaller correlations. Future studies examining

perceptions of interpersonal discrimination may want to sample from industries where occurrences of harassment are more frequent.

Another future direction from this study is to compare self-reports of PWD with objective and other (i.e., coworker) sources of workplace discrimination data to examine whether there is consensus on discrimination or if it entirely subjective and idiosyncratic to the person. While comparing perceptions to more objective measures is a long-studied avenue of research in various topics of industrial-organizational psychology, it has not been deeply studied in the context of workplace discrimination.

Finally, this study used only one industry (academia) for sampling participants. To address external threats to validity (generalizability), future research should test the current study's hypotheses with participants from other industries. More specifically, participants in this study were 76.02% White and 66.96% female. Conducting this study in industries that are more balanced across demographic groups (i.e., sales or retail) is needed to assess the generalizability of these results.

Conclusion

Perceptions of workplace discrimination is unfortunately a common occurrence that is consistently shown to be related to negative outcomes. Through this study, I have found that psychological climate, hostile attribution bias, and perceived group dissimilarity are all associated with different types of PWD and possess different strengths in their associations. This research also found that demographic groups also perceive workplace discrimination at varying rates, with Blacks, females, and Black females reporting the most frequent rates. Finally, females and older employees were found to have the strongest negative reactions to PWD. This research provides helpful insights about possible variables that drive PWD that can be used to help

organizations mitigate such perceptions as well as point researchers in the right direction for gaining a deeper understanding of the nuances of PWD.

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APPENDICES

Appendix A

Demographic Questions

1. What is your age in years?
2. What is your sex?
    a. Female
    b. Male
    c. Other (please specify)
3. What is your race?
    a. American Indian or Alaska Native
    b. Asian
    c. Black or African American
    d. Hispanic or Latino
    e. Native Hawaiian or Pacific Islander
    f. White
    g. Other (please specify)
4. What is your current job title?
5. When did you start working with your current employer?
    a. 1 month or less
    b. 2-6 months
    c. 7-12 months
    d. 1-2 years
    e. 2-5 years
    f. 5-10 years
    g. 10+ years

Appendix B

Hostile Attribution Bias

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
When coworkers leave me out of social events, it is to hurt my feelings.	○	○	○	○	○
If coworkers do not appreciate me enough, it is because they are self-centered.	○	○	○	○	○
If coworkers work slowly on a task I assigned them, it is because they don't like me.	○	○	○	○	○
If people are laughing at work, I think they are laughing at me.	○	○	○	○	○
If coworkers ignore me, it is because they are being rude.	○	○	○	○	○
Coworkers deliberately make my job more difficult.	○	○	○	○	○
When my things are missing, they have probably been stolen.	○	○	○	○	○

Appendix C

Perceived Group Dissimilarity

To what extent are you similar to the coworkers in your current job based on your race

- ○ No one is similar to me
- ○ Some are similar to me
- ○ Half are similar to me
- ○ Many are similar to me
- ○ Everyone is similar to me

To what extent are you similar to the coworkers in your current job based on your sex

- ○ No one is similar to me
- ○ Some are similar to me
- ○ Half are similar to me
- ○ Many are similar to me
- ○ Everyone is similar to me

Appendix D

Psychological Diversity Climate

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
I feel I have been treated differently here because of my race, sex, religion, or age. (R)	○	○	○	○	○	○
Managers here have a track record of hiring and promoting employees objectively, regardless of their race, sex, religion, or age.	○	○	○	○	○	○
Managers here give me feedback and evaluate employees fairly, regardless of the employee's ethnicity, sex, age, or social background.	○	○	○	○	○	○
Managers here make layoff decisions fairly, regardless of factors such as employees' race, sex, age, or social background.	○	○	○	○	○	○
Managers interpret human resources policies (such as sick leave) fairly for all employees.	○	○	○	○	○	○
Managers here give assignments based on the skills and abilities of employees.	○	○	○	○	○	○
Management here encourages the formation of employee network support groups.	○	○	○	○	○	○

There is a mentoring program in use here that identifies and prepares all minority and female employees for promotion.	○	○	○	○	○	○
The “old boys’ network” is alive and well here. (R)	○	○	○	○	○	○
The company spends enough money and time on diversity awareness and related training.	○	○	○	○	○	○

Appendix E

Job Satisfaction

	Disagree very much	Disagree moderately	Disagree slightly	Agree slightly	Agree moderately	Agree very much
In general, I don't like my job	○	○	○	○	○	○
All in all, I am satisfied with my job	○	○	○	○	○	○
In general, I like working here	○	○	○	○	○	○

Appendix F
Organizational Commitment

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
I would be very happy to spend the rest of my career with this organization.	○	○	○	○	○	○	○
I enjoy discussing my organization with people outside it.	○	○	○	○	○	○	○
I really feel as if this organization's problems are my own.	○	○	○	○	○	○	○
I think that I could easily become as attached to another organization as I am to this one. (R)	○	○	○	○	○	○	○
I do not feel like 'part of the family' at my organization. (R)	○	○	○	○	○	○	○
I do not feel 'emotionally attached' to this organization. (R)	○	○	○	○	○	○	○
This organization has a great deal of personal meaning for me.	○	○	○	○	○	○	○
I do not feel a strong sense of belonging to my organization. (R)	○	○	○	○	○	○	○

Appendix G

Perceived Workplace Discrimination

	Never (1)	Less than once a year (2)	A few times a year (3)	A few times a month (4)	Once a week or more (5)
How often are you unfairly given the jobs that no one else wanted to do? (1)	○	○	○	○	○
At work, when different opinions would be helpful, how often is your opinion not asked for? (2)	○	○	○	○	○
How often are you watched more closely than others? (3)	○	○	○	○	○
How often does your supervisor direct slurs or jokes at you? (4)	○	○	○	○	○
How often does your coworkers direct slurs or jokes at you? (5)	○	○	○	○	○

How often do you feel like you have to work twice as hard as others at work? (6)	○	○	○	○	○
How often do you feel like you are ignored or not taken seriously by others at work? (7)	○	○	○	○	○
How often do others assume that you work in a lower status job than you do and treat you as such? (10)	○	○	○	○	○
How often has a coworker with less experience and fewer qualifications gotten promoted before you? (11)	○	○	○	○	○
How often have you been unfairly humiliated in front of others at work? (12)	○	○	○	○	○

Appendix H

Perceived Workplace Discrimination Attributions

What do you think is the main reason for why you were unfairly given jobs that no one else wanted to do? (You can select more than one reasons that apply. If none apply, please select "Other" and describe the reason.)

- ☐ Your age (1)
- ☐ Your race (2)
- ☐ Your ethnicity (11)
- ☐ Your sex (3)
- ☐ Your religion (4)
- ☐ Your national origin (5)
- ☐ Your height (6)
- ☐ Your weight (7)
- ☐ Your sexual orientation (9)
- ☐ Other (10) _____

Appendix I

IRB Approval Letter

Dear Jeremiah Slutsky:

On 4/20/2022, the IRB reviewed and approved the following protocol:

Application Type:	Initial Study
IRB ID:	STUDY004170
Review Type:	Exempt 2
Title:	Perceptions of Workplace Discrimination
Funding:	None
Protocol:	• Perceptions of Workplace Discrimination Protocol v1.docx

The IRB determined that this protocol meets the criteria for exemption from IRB review.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Please note, as per USF policy, once the exempt determination is made, the application is closed in BullsIRB. This does not limit your ability to conduct the research. Any proposed or anticipated change to the study design that was previously declared exempt from IRB oversight must be submitted to the IRB as a new study prior to initiation of the change. However, administrative changes, including changes in research personnel, do not warrant a modification or new application.

Ongoing IRB review and approval by this organization is not required. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these activities impact the exempt determination, please submit a new request to the IRB for a determination.

Sincerely,

Katrina Johnson
IRB Research Compliance Administrator

Institutional Review Boards / Research Integrity & Compliance
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